

## Burgos, Alexander N

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**Subject:** FW: [External] NCRRC meeting Item 230314 Item B-1

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**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Sent:** Thursday, February 22, 2024 7:48 AM  
**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>  
**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>  
**Subject:** Re: [External] NCRRC meeting Item 230314 Item B-1

Thanks, David.

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law N.C.G.S. Chapter 132 and may be disclosed to third parties.

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**From:** Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>  
**Sent:** Thursday, February 22, 2024 7:45:01 AM  
**To:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>; Childs, Nathan D <[nchilds@NCDOJ.GOV](mailto:nchilds@NCDOJ.GOV)>  
**Cc:** Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>  
**Subject:** RE: [External] NCRRC meeting Item 230314 Item B-1

Brian,

Good morning.

Attached is the revised Form 400 and the 2024 NCRC Appendices which reflect the deletion of Appendix AT to satisfy the objection presented late yesterday by Mr. Isaac of NCHBA.

Let me know if you have any questions.

Thank you for your work on this.

**David B. Rittlinger, PE, LEED AP**  
**Division Chief - Codes & Interpretations**



**North Carolina Office of State Fire Marshal**  
1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
919.647.0008

[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)

Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

## Burgos, Alexander N

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**Subject:** FW: [External] NCRRC meeting Item 230314 Item B-1

---

**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Sent:** Wednesday, February 21, 2024 9:23 PM  
**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Cc:** Childs, Nathan D <nchilds@NCDOJ.GOV>; Burgos, Alexander N <alexander.burgos@oah.nc.gov>  
**Subject:** Re: [External] NCRRC meeting Item 230314 Item B-1

Brian,  
I will provide a struckthrough Appendix AT by 8am tomorrow morning.  
Thank you  
Have a good evening  
David Rittlinger  
..... Sent from my iPhone

On Feb 21, 2024, at 9:09 PM, Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)> wrote:

Yes, that would be fine. The meeting doesn't start until 10, and I probably won't be in until 8:45 or so, so take as long as you need.

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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**From:** Childs, Nathan <[nchilds@ncdoj.gov](mailto:nchilds@ncdoj.gov)>  
**Sent:** Wednesday, February 21, 2024 9:07:58 PM  
**To:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>; Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>  
**Cc:** Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>  
**Subject:** Re: [External] NCRRC meeting Item 230314 Item B-1

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Brian - I am positive that we can get you a struck-through copy tomorrow morning. I will be in the office by 7:30 - would an email to by 8A be soon enough?

Get [Outlook for iOS](#)

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**From:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>  
**Sent:** Wednesday, February 21, 2024 9:00:10 PM  
**To:** Childs, Nathan <[nchilds@ncdoj.gov](mailto:nchilds@ncdoj.gov)>; Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>  
**Cc:** Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>  
**Subject:** RE: [External] NCRRC meeting Item 230314 Item B-1

Nathan and David,

I'm removing all the other parties from this email exchange, as this is purely administrative. We're going to need a copy of the appendix with AT struck through or marked deleted, so the right version is properly before the Commission tomorrow morning. If you can't due to time constraints, let me know and I'll figure it out.

Thanks to both of you for your hard work,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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## Burgos, Alexander N

---

**Subject:** FW: [External] NCRRC meeting Item 230314 Item B-1

---

**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Wednesday, February 21, 2024 9:00 PM

**To:** Childs, Nathan D <nchilds@NCDOJ.GOV>; Rittlinger, David B <david.rittlinger@ncdoi.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>

**Subject:** RE: [External] NCRRC meeting Item 230314 Item B-1

Nathan and David,

I'm removing all the other parties from this email exchange, as this is purely administrative. We're going to need a copy of the appendix with AT struck through or marked deleted, so the right version is properly before the Commission tomorrow morning. If you can't due to time constraints, let me know and I'll figure it out.

Thanks to both of you for your hard work,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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## Burgos, Alexander N

---

**Subject:** FW: [External] NCRRC meeting Item 230314 Item B-1  
**Attachments:** 2024 NCRC - Appendix AT.pdf

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**From:** Childs, Nathan <nchilds@ncdoj.gov>  
**Sent:** Wednesday, February 21, 2024 7:57 PM  
**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Cc:** Bridget Herring (herring.ncbcc@gmail.com) <herring.ncbcc@gmail.com>; mmatheny <mmatheny@ashevillenc.gov>; Rittlinger, David B <david.rittlinger@ncdoi.gov>; Yip, Pak <pak.yip@ncdoi.gov>; Dittman, Daniel E <dan.dittman@ncdoi.gov>; Clsaac@nchba.org; Holder, Karen <Karen.Holder@ncdoi.gov>; Burgos, Alexander N <alexander.burgos@oah.nc.gov>  
**Subject:** RE: [External] NCRRC meeting Item 230314 Item B-1

**CAUTION:** External email. Do not click links or open attachments unless verified. Report suspicious emails with the Report Message button located on your Outlook menu bar on the Home tab.

Dear Brian:

As you know, I am the attorney for the North Carolina Building Code Council and am in receipt of the correspondence received this evening from Mr. Issac of the North Carolina Home Builder's Association indicating that NCHBA objects to the inclusion of Appendix AT "Solar-Ready Provisions Detached One- and Two-Family Dwellings and Townhouses" in the 2024 North Carolina Residential Code final rule. A copy of this 2-page appendix, which appears at pages 710-11 of the rule in the Commissioner's materials, is attached for easy reference.

Appendix AT was included to provide guidance should a local government choose to adopt an ordinance addressing solar readiness. It is a self-contained appendix and is not cross-referenced by any other provision of the proposed 2024 North Carolina Residential Code. However, as noted by NCHBA's objection, N.C. Gen. Stat. § 143-138(e) provides that local governments may adopt "fire prevention codes" and "floodplain management regulations" subject to certain further restrictions. Section 143-138(e) **does not** authorize local governments to adopt ordinances addressing construction requirements for solar readiness. Although the Council retains the authority to provide nonmandatory guidance relating to residential construction, under Section 143-138(e), Appendix AT could not provide guidance because local governments could not validly enact related ordinances addressing solar readiness.

In light of the Section 143-138(e)'s restrictions on the authority of local governments to enact such ordinances, the Council acknowledges NCHBA's objection and withdraws Appendix AT from the rule. The Council asks that the Commission approve the remainder of the agenda item, as amended, with the removal of Appendix AT.

Should you have any questions, I will be in attendance at tomorrow's meeting and you may contact me by phone or email.

Sincerely,

Nathan Childs



**Nathan D. Childs**

Assistant Attorney General

Insurance Section

(919) 716-0010

[nchilds@ncdoj.gov](mailto:nchilds@ncdoj.gov)

Street Address: 114 W. Edenton St., Raleigh, NC 27603

Mailing Address: P.O. Box 629, Raleigh, NC 27602-0629

Website: [ncdoj.gov](http://ncdoj.gov)

Please note messages to or from this address may be public records.

APPENDIX AS  
STRAWBALE CONSTRUCTION

DELETED.

APPENDIX AT [RE]  
**SOLAR-READY PROVISIONS—DETACHED ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES**

*The provisions contained in this appendix are ~~adopted as part of this code~~ not mandatory unless specifically referenced in the adopting ordinance.*

**SECTION AT101 (RB101)**  
**SCOPE**

**AT101.1 (RB101.1) General.** These provisions shall be applicable for new construction where solar-ready provisions are required.

**SECTION AT102 (RB102)**  
**GENERAL DEFINITION**

**AT102.1 (RB102.1) General.** The following term shall, for the purpose of this appendix, have the meaning shown herein.

**SOLAR-READY ZONE.** A section or sections of the roof or building overhang designated and reserved for the future installation of a solar photovoltaic or solar thermal system.

**SECTION AT103 (RB103)**  
**SOLAR-READY ZONE**

**AT103.1 (RB103.2) General.** New detached one- and two-family dwellings, and townhouses with not less than 600 square feet (55.74 m<sup>2</sup>) of roof area oriented between 110 degrees and 270 degrees of true north, shall comply with Sections AT103.2 through AT103.10.

**Exceptions:**

1. New residential buildings with a permanently installed on-site renewable energy system.
2. A building where all areas of the roof that would otherwise meet the requirements of Section AT103 are in full or partial shade for more than 70 percent of daylight hours annually.

**AT103.2 (RB103.2) Construction document requirements for solar-ready zone.** *Construction documents shall indicate the solar-ready zone.*

**AT103.3 (RB103.3) Solar-ready zone area.** The total solar-ready zone area shall be not less than 300 square feet (27.87 m<sup>2</sup>) exclusive of mandatory access or setback areas as required by the *International Fire Code*. New townhouses three stories or less in height above grade plane and with a total floor area less than or equal to 2,000 square feet (185.8 m<sup>2</sup>) per dwelling shall have a solar-ready zone area of not less than 150 square feet (13.94 m<sup>2</sup>). The solar-ready zone shall be composed of areas not less than 5 feet (1524 mm) in width and not less than 80 square feet (7.44 m<sup>2</sup>) exclusive of access or set-back areas as required by the *International Fire Code*.

**AT103.4 (RB103.4) Obstructions.** Solar-ready zones shall be free from obstructions, including but not limited to vents, chimneys, and roof-mounted equipment.

**AT103.5 (RB103.5) Shading.** The solar-ready zone shall be set back from any existing or new, permanently affixed object on the building or site that is located south, east or west of the solar zone a distance not less than two times the object's height above the nearest point on the roof surface. Such objects include, but are not limited to, taller portions of the building itself, parapets, chimneys, antennas, signage, rooftop equipment, trees and roof plantings.

**AT103.6 (RB103.6) Capped roof penetration sleeve.** A capped roof penetration sleeve shall be provided adjacent to a solar-ready zone located on a roof slope of not greater than 1 unit vertical in 12 units horizontal (8-percent slope). The capped roof penetration sleeve shall be sized to accommodate the future photovoltaic system conduit, but shall have an inside diameter of not less than 1<sup>1</sup>/<sub>4</sub> inches (32 mm).

**AT103.7 (RB103.7) Roof load documentation.** The structural design loads for roof dead load and roof *live load* shall be clearly indicated on the *construction documents*.

**AT103.8 (RB103.8) Interconnection pathway.** *Construction documents* shall indicate pathways for routing of conduit or plumbing from the solar-ready zone to the electrical service panel or service hot water system.

**AT103.9 (RB103.9) Electrical service reserved space.** The main electrical service panel shall have a reserved space to allow installation of a dual pole circuit breaker for future solar electric installation and shall be *labeled* "For Future Solar Electric." The reserved space shall be positioned at the opposite (load) end from the input feeder location or main circuit location.

**AT103.10 (RB103.10) Construction documentation certificate.** A permanent certificate, indicating the solar-ready zone and other requirements of this section, shall be posted near the electrical distribution panel, water heater or other conspicuous location by the builder or *registered design professional*.



## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

---

**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>

**Sent:** Wednesday, February 21, 2024 1:19 PM

**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>; Rules, Oah <oah.rules@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>; McGhee, Dana <dana.McGhee@oah.nc.gov>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

Brian,

Good afternoon.

Thank you for the recommendation and your work on this.

Have a great day

**David B. Rittlinger, PE, LEED AP**  
**Division Chief - Codes & Interpretations**



**North Carolina Office of State Fire Marshal**  
1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
919.647.0008

[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)

Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

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**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Wednesday, February 21, 2024 11:08 AM

**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>; Rules, Oah <oah.rules@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>; McGhee, Dana <dana.McGhee@oah.nc.gov>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

Thank you, David. With that, I think I can recommend approval of the Plumbing Code at tomorrow's meeting.

Brian

Brian Liebman

Counsel to the North Carolina Rules Review Commission

Office of Administrative Hearings

(984)236-1948

[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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## Burgos, Alexander N

---

**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's  
**Attachments:** D-1 20230314 Item B-1 2024 NC Plumbing Code Rev 3. Form\_0400\_for\_Permanent\_Rule\_September\_2023.pdf; D-1 20230314 Item B-1 2024 NC Plumbing Code Rev 3. Form\_0400\_for\_Permanent\_Rule\_September\_2023.docx; RRC DRAFT-2024 NCPC PLUMBING CHAPTERS (07) (Marked-Up).pdf; RRC DRAFT-2024 NCPC PLUMBING CHAPTERS (07) (Marked-Up).docx; DRAFT-2024 NCPC PLUMBING CHAPTERS (11) (Marked Up) - DED.pdf; DRAFT-2024 NCPC PLUMBING CHAPTERS (11) (Marked Up) - DED.docx

**Importance:** High

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**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Sent:** Wednesday, February 21, 2024 9:30 AM  
**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>; Rules, Oah <oah.rules@oah.nc.gov>  
**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>; McGhee, Dana <dana.McGhee@oah.nc.gov>  
**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's  
**Importance:** High

Brian,

Good morning.

To satisfy the objection to plastic piping in Chapter 7 and Chapter 11 of the 2024 NC Plumbing Code, attached updated are pdf's and word files that reflect the new law.

Let me know if you have any questions.

Thank you for your work on this.

**David B. Rittlinger, PE, LEED AP**  
**Division Chief - Codes & Interpretations**



**North Carolina Office of State Fire Marshal**

1429 Rock Quarry Road, Suite 105

Raleigh, NC 27610


919.647.0008

[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)

Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

# SUBMISSION FOR PERMANENT RULE

<b>1. Rule-Making Agency: NC Building Code Council</b>	
<b>2. Rule citation &amp; name (name not required for repeal):</b> 2024 North Carolina Plumbing Code (230314 Item B-1)	
<b>3. Action:</b> <input type="checkbox"/> ADOPTION <input checked="" type="checkbox"/> AMENDMENT <input type="checkbox"/> REPEAL <input type="checkbox"/> READOPTIOIN <input type="checkbox"/> REPEAL through READOPTIOIN	
<b>4. Rule exempt from RRC review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No	<b>5. Rule automatically subject to legislative review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No
<b>6. Notice for Proposed Rule:</b> <input checked="" type="checkbox"/> <b>Notice Required</b> Notice of Text published on: May 15, 2023 in NC Register, April 24, 2023 agency website Link to Agency notice: <a href="https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice">https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice</a> Hearing on: June 13, 2023 Adoption by Agency on: September 12, 2023 <input type="checkbox"/> <b>Notice not required under G.S.:</b> Adoption by Agency on:	
<b>7. Rule establishes or increases a fee? (See G.S. 12-3.1)</b> <input type="checkbox"/> Yes Agency submitted request for consultation on: Consultation not required. Cite authority: <input checked="" type="checkbox"/> No	<b>8. Fiscal impact. Check all that apply.</b> <input type="checkbox"/> This Rule was part of a combined analysis. <input type="checkbox"/> State funds affected <input type="checkbox"/> Local funds affected <input type="checkbox"/> Substantial economic impact (≥\$1,000,000) <input type="checkbox"/> Approved by OSBM <input checked="" type="checkbox"/> No fiscal note required
<b>9. REASON FOR ACTION</b>	
<b>9A. What prompted this action? Check all that apply:</b> <input checked="" type="checkbox"/> Agency <input type="checkbox"/> Legislation enacted by the General Assembly <input type="checkbox"/> Court order / cite:           Cite Session Law: <input type="checkbox"/> Federal statute / cite: <input checked="" type="checkbox"/> Petition for rule-making <input type="checkbox"/> Federal regulation / cite: <input type="checkbox"/> Other:	
<b>9B. Explain:</b> <u>This amendment</u> The 2018 NC Plumbing Code is amended to create the 2024 NC Plumbing Code and is proposed to protect the public by updating the code to current standards of <u>prae-tice-practice</u> .	
The delayed effective date of this Rule is January 1, 2025. The Statutory authority for Rule-making is G. S. 143-136; 143-138.	
<b>10. Rulemaking Coordinator: David Bruce Rittlinger</b> David B. Rittlinger Phone: (919)647-0008 E-Mail: david.rittlinger@ncdoi.gov  <b>Additional agency contact, if any:</b> Phone: E-Mail:	<b>11. Signature of Agency Head* or Rule-making Coordinator:</b>   *If this function has been delegated (reassigned) pursuant to G.S. 143B-10(a), submit a copy of the delegation with this form. Typed Name: David Bruce Rittlinger Title: <u>(Interim)</u> Deputy commissioner of Engineering & Chief Code Consultant
<b>RRC AND OAH USE ONLY</b>	
<b>Action taken:</b> <input type="checkbox"/> RRC extended period of review: <input type="checkbox"/> RRC determined substantial changes: <input type="checkbox"/> Withdrawn by agency <input type="checkbox"/> Subject to Legislative Review <input type="checkbox"/> Other:	

# SUBMISSION FOR PERMANENT RULE

The 2021 International Plumbing Code can be viewed for free at the following link:

<https://codes.iccsafe.org/content/IPC2021P3>

Errata to the 2021 International Plumbing Code can be viewed for free at the following link:

<https://www.iccsafe.org/wp-content/uploads/errata-central/2021-International-Plumbing-Code-Errata-Complete.pdf>

Amendments to the 2018 North Carolina Plumbing Code can be viewed for free at the following link:

<https://www.ncosfm.gov/2017-2023-approved-amendments-230314plumbing-code>

**THIS DOCUMENT CONTAINS PROPOSED NORTH CAROLINA AMENDMENTS TO THE 2021 EDITION OF THE INTERNATIONAL PLUMBING CODE (IPC) FOR THE PURPOSE OF ESTABLISHING THE 2024 EDITION OF THE NORTH CAROLINA PLUMBING CODE.**

**UNDERLINED TEXT INDICATE NORTH CAROLINA PROPOSED AMENDMENTS TO THE 2021 INTERNATIONAL PLUMBING CODE FOR THE 2024 NORTH CAROLINA PLUMBING CODE.**

**STRUCKTHROUGH TEXT INDICATES IPC TEXT THAT IS PROPOSED TO BE REMOVED FROM THE 2024 NORTH CAROLINA PLUMBING CODE.**

**TEXT THAT IS HIGHLIGHTED IN YELLOW INDICATES PROPOSED NORTH CAROLINA AMENDMENTS THAT ARE NEW OR DIFFERENT THAN THE 2018 NORTH CAROLINA PLUMBING CODE.**

**Documents included:**

1. Formatted Review Aide and 2024 North Carolina Plumbing Code: Chapter 1 through Resource A\*

**TEXT THAT IS STRUCKTHROUGH IS DELETED FROM THE 2018 EDITION TO CREATE THE 2024 EDITION.**

**TEXT THAT IS UNDERLINED IS NEW TEXT TO CREATE THE 2024 EDITION.**

\*Of note, publishing edits to the Cover page, North Carolina Building Code Council members and committees lists, North Carolina Department of Insurance contact information, Preface, Table of Contents and Index are not included as those are publishing edits that do not contain permanent rule content. These publishing edits contain NCBC and NCDI contact information, instructions on how to use the code, and guidance on where to find information in the code for the public-at-large. Coordination of the correct page numbers tied to the Table of Contents and Index cannot be accurately completed until the first draft of publishing is completed for NCDI-OSFM Engineering & Codes staff review prior to completion of publishing by the International Code Council. NCDI-OSFM Engineering & Codes staff will be coordinating the publication of all these publishing edits with the International Code Council once the proposed 2024 North Carolina Building Codes are approved.

2. Appendix C Code Change Proposal North Carolina Building Code Council (230314 Item B-1) 2024 North Carolina Mechanical Code (File: B-1 2024 NCPC). A link to the petition can be found here: <https://www.ncosfm.gov/news/events/building-code-council-meeting-march-14-2023>

3. 2017-2023 Approved Amendments to the 2018 North Carolina Plumbing Code (File: 2017-2023 Approved Amendments 230314 Plumbing Code). A link to these amendments can be found here: <https://www.ncosfm.gov/2017-2023-approved-amendments-230314plumbing-code>

## **SUBMISSION FOR PERMANENT RULE**

4. Appendix C Code Change Proposal North Carolina Building Code Council (231219 Item B-16) 2024 NC Plumbing Code, Sections 702.1, 702.4, 1102.2 and 1102.7 (File B-16 2024 NCPC 702.1-702.4-1102.2 and 1102.7). This petition amends the 2024 NC Plumbing Code per General Assembly of North Carolina Session Law 2023-137, Section 36 that became law on 10/10/23 and addresses the Letter of Objection dated 12/6/23 by Canaan Huie-Attorney at Law-Moore & VanAllen that was submitted to Brian Liebman-Counsel to the North Carolina Rules Review Commission of the Office of Administrative Hearings. This permanent rule is anticipated to be adopted by the NCBCC on 3/19/24 and submitted to RRC within 30 days after its adoption.

**(see attached documents)**

# CHAPTER 11

## STORM DRAINAGE

### SECTION 1101 GENERAL

**1101.1 Scope.** The provisions of this chapter shall govern the materials, design, construction and installation of storm ~~drainage~~ drainage except one- and two- family dwellings.

**1101.2 Disposal.** Rainwater from roofs and storm water from paved areas, yards, courts and courtyards shall drain to an *ap-  
proved* place of disposal.

**1101.3 Prohibited drainage.** Storm water shall not be drained into *sewers* intended for sewage only.

**1101.4 Tests.** The conductors and the building *storm drain* shall be tested in accordance with Section 312.

**1101.5 Change in size.** The size of a drainage pipe shall not be reduced in the direction of flow.

**1101.6 Fittings and connections.** ~~All connections~~ Connections and changes in direction of the storm drainage system shall be made with *approved* drainage-type fittings in accordance with Table 706.3. The fittings shall not obstruct or retard flow in the system.

**[BS] 1101.7 Roof design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. The maximum possible depth of water on the roof shall include the height of the water required above the inlet of the secondary roof drainage means to achieve the required flow rate of the secondary drainage means to accommodate the design rainfall rate as required by Section 1106.

**1101.8 Cleanouts required.** Cleanouts shall be installed in the storm drainage system and shall comply with the provisions of this code for sanitary drainage pipe cleanouts.

**Exception:** Subsurface drainage system.

**1101.9 Backwater valves.** Storm drainage systems shall be provided with backwater valves as required for sanitary drainage systems in accordance with Section ~~715-714.~~

### SECTION 1102 MATERIALS

**1102.1 General.** The materials and methods utilized for the construction and installation of storm drainage systems shall comply with this section and the applicable provisions of Chapter 7.

**1102.2 Inside storm drainage conductors.** Inside storm drainage conductors installed above ground shall conform to one of the standards listed in Table 702.1.

**Exception:** Plastic pipe with an inside diameter of 2 inches and larger shall not be used for storm drainage conductors in buildings in which the top occupied floor exceeds 75 feet (23 m) in height. height as per N.C.G.S. 143-138 (b24).

**1102.3 Underground building storm drain pipe.** Underground building *storm drain* pipe shall conform to one of the standards listed in Table 702.2.

**1102.4 Building storm sewer pipe.** Building storm *sewer* pipe shall conform to one of the standards listed in Table 1102.4.

TABLE 1102.4  
BUILDING STORM SEWER PIPE

**STORM DRAINAGE**

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe <u>in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall</u>	ASTM D2661; <del>ASTM D2751</del> ; ASTM F628; <del>ASTM F1488</del> ; CSA B181.1; CSA B182.1
Cast-iron pipe	ASTM A74; ASTM A888; CISPI 301
Concrete pipe	ASTM C14; ASTM C76; CSA A257.1; CSA A257.2
Copper or copper-alloy tubing (Type K, L, M or DWV)	ASTM B75; ASTM B88; ASTM B251; ASTM B306
Polyethylene (PE) plastic pipe	<del>ASTM F667</del> ; ASTM F2306/F2306M; <del>ASTM F2648/F2648M</del>
Polypropylene (PP) pipe	<del>ASTM F2881</del> ; CSA B182.13
Polyvinyl chloride (PVC) plastic pipe (Type DWV, SDR26, SDR35, SDR41, PS50 or PS100) <u>in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall.</u>	ASTM D2665; ASTM D3034; ASTM F891; <del>ASTM F1488</del> ; CSA B181.2; CSA B182.2; CSA B182.4
Stainless steel drainage systems, Type 316L	ASME A112.3.1
Vitrified clay pipe	ASTM C4; ASTM C700

**1102.5 Subsoil drain pipe.** Subsoil drains shall be open-jointed, horizontally split or perforated pipe conforming to one of the standards listed in Table 1102.5.

**TABLE 1102.5  
SUBSOIL DRAIN PIPE**

MATERIAL	STANDARD
Cast-iron pipe	ASTM A74; ASTM A888; CISPI 301
Polyethylene (PE) plastic pipe	ASTM F405; <del>ASTM F667</del> ; CSA B182.1; CSA B182.6; CSA B182.8
Polyvinyl chloride (PVC) plastic pipe (type sewer pipe, SDR35, PS25, PS50 or PS100)	ASTM D2729; ASTM D3034; ASTM F891; CSA B182.2; CSA B182.4
Stainless steel drainage systems, Type 316L	ASME A112.3.1
Vitrified clay pipe	ASTM C4; ASTM C700

**1102.6 Roof drains.** Roof drains shall conform to ASME A112.3.1 or ASME A112.6.4. Roof drains, other than siphonic roof drains, shall be tested and rated in accordance with ASME A112.6.4 or ASPE/IAPMO Z1034.

**1102.7 Fittings.** Pipe fittings shall be *approved* for installation with the piping material installed, and shall conform to the respective pipe standards or one of the standards listed in Table 1102.7. The fittings shall not have ledges, shoulders or reductions capable of retarding or obstructing flow in the piping. Threaded drainage pipe fittings shall be of the recessed drainage type.

**Exception:** Plastic pipe fittings and plastic plumbing appurtenances with an inside diameter of 2 inches and larger shall not be used for storm drainage conductors in buildings in which the top occupied floor exceeds 75 feet (23 m) in height, height as per N.C.G.S 143-138 (b24).

**TABLE 1102.7  
PIPE FITTING FITTINGS**

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic	ASTM D2661; ASTM D3311; CSA B181.1
Cast iron	ASME B16.4; ASME B16.12; ASTM A74; ASTM A888; CISPI 301
Coextruded composite ABS and drain DR-PS in PS35, PS50, PS100, PS140, PS200	ASTM D2751
Coextruded composite ABS DWV Schedule 40 IPS pipe (solid or cellular core)	ASTM D2661; ASTM D3311; ASTM F628
Coextruded composite PVC DWV Schedule 40 IPS-DR, PS140, PS200 (solid or cellular core)	ASTM D2665; ASTM D3311; ASTM F891
Coextruded composite PVC sewer and drain DR-PS in PS35, PS50, PS100, PS140, PS200	ASTM D3034
Copper or copper alloy	ASME B16.15; ASME B16.18; ASME B16.22; ASME B16.23; ASME B16.26; ASME B16.29
Gray iron and ductile iron	AWWA C110/A21.10
Malleable iron	ASME B16.3
Plastic, general	ASTM F409
Polyethylene (PE) plastic pipe	ASTM F2306/F2306M
Polyvinyl chloride (PVC) plastic	ASTM D2665; ASTM D3311; ASTM F1866 (10 inches in diameter and larger)
Stainless steel drainage systems, Type 316L	ASME A112.3.1
Steel	ASME B16.9; ASME B16.11; ASME B16.28



**SECTION 1103  
TRAPS**

Deleted.

**SECTION 1104  
CONDUCTORS AND CONNECTIONS**

**1104.1 Prohibited use.** Conductor pipes shall not be used as soil, waste or vent pipes, and soil, waste or vent pipes shall not be used as conductors.

**1104.2 ~~Floor drains.~~ Waste receptors.** ~~Floor drains~~ Waste receptors shall not be connected to a *storm drain*.

**Exception:** Shall not apply to open and enclosed parking garages.

**SECTION 1105  
ROOF DRAINS**

**1105.1 General.** Roof drains shall be installed in accordance with the manufacturer's instructions. The inside opening for the roof drain shall not be obstructed by the roofing membrane material.

**1105.1.1 Strainers.** Roof drains shall have strainers extending not less than 3 inches (76 mm) above the surface of the roof immediately adjacent to the roof drain. Strainers shall have an available inlet area, above roof level, of not less than one and one-half times the area of the conductor or leader to which the drain is connected.

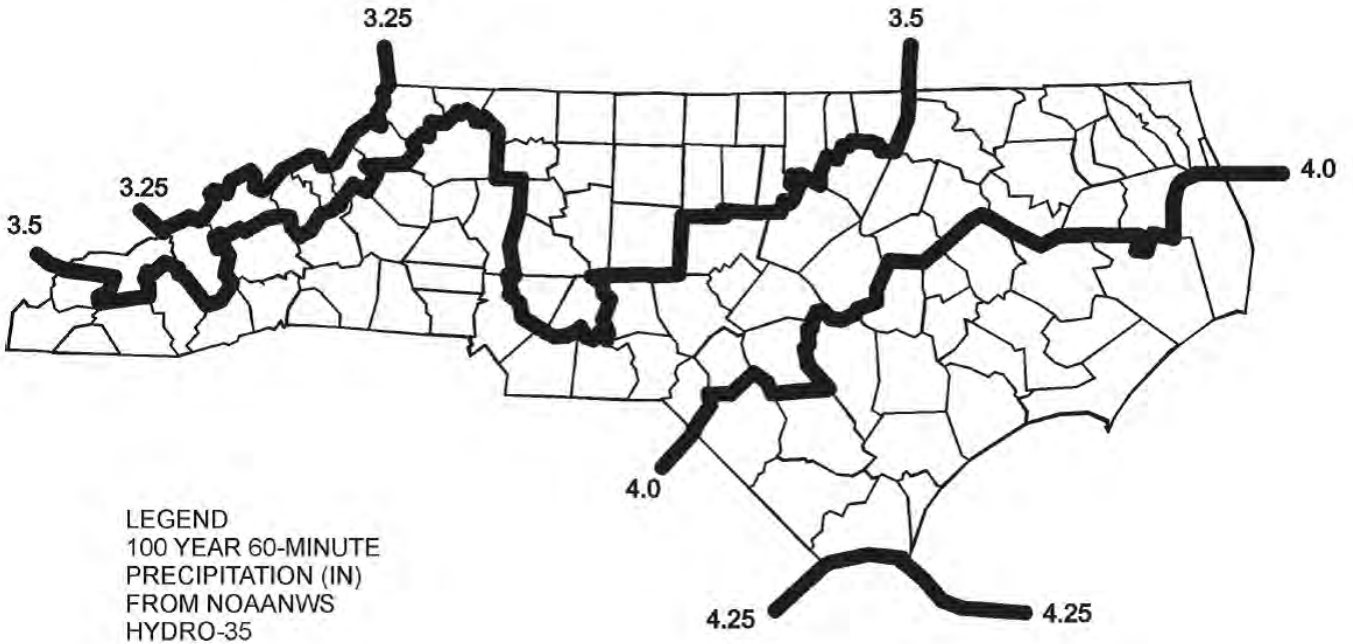
**1105.1.2 Flat decks.** Roof drain strainers for use on sun decks, parking decks and similar areas that are normally serviced and maintained shall comply with Section 1105.1 or shall be of the flat-surface type, installed level with the deck, with an available inlet area not less than two times the area of the conductor or leader to which the drain is connected.

**1105.1.3 Roof drain flashings.** The connection between roofs and roof drains which pass through the roof and into the interior of the building shall be made water-tight by the use of *approved* flashing material.

**1105.2 Roof drain flow rate.** The published roof drain flow rate, based on the head of water above the roof drain, shall be used to size the storm drainage system in accordance with Section 1106. The flow rate used for sizing the storm drainage piping shall be based on the maximum anticipated ponding at the roof drain.

**SECTION 1106  
SIZE OF CONDUCTORS,  
LEADERS AND STORM DRAINS**

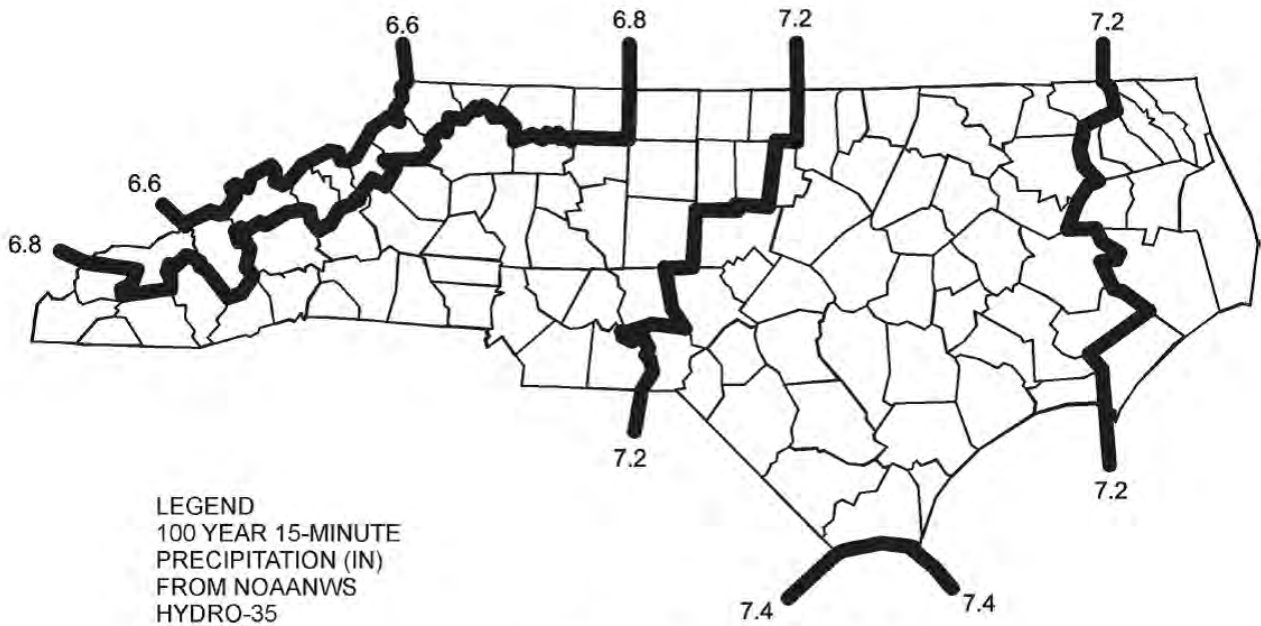
**1106.1 General.** The size of the vertical conductors and leaders, building *storm drains*, building *storm sewers* and any horizontal branches of such drains or *sewers* shall be based on the 100-year hourly rainfall rate indicated in Figures 1106.1(a) and 1106.1(b) or on other rainfall rates determined from *approved* local weather data.



**FIGURE 1106.1(a)**  
**100-YEAR, 1-HOUR RAINFALL (INCHES/HOUR) NORTH CAROLINA FOR PRIMARY ROOF DRAINS**

For SI: 1 inch = 25.4 mm.

Source: National Weather Service, National Oceanic and Atmospheric Administration, Washington D.C.



**FIGURE 1106.1(b)**  
**100-YEAR, 15-MINUTE RAINFALL (INCHES/HOUR) NORTH CAROLINA FOR SECONDARY ROOF DRAINS**

For SI: 1 inch = 25.4 mm.

Source: National Weather Service, National Oceanic and Atmospheric Administration, Washington D.C.

**STORM DRAINAGE**

**1106.2 Vertical conductors and leaders.** Vertical conductors and leaders shall be sized for the maximum projected roof area, in accordance with Tables 1106.2(1) and 1106.2(2).

**TABLE 1106.2(1)  
SIZE OF CIRCULAR VERTICAL CONDUCTORS AND LEADERS**

DIAMETER OF LEADER (inches) <sup>a</sup>	HORIZONTALLY PROJECTED ROOF AREA (square feet)											
	Rainfall rate (inches per hour)											
	1	2	3	4	5	6	7	8	9	10	11	12
2	2,880	1,440	960	720	575	480	410	360	320	290	260	240
3	8,800	4,400	2,930	2,200	1,760	1,470	1,260	1,100	980	880	800	730
4	18,400	9,200	6,130	4,600	3,680	3,070	2,630	2,300	2,045	1,840	1,675	1,530
5	34,600	17,300	11,530	8,650	6,920	5,765	4,945	4,325	3,845	3,460	3,145	2,880
6	54,000	27,000	17,995	13,500	10,800	9,000	7,715	6,750	6,000	5,400	4,910	4,500
8	116,000	58,000	38,660	29,000	23,200	19,315	16,570	14,500	12,890	11,600	10,545	9,600

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m<sup>2</sup>.

a. Sizes indicated are the diameter of circular piping. This table is applicable to piping of other shapes, provided the cross-sectional shape fully encloses a circle of the diameter indicated in this table. For rectangular leaders, see Table 1106.2(2). Interpolation is permitted for pipe sizes that fall between those listed in this table.

**TABLE 1106.2(2)  
SIZE OF RECTANGULAR VERTICAL CONDUCTORS AND LEADERS**

DIMENSIONS OF COMMON LEADER SIZES width x length (inches) <sup>a</sup>	HORIZONTALLY PROJECTED ROOF AREA (square feet)											
	Rainfall rate (inches per hour)											
	1	2	3	4	5	6	7	8	9	10	11	12
1 <sup>3</sup> / <sub>4</sub> × 2 <sup>1</sup> / <sub>2</sub>	3,410	1,700	1,130	850	680	560	480	420	370	340	310	280
2 × 3	5,540	2,770	1,840	1,380	1,100	920	790	690	610	550	500	460
2 <sup>3</sup> / <sub>4</sub> × 4 <sup>1</sup> / <sub>4</sub>	12,830	6,410	4,270	3,200	2,560	2,130	1,830	1,600	1,420	1,280	1,160	1,060
3 × 4	13,210	6,600	4,400	3,300	2,640	2,200	1,880	1,650	1,460	1,320	1,200	1,100
3 <sup>1</sup> / <sub>2</sub> × 4	15,900	7,950	5,300	3,970	3,180	2,650	2,270	1,980	1,760	1,590	1,440	1,320
3 <sup>1</sup> / <sub>2</sub> × 5	21,310	10,650	7,100	5,320	4,260	3,550	3,040	2,660	2,360	2,130	1,930	1,770
3 <sup>3</sup> / <sub>4</sub> × 4 <sup>3</sup> / <sub>4</sub>	21,960	10,980	7,320	5,490	4,390	3,660	3,130	2,740	2,440	2,190	1,990	1,830
3 <sup>3</sup> / <sub>4</sub> × 5 <sup>1</sup> / <sub>4</sub>	25,520	12,760	8,500	6,380	5,100	4,250	3,640	3,190	2,830	2,550	2,320	2,120
3 <sup>1</sup> / <sub>2</sub> × 6	27,790	13,890	9,260	6,940	5,550	4,630	3,970	3,470	3,080	2,770	2,520	2,310
4 × 6	32,980	16,490	10,990	8,240	6,590	5,490	4,710	4,120	3,660	3,290	2,990	2,740
5 <sup>1</sup> / <sub>2</sub> × 5 <sup>1</sup> / <sub>2</sub>	44,300	22,150	14,760	11,070	8,860	7,380	6,320	5,530	4,920	4,430	4,020	3,690
7 <sup>1</sup> / <sub>2</sub> × 7 <sup>1</sup> / <sub>2</sub>	100,500	50,250	33,500	25,120	20,100	16,750	14,350	12,560	11,160	10,050	9,130	8,370

a. Sizes indicated are nominal width × length of the opening for rectangular piping.

b. For shapes not included in this table, Equation 11-1 shall be used to determine the equivalent circular diameter,  $D_e$ , of rectangular piping for use in interpolation using the data from Table 1106.2(1).

$$D_e = [\text{width} \times \text{length}]^{1/2} \text{ (Equation 11-1)}$$

where:

$D_e$  = equivalent circular diameter and  $D_e$  width and length are in inches.

**1106.3 Building storm drains and sewers.** The size of the building *storm drain*, building *storm sewer* and their horizontal branches having a slope of one-half unit or less vertical in 12 units horizontal (4-percent slope) shall be based on the maximum projected roof area in accordance with Table 1106.3. The minimum slope of horizontal branches shall be one-eighth unit vertical in 12 units horizontal (1-percent slope) unless otherwise *approved*.

**TABLE 1106.3  
SIZE OF HORIZONTAL STORM DRAINAGE PIPING<sup>a</sup>**

SIZE OF HORIZONTAL PIPING (inches)	HORIZONTALLY PROJECTED ROOF AREA (square feet)					
	Rainfall rate (inches per hour)					
	1	2	3	4	5	6
<i>1/8</i> unit vertical in 12 units horizontal (1-percent slope)						
3	3,288	1,644	1,096	822	657	548
4	7,520	3,760	2,506	1,800	1,504	1,253
5	13,360	6,680	4,453	3,340	2,672	2,227
6	21,400	10,700	7,133	5,350	4,280	3,566
8	46,000	23,000	15,330	11,500	9,200	7,600
10	82,800	41,400	27,600	20,700	16,580	13,800
12	133,200	66,600	44,400	33,300	26,650	22,200
15	218,000	109,000	72,800	59,500	47,600	39,650
<i>1/4</i> unit vertical in 12 units horizontal (2-percent slope)						
3	4,640	2,320	1,546	1,160	928	773
4	10,660	5,330	3,533	2,650	2,120	1,766
5	18,880	9,440	6,293	4,720	3,776	3,146
6	30,200	15,100	10,066	7,550	6,040	5,033
8	65,200	32,600	21,733	16,300	13,040	10,866
10	116,800	58,400	38,950	29,200	23,350	19,450
12	188,000	94,000	62,600	47,000	37,600	31,350
15	336,000	168,000	112,000	84,000	67,250	56,000
<i>1/2</i> unit vertical in 12 units horizontal (4-percent slope)						
3	6,576	3,288	2,295	1,644	1,310	1,096
4	15,040	7,520	5,010	3,760	3,010	2,500
5	26,720	13,360	8,900	6,680	5,320	4,450
6	42,800	21,400	13,700	10,700	8,580	7,140
8	92,000	46,000	30,650	23,000	18,400	15,320
10	171,600	85,800	55,200	41,400	33,150	27,600
12	266,400	133,200	88,800	66,600	53,200	44,400
15	476,000	238,000	158,800	119,000	95,300	79,250

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m<sup>2</sup>.

<sup>a</sup> For Tables 1106.3 and 1106.6, when rainfall rates exceed 6 inches per hour, then the figures for roof area shall be adjusted proportionally by multiplying the figure by six and dividing by the maximum rate of rainfall in inches per hour [see Figure 1106.1(a)].

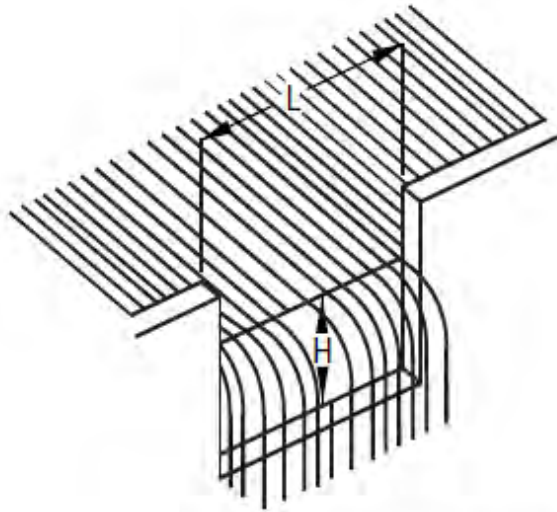
**1106.4 Vertical walls.** In sizing roof drains and storm drainage piping, one-half of the area of any vertical wall or parapet that diverts rainwater to the roof shall be added to the projected roof area for inclusion in calculating the required size of vertical conductors, leaders and horizontal storm drainage piping.

**1106.5 Parapet wall scupper location.** Parapet wall roof drainage scupper and overflow scupper location shall comply with the requirements of Figure 1106.5.

(Note: 1 gpm = 0.0104 \* (rainfall rate) \* area)

**1106.5 Parapet wall scuppers location.** Where scuppers are used for primary roof drainage or for secondary (emergency overflow) roof drainage or both, the quantity, size, location and inlet elevation of the scuppers shall be chosen to prevent the depth of ponding water on the roof from exceeding the maximum water depth that the roof was designed for as determined by Section 1611.1 of the *International Building Code*. Scupper openings shall be not less than 4 inches (102 mm) in height and be designed in accordance with Figure 1106.5 (Note: 1 gpm = 0.0104 \* (rainfall rate) \* area). The flow through the primary system shall not be considered when locating and sizing secondary scuppers.

**STORM DRAINAGE**



Head (H) (inches)	CAPACITY OF SCUPPER (gallons per minute)									
	Length (L) of scupper (inches)									
	4	6	8	10	12	18	24	30	36	48
1	10.7	17.4	23.4	29.3	35.4	53.4	71.5	89.5	107.5	143.7
2	30.5	47.5	64.4	81.4	98.5	149.4	200.3	251.1	302.1	404.0
3	52.9	84.1	115.2	146.3	177.8	271.4	364.9	458.5	552.0	739.0
4	76.7	124.6	172.6	220.5	269.0	413.3	557.5	701.8	846.0	1135.0
6	123.3	211.4	299.5	387.5	476.5	741.1	1005.8	1270.4	1535.0	2067.5

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.

Based on the Francis formula:

$$Q = 3.33 (L - 0.2H) H^{3/2}$$

where:

Q = Flow rate (cubic feet per second).

L = Length of scupper opening (feet).

H = Head on scupper [feet (measured 6 feet back from opening)].

**FIGURE 1106.5  
SIZE OF SCUPPERS**

**1106.6 Size of roof gutters.** The size of semicircular gutters shall be based on the maximum projected roof area in accordance with Table 1106.6.

**TABLE 1106.6  
SIZE OF SEMICIRCULAR ROOF GUTTERS<sup>a</sup>**

DIAMETER OF GUTTERS (inches)	HORIZONTALLY PROJECTED ROOF AREA (square feet)					
	Rainfall rate (inches per hour)					
	1	2	3	4	5	6
$\frac{1}{16}$ unit vertical in 12 units horizontal (0.5-percent slope)						
3	680	340	226	170	136	113
4	1,440	720	480	360	288	240
5	2,500	1,250	834	625	500	416
6	3,840	1,920	1,280	960	768	640
7	5,520	2,760	1,840	1,380	1,100	918
8	7,960	3,980	2,655	1,990	1,590	1,325
10	14,400	7,200	4,800	3,600	2,880	2,400
$\frac{1}{8}$ unit vertical 12 units horizontal (1-percent slope)						
3	960	480	320	240	192	160
4	2,040	1,020	681	510	408	340
5	3,520	1,760	1,172	880	704	587
6	5,440	2,720	1,815	1,360	1,085	905
7	7,800	3,900	2,600	1,950	1,560	1,300
8	11,200	5,600	3,740	2,800	2,240	1,870
10	20,400	10,200	6,800	5,100	4,080	3,400
$\frac{1}{4}$ unit vertical in 12 units horizontal (2-percent slope)						
3	1,360	680	454	340	272	226
4	2,880	1,440	960	720	576	480
5	5,000	2,500	1,668	1,250	1,000	834
6	7,680	3,840	2,560	1,920	1,536	1,280
7	11,040	5,520	3,860	2,760	2,205	1,840
8	15,920	7,960	5,310	3,980	3,180	2,655
10	28,800	14,400	9,600	7,200	5,750	4,800
$\frac{1}{2}$ unit vertical in 12 units horizontal (4-percent slope)						
3	1,920	960	640	480	384	320
4	4,080	2,040	1,360	1,020	816	680
5	7,080	3,540	2,360	1,770	1,415	1,180
6	11,080	5,540	3,695	2,770	2,220	1,850
7	15,600	7,800	5,200	3,900	3,120	2,600
8	22,400	11,200	7,460	5,600	4,480	3,730
10	40,000	20,000	13,330	10,000	8,000	6,660

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m<sup>2</sup>.

a. For Tables 1106.3 and 1106.6, when rainfall rates exceed 6 inches per hour, then the figures for roof area shall be adjusted proportionally by multiplying the figure by six and dividing by the maximum rate of rainfall in inches per hour [see Figure 1106.1(a)].

### SECTION 1107 SIPHONIC ROOF DRAINAGE SYSTEMS

**1107.1 General.** Siphonic roof drains and drainage systems shall be designed in accordance with ASME A112.6.9 and ASPE 45.

### SECTION 1108 SECONDARY (EMERGENCY) ROOF DRAINS

**1108.1 Secondary (emergency overflow) drains or scuppers.** Where roof drains are required, secondary (emergency overflow) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason. Where primary and secondary roof drains are manufactured as a single assembly, the inlet and outlet for each drain shall be independent.

## STORM DRAINAGE

**1108.2 Separate systems required.** Secondary roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location that would normally be observed by the building occupants or maintenance personnel.

**1108.3 Sizing of secondary drains.** Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106 based on the rainfall indicated in Figure 1106.1(b). Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall have an opening dimension of not less than 4 inches (102 mm) in height and have an opening width equal to the circumference of the roof drain required for the area served. The flow through the primary system shall not be considered when sizing the secondary roof drain system.

### SECTION 1109 COMBINED SANITARY AND STORM PUBLIC SEWER

**1109.1 General.** Where the *public sewer* is a combined system for both sanitary and storm water, the *storm sewer* shall be connected independently to the *public sewer*.

### SECTION 1110 CONTROLLED FLOW ROOF DRAIN SYSTEMS

**1110.1 General.** The roof of a structure shall be designed for the storage of water where the storm drainage system is engineered for controlled flow. The controlled flow roof drain system shall be an engineered system in accordance with this section and the design, submittal, approval, inspection and testing requirements of Section 316.1. The controlled flow system shall be designed based on the required rainfall rate in accordance with Section 1106.1.

**1110.2 Control devices.** The control devices shall be installed so that the rate of discharge of water per minute shall not exceed the values for continuous flow as indicated in Section 1110.1.

**1110.3 Installation.** Runoff control shall be by control devices. Control devices shall be protected by strainers.

**1110.4 Minimum number of roof drains.** Not less than two roof drains shall be installed in roof areas 10,000 square feet (929 m<sup>2</sup>) or less and not less than four roof drains shall be installed in roofs over 10,000 square feet (929 m<sup>2</sup>) in area.

### SECTION 1111 SUBSOIL DRAINS

**1111.1 Subsoil drains.** Subsoil drains shall be open-jointed, horizontally split or perforated pipe conforming to one of the standards listed in Table 1102.5. Such drains shall ~~not~~ be not less than 4 inches (102 mm) in diameter. Where the building is subject to backwater, the subsoil drain shall be protected by an accessibly located backwater valve. Subsoil drains shall discharge to a trapped area drain, sump, dry well or *approved* location above ground. The subsoil sump shall not be required to have either a gastight cover or a vent. The sump and pumping system shall comply with Section 1113.1.

### SECTION 1112 BUILDING SUBDRAINS

**1112.1 Building subdrains.** *Building subdrains* located below the *public sewer* level shall discharge into a sump or receiving tank, the contents of which shall be automatically lifted and discharged into the drainage system as required for building sumps. The sump and pumping equipment shall comply with Section 1113.1.

### SECTION 1113 SUMPS AND PUMPING SYSTEMS

**1113.1 Pumping system.** The sump pump, pit and discharge piping shall conform to Sections 1113.1.1 through 1113.1.4.

**1113.1.1 Pump capacity and head.** The sump pump shall be of a capacity and head appropriate to anticipated use requirements.

**1113.1.2 Sump pit.** The sump pit shall be not less than 18 inches (457 mm) in diameter and not less than 24 inches (610 mm) in depth, unless otherwise *approved*. The pit shall be ~~accessible~~provided with access and shall be located such that all drainage flows into the pit by gravity. The sump pit shall be constructed of tile, steel, plastic, cast iron, concrete or other *approved* material, with a removable cover adequate to support anticipated loads in the area of use. The pit floor shall be solid and provide permanent support for the pump.

**1113.1.3 Electrical.** Electrical service outlets, ~~when~~where required, shall meet the requirements of NFPA 70.

**1113.1.4 Piping.** Discharge piping shall meet the requirements of Section 1102.2, 1102.3 or 1102.4 and shall include a gate valve and a full flow check valve. Pipe and fittings shall be the same size as, or larger than, the pump discharge tapping.

**Exception:** ~~In one and two family dwellings, only a check valve shall be required, located on the discharge piping from the pump or ejector.~~

## SECTION 1114 VALUES FOR CONTINUOUS FLOW

**1114.1 Equivalent roof area.** Where there is a continuous or ~~semicontinuous~~semi-continuous discharge into the building *storm drain* or building *storm sewer*, such as from a pump, ejector, air conditioning plant or similar device, each gallon per minute (L/m) of such discharge shall be computed as being equivalent to 96 square feet (9m<sup>2</sup>) of roof area, based on a rainfall rate of 1 inch (25.4 mm) per hour.



# CHAPTER 7

## SANITARY DRAINAGE

### SECTION 701 GENERAL

**701.1 Scope.** The provisions of this chapter shall govern the materials, design, construction and installation of sanitary drainage systems.

**701.2 Sewer Connection to sewer required.** Buildings in which plumbing fixtures are installed and premises having drainage piping sanitary drainage piping from plumbing fixtures in buildings and sanitary drainage piping systems from premises shall be connected to a public sewer, where available, or an approved private sewage disposal system. Where a public sewer is not available, the sanitary drainage piping and systems shall be connected to a private sewage disposal system in compliance with state or local requirements.

**Exception:** Sanitary drainage piping and systems that convey only the discharge from bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to connect to a public sewer or to a private sewage disposal system provided that the piping or systems are connected to a system in accordance with Chapter 13.

**701.3 Separate sewer connection.** A building having plumbing fixtures installed and intended for human habitation, occupancy or use on premises abutting on a street, alley or easement in which there is a public sewer shall have a separate connection with the sewer. Where located on the same lot, multiple buildings shall not be prohibited from connecting to a common building sewer that connects to the public sewer.

**701.4 Sewage treatment.** Sewage or other waste from a plumbing system that is deleterious to surface or subsurface waters shall not be discharged into the ground or into any waterway unless it has first been rendered innocuous through treatment approved by the authority having jurisdiction.

**701.5 Damage to drainage system or public sewer.** Wastes Waste detrimental to the public sewer system or detrimental to the functioning of the private sewage system shall be treated and disposed of in accordance with Section 1003.

**701.6 Tests.** The sanitary drainage system shall be tested in accordance with Section 312.

**701.7 Engineered systems.** Engineered sanitary drainage systems shall conform to the provisions of Sections 316, 316 and 713.

**701.8 Drainage piping in food service areas.** Exposed soil or waste piping shall not be installed above any working, storage or eating surfaces in food service establishments.

### SECTION 702 MATERIALS

**702.1 Above-ground sanitary drainage and vent pipe.** Above-ground soil, waste and vent pipe shall conform to one of the standards listed in Table 702.1. Pipe fittings shall not be solvent cemented inside of plastic pipe.

**Exception:** Plastic pipe with an inside diameter 2 inches (51 mm) and larger shall not be used for storm drainage drain, waste and vent conductors in buildings in which the top occupied floor exceeds 75 feet (23 m) in height, height as per N.C.G.S 143-138 (b24).

TABLE 702.1  
ABOVE-GROUND DRAINAGE AND VENT PIPE

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall	ASTM D2661; ASTM F628; ASTM F1488; CSA B181.1

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Brass pipe	ASTM B43
Cast-iron pipe	ASTM A74; ASTM A888; CISPI 301
Copper or copper-alloy pipe	ASTM B42; <u>ASTM B43</u> ; ASTM B302
Copper or copper-alloy tubing (Type K, L, M or DWV)	ASTM B75; ASTM B88; ASTM B251; ASTM B306
Ductile iron pipe	ANSI/AWWA C150/A21.50
Galvanized steel pipe	ASTM A53
Glass pipe	ASTM C1053
Polyolefin pipe	ASTM F1412; CSA B181.3
Polyvinyl chloride (PVC) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200), and DR 24 (PS 140); with a solid, cellular core or composite wall	ASTM D2665; ASTM F891; ASTM F1488; CSA B181.2
Polyvinyl chloride (PVC) plastic pipe with a 3.25-inch O.D. and a solid, cellular core or composite wall	ASTM D2949; ASTM F1488
Polyvinylidene fluoride (PVDF) plastic pipe	ASTM F1673; CSA B181.3
Stainless steel drainage systems, Types 304 and 316L	ASME A112.3.1

**702.2 Underground building sanitary drainage and vent pipe.** Underground building sanitary drainage and vent pipe shall conform to one of the standards listed in Table 702.2.

**TABLE 702.2  
UNDERGROUND BUILDING DRAINAGE AND VENT PIPE**

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall	ASTM D2661; ASTM F628; ASTM F1488; CSA B181.1
Cast-iron pipe	ASTM A74; ASTM A888; CISPI 301
Copper or copper-alloy tubing (Type K, L, M or DWV)	ASTM B75; ASTM B88; ASTM B251; ASTM B306
Ductile iron pipe	ANSI/AWWA C150/A21.50
<u>Polyethylene (PE) plastic pipe (SDR-PR)</u>	<u>ASTM F714</u>

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Polyolefin pipe	<u>ASTM F714</u> ; ASTM F1412; CSA B181.3
Polyvinyl chloride (PVC) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall	ASTM D2665; ASTM F891; ASTM F1488; CSA B181.2
Polyvinyl chloride (PVC) plastic pipe with a 3.25-inch O.D. and a solid, cellular core or composite wall	ASTM D2949; ASTM F1488
Polyvinylidene fluoride (PVDF) plastic pipe	ASTM F1673; CSA B181.3
Stainless steel drainage systems, Type 316L	ASME A112.3.1

For SI: 1 inch = 25.4 mm.

**702.3 Building sewer pipe.** *Building sewer* pipe shall conform to one of the standards listed in Table 702.3.

**TABLE 702.3  
BUILDING SEWER PIPE**

<b>MATERIAL</b>	<b>STANDARD</b>
Acrylonitrile butadiene styrene (ABS) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall	ASTM D2661; <u>ASTM D2680</u> ; ASTM F628; ASTM F1488; CSA B181.1
Acrylonitrile butadiene styrene (ABS) plastic pipe in sewer and drain diameters, including SDR 42 (PS 20), PS 35, SDR 35 (PS 45), PS 50, PS 100, PS 140, SDR 23.5 (PS 150) and PS 200; with a solid, cellular core or composite wall	ASTM D2751; ASTM F1488
Cast-iron pipe	ASTM A74; ASTM A888; CISPI 301
Concrete pipe	ASTM C14; ASTM C76; CSA A257.1; CSA A257.2
Copper or copper-alloy tubing (Type K or L)	ASTM B75; ASTM B88; ASTM B251
Ductile iron pipe	ANSI/AWWA C150/A21.50
Polyethylene (PE) plastic pipe (SDR-PR)	ASTM F714
<u>Polypropylene (PP) plastic pipe</u>	<u>ASTM F2736</u> ; <u>ASTM F2764</u> ; CSA B182.13

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Polyvinyl chloride (PVC) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall	ASTM D2665; ASTM F891; ASTM F1488
Polyvinyl chloride (PVC) plastic pipe in sewer and drain diameters, including PS 25, SDR 41 (PS 28), PS 35, SDR 35 (PS 46), PS 50, PS 100, SDR 26 (PS 115), PS 140 and PS 200; with a solid, cellular core or composite wall	ASTM F891; ASTM F1488; ASTM D3034; CSA B182.2; CSA B182.4, ANSI/AWWA C900
Polyvinyl chloride (PVC) plastic pipe with a 3.25-inch O.D. and a solid, cellular core or composite wall	ASTM D2949; ASTM F1488
Polyvinylidene fluoride (PVDF) plastic pipe	ASTM F1673; CSA B181.3
Stainless steel drainage systems, Types 304 and 316L	ASME A112.3.1
Vitrified clay pipe	ASTM C4; ASTM C700

For SI: 1 inch = 25.4 mm.

**702.4 Fittings.** Pipe fittings shall be *approved* for installation with the piping material installed and shall comply with the applicable standards listed in Table 702.4. Pipe fittings shall not be solvent cemented inside of plastic pipe.

**Exception:** Plastic pipe fittings and plastic plumbing appurtenances with an inside diameter 2 inches (51 mm) and larger shall not be used for drain, waste and vent conductors in buildings in which the top occupied floor exceeds 75 feet (23 m) in height, height as per N.C.G.S 143-138 (b24).

**TABLE 702.4  
PIPE FITTINGS**

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe in IPS diameters	ASME A112.4.4; ASTM D2661; ASTM F628; CSA B181.1
Acrylonitrile butadiene styrene (ABS) plastic pipe in sewer and drain diameters	ASTM D2751
Cast iron	ASME B-16.4; B16.4; ASME B-16.12; B16.12; ASTM A74; ASTM A888; CISPI 301
Copper or copper alloy	ASME B-16.15; B16.15; ASME B-16.18; B16.18; ASME B-16.22; B16.22; ASME B-16.23; B16.23; ASME B-16.26; B16.26; ASME B-16.29; B16.29
Glass	ASTM C1053
Gray iron and ductile iron	AWWA C-

	<del>110/A21.10</del> C110/A21.10
Malleable iron	ASME B 16.3
Polyethylene	ASTM D2683
Polyolefin	ASTM F1412; CSA B181.3
Polyvinyl chloride (PVC) plastic in IPS diameters	ASME A112.4.4; ASTM D2665; ASTM F1866
Polyvinyl chloride (PVC) plastic pipe in sewer and drain diameters	ASTM D3034
Polyvinyl chloride (PVC) plastic pipe with a 3.25-inch O.D.	ASTM D2949
Polyvinylidene fluoride (PVDF) plastic pipe	ASTM F1673; CSA B181.3
Stainless steel drainage systems, Types 304 and 316L	ASME A 112.3.1A112.3.1
Steel	ASME B 16.9;B16.9; ASME B- 16.11;B16.11; ASME B- 16.28B16.28
Vitrified clay	ASTM C700

For SI: 1 inch = 25.4 mm.

**702.5 Temperature rating.** Direct connection of a steam exhaust, blowoff or drip pipe shall not be made with the building drainage system. Where the wastewater temperature will be greater than 140°F (60°C), the sanitary drainage piping material shall be rated for the highest temperature of the wastewater or approved cooling methods shall be provided.

**702.6 Chemical waste system.** A chemical waste system shall be completely separated from the sanitary drainage system. The chemical waste shall be treated in accordance with Section 803.2 before discharging to the sanitary drainage system. Separate drainage systems for chemical wastes and vent pipes shall be of an *approved* material that is resistant to corrosion and degradation for the concentrations of chemicals involved.

**702.7 Lead bends and traps.** The wall thickness of lead bends and traps shall be not less than  $\frac{1}{8}$  inch (3.2 mm).

## SECTION 703 BUILDING SEWER

**703.1 Building sewer pipe near the water service.** The proximity of a *sewer* to a water service shall comply with Section 603.2.

**703.2 Drainage pipe in filled ground.** Where a *building sewer* or *building drain* is installed in unstable fill or unstable ~~ground~~, the ~~drainage pipe~~ shall be of cast-iron or ductile iron pipe, except that nonmetallic drains may be laid upon an approved continuous supporting system if installed in accordance with the manufacturer's installation instructions.

**703.3 Sanitary and storm sewers.** Where separate systems of sanitary drainage and storm drainage are installed in the same property, the sanitary and storm ~~building sewers~~ or ~~drains~~ shall be permitted to be laid side by side in one trench.

**703.4 Existing building sewers and building drains.** Existing *building sewers* and *drains* shall connect with new *building sewer* and drainage systems only where found by examination and test to conform to the new system in quality of material. ~~Where the entire sanitary drainage system of an existing building is replaced, existing building drains under concrete slabs and existing building sewers that will serve the new system shall be internally ex-~~

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amined to verify that the piping is sloping in the correct direction, is not broken, is not obstructed and is sized for the drainage load of the new plumbing drainage system to be installed. The code official shall notify the owner to make the changes necessary to conform to this code.

**703.5 Cleanouts on building sewers.** Cleanouts on *building sewers* shall be located as ~~set forth~~ indicated in Section 708.

**703.6 Combined sanitary and storm public sewer.** Where the public sewer is a combined system for both sanitary and storm water, the sanitary sewer shall be connected independently to the public sewer.

### SECTION 704 DRAINAGE PIPING INSTALLATION

**704.1 Slope of horizontal drainage piping.** Horizontal drainage piping shall be installed in uniform alignment at uniform slopes. The slope of a horizontal drainage pipe shall be not less than that indicated in Table 704.1-704.1 except that where the drainage piping is upstream of a grease interceptor, the slope of the piping shall be not less than 1/4 inch per foot (2-percent slope).

TABLE 704.1  
SLOPE OF HORIZONTAL DRAINAGE PIPE

SIZE (inches)	MINIMUM SLOPE (inch per foot)
2 1/2 or less	1/4 <sup>a</sup>
3 to 6	1/8 <sup>a</sup>
8 or larger	1/16 <sup>a</sup>

For SI: 1 inch = 25.4 mm, 1 inch per foot = 83.33 mm/m.

**704.2 ~~Change in size.~~ Reduction in pipe size in the direction of flow.** The size of the drainage piping shall not be reduced in the direction of the flow. The following shall not be considered as a reduction in size in the direction of flow:

1. A 4-inch by 3-inch (102 mm by 76 mm) water closet flange connection shall not be considered as a reduction in size.
2. A water closet bend fitting having a 4-inch (102 mm) inlet and a 3-inch (76 mm) outlet provided that the 4-inch leg of the fitting is upright and below, but not necessarily directly connected to, the water closet flange.
3. An offset closet flange with a full flow, minimum 3-inch interior diameter throat.

**704.3 Connections to offsets and bases of stacks.** Horizontal *branches* shall connect to the bases of *stacks* at a point located not less than 10 times the diameter of the drainage *stack* downstream from the *stack*. Horizontal *branches* shall connect to horizontal *stack* offsets at a point located not less than 10 times the diameter of the drainage *stack* downstream from the upper *stack*.

**704.4 Future fixtures.** Drainage piping for future fixtures shall terminate with an *approved* cap or plug.

**704.5 Dead ends.** In the installation or removal of any part of a drainage system, dead ends shall be prohibited. Cleanout extensions and approved future fixture drainage piping shall not be considered as dead ends.

### SECTION 705 JOINTS

**705.1 General.** This section contains provisions applicable to joints specific to sanitary drainage piping.

**705.2 ABS plastic.** Joints between ABS plastic pipe and fittings shall comply with Sections 705.2.1 through ~~705.2.3~~ 705.2.4.

**705.2.1 Mechanical joints.** Mechanical joints on drainage pipes shall be made with an elastomeric seal conforming to ASTM C1173, ASTM D3212 or CSA B602. Mechanical joints shall be installed only in underground systems unless otherwise *approved*. Joints shall be installed in accordance with the manufacturer's instructions.

**705.2.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture. Solvent cement that conforms to ASTM D2235 or CSA B181.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet. Joints shall be made in accordance with ASTM D2235, ASTM D2661, ASTM F628 or CSA B181.1. Solvent-cement joints shall be permitted above or below ground.

**705.2.3 Threaded joints.** Threads shall conform to ASME B1.20.1. Schedule 80 or heavier pipe shall be permitted to be threaded with dies specifically designed for plastic pipe. *Approved* thread lubricant or tape shall be applied on the male threads only.

**705.2.4 Push-fit joints.** Push-fit DWV fittings shall be listed and labeled to ASME A112.4.4 and shall be installed in accordance with the manufacturer's instructions.

**705.3 Brass.** Joints between brass pipe or fittings shall comply with Sections 705.3.1 through 705.3.4.

~~**705.3.1 Brazed joints.** All joint surfaces shall be cleaned. An *approved* flux shall be applied where required. The joint shall be brazed with a filler metal conforming to AWS A5.8.~~

~~**705.3.2 Mechanical joints.** Mechanical joints shall be installed in accordance with the manufacturer's instructions.~~

~~**705.3.3 Threaded joints.** Threads shall conform to ASME B1.20.1. Pipe joint compound or tape shall be applied on the male threads only.~~

~~**705.3.4 Welded joints.** All joint surfaces shall be cleaned. The joint shall be welded with an *approved* filler metal.~~

~~**705.4.1705.3 Cast iron.** Joints between cast-iron pipe and fittings shall comply with Sections 705.4.1705.3.1 through 705.4.3.705.3.3.~~

~~**705.4.1705.3.1 Caulked joints.** Joints for hub and spigot pipe shall be firmly packed with oakum or hemp. Molten lead shall be poured in one operation to a depth of not less than 1 inch (25 mm). The lead shall not recede more than  $\frac{1}{8}$  inch (3.2 mm) below the rim of the hub and shall be caulked tight. Paint, varnish or other coatings shall not be permitted on the jointing material until after the joint has been tested and *approved*. Lead shall be run in one pouring and shall be caulked tight. Acid-resistant rope and acidproof cement shall be permitted.~~

~~**705.4.2705.3.2 Compression gasket joints.** Compression gaskets for hub and spigot pipe and fittings shall conform to ASTM C564 and shall be tested to ASTM C1563. Gaskets shall be compressed when the pipe is fully inserted.~~

~~**705.4.3705.3.3 Mechanical joint coupling.** Mechanical joint couplings for hubless pipe and fittings shall consist of an elastomeric sealing sleeve and a metallic shield that comply with CISPI 310, ASTM C1277 or ASTM C1540. The elastomeric sealing sleeve shall conform to ASTM C564 or CSA B602 and shall be provided with a center stop. Mechanical joint couplings shall be installed in accordance with the manufacturer's instructions.~~

~~**705.5705.4 Concrete joints.** Joints between concrete pipe and fittings shall be made with an elastomeric seal conforming to ASTM C443, ASTM C1173, CSA A257.3M or CSA B602.~~

~~**705.6705.5 Copper pipe.** Joints between copper ~~and~~ copper-alloy pipe ~~and/or~~ fittings shall comply with Sections 705.6.1705.5.1 through 705.6.5.705.5.5.~~

~~**705.6.1705.5.1 Brazed joints.** All ~~joint~~Joint surfaces shall be cleaned. An *approved* flux shall be applied where required. The joint shall be brazed with a filler metal conforming to AWS A5.8.~~

~~**705.6.2705.5.2 Mechanical joints.** Mechanical joints shall be installed in accordance with the manufacturer's instructions.~~

~~**705.6.3705.5.3 Solder joints.** Solder joints shall be made in accordance with the methods of ASTM B828. Cut tube ends shall be reamed to the full inside diameter of the tube end. All ~~joint~~Joint surfaces shall be cleaned. A flux conforming to ASTM B813 shall be applied. The joint shall be soldered with a solder conforming to ASTM B32.~~

~~**705.6.4705.5.4 Threaded joints.** Threads shall conform to ASME B1.20.1. Pipe-joint compound or tape shall be applied on the male threads only.~~

~~**705.6.5705.5.5 Welded joints.** All ~~joint~~Joint surfaces shall be cleaned. The joint shall be welded with an *approved* filler metal.~~

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**705.7.1705.6 Copper tubing.** Joints between copper ~~or~~ and copper-alloy tubing ~~and~~ or fittings shall comply with Sections ~~705.7.1705.6.1~~ through ~~705.7.3705.6.3~~.

**705.7.1705.6.1 Brazed joints.** ~~All joint~~Joint surfaces shall be cleaned. An *approved* flux shall be applied where required. The joint shall be brazed with a filler metal conforming to AWS A5.8.

**705.7.2705.6.2 Mechanical joints.** Mechanical joints shall be installed in accordance with the manufacturer's instructions.

**705.7.3705.6.3 Solder joints.** Solder joints shall be made in accordance with the methods of ASTM B828. Cut tube ends shall be reamed to the full inside diameter of the tube end. ~~All joint~~Joint surfaces shall be cleaned. A flux conforming to ASTM B813 shall be applied. The joint shall be soldered with a solder conforming to ASTM B32.

**705.8705.7 Borosilicate glass joints.** Glass-to-glass connections shall be made with a bolted compression-type, 300 series stainless steel coupling with contoured acid-resistant elastomeric compression ring and a fluorocarbon polymer inner seal ring; or with caulked joints in accordance with Section ~~705.8.1705.7.1~~.

**705.8.1705.7.1 Caulked joints.** Lead-caulked joints for hub and spigot soil pipe shall be firmly packed with oakum or hemp and filled with molten lead not less than 1 inch (25 mm) in depth and not to recede more than  $\frac{1}{8}$  inch (3.2 mm) below the rim of the hub. Paint, varnish or other coatings shall not be permitted on the jointing material until after the joint has been tested and *approved*. Lead shall be run in one pouring and shall be caulked tight. Acid-resistant rope and acidproof cement shall be permitted.

**705.9705.8 Steel.** Joints between galvanized steel pipe and fittings shall comply with Sections ~~705.9.1705.8.1~~ and ~~705.9.2705.8.2~~.

**705.9.1705.8.1 Threaded joints.** Threads shall conform to ASME B1.20.1. Pipe-joint compound or tape shall be applied on the male threads only.

**705.9.2705.8.2 Mechanical joints.** Joints shall be made with an *approved* elastomeric seal. Mechanical joints shall be installed in accordance with the manufacturer's instructions.

**705.10705.9 Lead.** Joints between lead pipe and fittings shall comply with Sections ~~705.10.1705.9.1~~ and ~~705.10.2705.9.2~~.

**705.10.1705.9.1 Burned.** Burned joints shall be uniformly fused together into one continuous piece. The thickness of the joint shall be ~~at least as thick as~~ not less than the thickness of the lead being joined. The filler metal shall be of the same material as the pipe.

**705.10.2705.9.2 Wiped.** Joints shall be fully wiped, with an exposed surface on each side of the joint not less than  $\frac{3}{4}$  inch (19.1 mm). The joint shall be not less than  $\frac{3}{8}$  inch (9.5 mm) thick at the thickest point.

**705.11705.10 PVC plastic.** Joints between PVC plastic pipe and fittings shall comply with Sections ~~705.11.1705.10.1~~ through ~~705.11.3705.10.4~~.

**705.11.1705.10.1 Mechanical joints.** Mechanical joints on drainage pipe shall be made with an elastomeric seal conforming to ASTM C1173, ASTM D3212 or CSA B602. Mechanical joints shall not be installed in above-ground systems, unless otherwise *approved*. Joints shall be installed in accordance with the manufacturer's instructions.

**705.11.2705.10.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture. A purple primer or an ultraviolet purple primer that conforms to ASTM F656 shall be applied. When an ultraviolet primer is used, the installer shall provide an ultraviolet light to the inspector to be used during the inspection. Solvent cement not purple in color and conforming to ASTM D2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D2855. Solvent-cement joints shall be permitted above or below ground. Clear primer conforming to ASTM F656 may be applied to all joint surfaces where the piping is exposed under sinks and in buildings.

**705.11.3705.10.3 Threaded joints.** Threads shall conform to ASME B1.20.1. ~~Schedule 80 or heavier pipe shall be permitted to be threaded with dies specifically designed for plastic pipe.~~ Where pipe is to be threaded, the pipe shall have a wall thickness of not less than Schedule 80. Pipe threads shall be made with dies specifically designed for plastic pipe. *Approved* thread lubricant or tape shall be applied on the male threads only.

**705.11.4705.10.4 Push-fit joints.** Push-fit joints shall conform to ASME A112.4.4 and shall be installed in accordance with the manufacturer's instructions.



**~~705.12~~705.11 Vitrified clay.** Joints between vitrified clay pipe and fittings shall be made with an elastomeric seal conforming to ASTM C425, ASTM C1173 or CSA B602.

**~~705.13~~705.12 Polyethylene plastic pipe.** Joints between polyethylene plastic pipe and fittings shall be underground and shall comply with Section ~~705.13.1~~705.12.1 or ~~705.13.2~~705.12.2.

**~~705.13.1~~705.12.1 Heat-fusion joints.** Joint surfaces shall be clean and free from moisture. ~~All joint~~Joint surfaces shall be cut, heated to melting temperature and joined using tools specifically designed for the operation. Joints shall be undisturbed until cool. Joints shall be made in accordance with ASTM D2657 and the manufacturer's instructions.

**~~705.13.2~~705.12.2 Mechanical joints.** Mechanical joints in drainage piping shall be made with an elastomeric seal conforming to ASTM C1173, ASTM D3212 or CSA B602. Mechanical joints shall be installed in accordance with the manufacturer's instructions.

**~~705.14~~705.13 Polyolefin plastic.** Joints between polyolefin plastic pipe and fittings shall comply with Sections ~~705.14.1~~705.13.1 and ~~705.14.2~~705.13.2.

**~~705.14.1~~705.13.1 Heat-fusion joints.** Heat-fusion joints for polyolefin pipe and tubing joints shall be installed with socket-type heat-fused polyolefin fittings or electrofusion polyolefin fittings. Joint surfaces shall be clean and free from moisture. The joint shall be undisturbed until cool. Joints shall be made in accordance with ASTM F1412 or CSA B181.3.

**~~705.14.2~~705.13.2 Mechanical and compression sleeve joints.** Mechanical and compression sleeve joints shall be installed in accordance with the manufacturer's instructions.

**~~705.15~~705.14 Polyvinylidene fluoride plastic.** Joints between polyvinylidene fluoride plastic pipe and fittings shall comply with Sections ~~705.15.1~~705.14.1 and ~~705.15.2~~705.14.2.

**~~705.15.1~~705.14.1 Heat-fusion joints.** Heat-fusion joints for polyvinylidene fluoride pipe and tubing joints shall be installed with socket-type heat-fused polyvinylidene fluoride fittings or electrofusion polyvinylidene fittings and couplings. Joint surfaces shall be clean and free from moisture. The joint shall be undisturbed until cool. Joints shall be made in accordance with ASTM F1673.

**~~705.15.2~~705.14.2 Mechanical and compression sleeve joints.** Mechanical and compression sleeve joints shall be installed in accordance with the manufacturer's instructions.

**705.15 Polypropylene plastic.** The joint between polypropylene plastic pipe and fittings shall incorporate an elastomeric seal. The joint shall conform to ASTM D3212. Mechanical joints shall not be installed above ground.

**705.16 Joints between different materials.** Joints between different piping materials shall be made with a mechanical joint of the compression or mechanical-sealing type conforming to ASTM C1173, ASTM C1460 or ASTM C1461. Connectors and adapters shall be *approved* for the application and such joints shall have an elastomeric seal conforming to ASTM C425, ASTM C443, ASTM C564, ASTM C1440, ASTM F477, CSA A257.3M or CSA B602, or as required in Sections 705.16.1 through 705.16.7. Joints between glass pipe and other types of materials shall be made with adapters having a TFE seal. Joints shall be installed in accordance with the manufacturer's instructions.

**705.16.1 Copper ~~or copper-alloy~~ pipe or tubing to cast-iron hub pipe.** Joints between copper ~~or copper-alloy~~ pipe or tubing and cast-iron hub pipe shall be made with a ~~brass~~copper or copper-alloy ferrule or compression joint. The copper ~~or copper-alloy~~ pipe or tubing shall be soldered to the ferrule in an *approved* manner, and the ferrule shall be joined to the cast-iron hub by a caulked joint or a mechanical compression joint.

**705.16.2 Copper or copper-alloy pipe or tubing to galvanized steel pipe.** Joints between copper or copper-alloy pipe or tubing and galvanized steel pipe shall be made with a ~~brass converter~~copper-alloy fitting or dielectric fitting. The copper tubing shall be soldered to the fitting in an *approved* manner, and the fitting shall be screwed to the threaded pipe.

**705.16.3 Cast-iron pipe to galvanized steel ~~or brass~~ pipe.** Joints between cast iron and galvanized steel ~~or brass~~ pipe shall be made by either caulked or threaded joints or with an *approved* adapter fitting.

**705.16.4 Plastic pipe or tubing to other piping material.** Joints between different types of plastic pipe ~~or between plastic pipe and other piping material~~ shall be made with an *approved* adapter fitting. Joints between plastic pipe and other piping material shall be made with an *approved* adapter fitting. Joints between plastic pipe and cast-iron hub pipe shall be made by a caulked joint or a mechanical compression joint.

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**705.16.5 Lead pipe to other piping material.** Joints between lead pipe and other piping material shall be made by a wiped joint to a caulking ferrule, soldering nipple or bushing or shall be made with an *approved* adapter fitting.

**705.16.6 Borosilicate glass to other materials.** Joints between glass pipe and other types of materials shall be made with adapters having a TFE seal and shall be installed in accordance with the manufacturer’s instructions.

**705.16.7 Stainless steel drainage systems to other materials.** Joints between stainless steel drainage systems and other piping materials shall be made with *approved* mechanical couplings.

**705.17 Drainage slip joints.** Slip joints shall comply with Section ~~405.8~~ 405.9.

**705.18 Caulking ferrules.** ~~Ferrules~~ Caulking ferrules shall be of ~~red brass~~ copper alloy and shall be in accordance with Table 705.18.

**TABLE 705.18  
CAULKING FERRULE SPECIFICATIONS**

PIPE SIZES (inches)	INSIDE DIAMETER (inches)	LENGTH (inches)	MINIMUM WEIGHT EACH
2	2 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	1 pound
3	3 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	1 pound 12 ounces
4	4 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	2 pounds 8 ounces

For SI: 1 inch = 25.4 mm, 1 ounce = 28.35 g, 1 pound = 0.454 kg.

**705.19 Soldering bushings.** Soldering bushings shall be of ~~red brass~~ copper or copper alloy and shall be in accordance with Table 705.19.

**TABLE 705.19  
SOLDERING BUSHING SPECIFICATIONS**

PIPE SIZES (inches)	MINIMUM WEIGHT EACH
1 <sup>1</sup> / <sub>4</sub>	6 ounces
1 <sup>1</sup> / <sub>2</sub>	8 ounces
2	14 ounces
2 <sup>1</sup> / <sub>2</sub>	1 pound 6 ounces
3	2 pounds
4	3 pounds 8 ounces

For SI: 1 inch = 25.4 mm, 1 ounce = 28.35 g, 1 pound = 0.454 kg.

**705.20 Stainless steel drainage systems.** O-ring joints for stainless steel drainage systems shall be made with an *approved* elastomeric seal.

**705.21 Coextruded composite ABS pipe, joints.** Joints between coextruded composite pipe with an ABS outer layer or ABS fittings shall comply with Sections 705.21.1 and 705.21.2.

**705.21.1 Mechanical joints.** Mechanical joints on drainage pipe shall be made with an elastomeric seal conforming to ASTM C1173, ASTM D3212 or CSA B602. Mechanical joints shall not be installed in above-ground systems, unless otherwise approved. Joints shall be installed in accordance with the manufacturer's instructions.

**705.21.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture. Solvent cement that conforms to ASTM D 2235 or CSA B181.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet. Joints shall be made in accordance with ASTM D2235, ASTM D2661, ASTM F628 or CSA B181.1. Solvent-cement joints shall be permitted above or below ground.

**705.22 Coextruded composite PVC pipe.** Joints between coextruded composite pipe with a PVC outer layer or PVC fittings shall comply with Sections 705.22.1 and 705.22.2.

**705.22.1 Mechanical joints.** Mechanical joints on drainage pipe shall be made with an elastomeric seal conforming to ASTM D3212. Mechanical joints shall not be installed in above-ground systems, unless otherwise approved. Joints shall be installed in accordance with the manufacturer's instructions.

**705.22.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture. A purple primer or an ultraviolet purple primer that conforms to ASTM F656 shall be applied. When an ultraviolet primer is used, the installer shall provide an ultraviolet light to the inspector to be used during the inspection. Solvent cement not purple in color and conforming to ASTM D2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D2855. Solvent-cement joints shall be permitted above or below ground.

**705.23 Brass.** Joints between brass pipe or fittings shall comply with Sections 705.23.1 through 705.23.4.

**705.23.1 Brazed joints.** All joint surfaces shall be cleaned. An *approved* flux shall be applied where required. The joint shall be brazed with a filler metal conforming to AWS A5.8.

**705.23.2 Mechanical joints.** Mechanical joints shall be installed in accordance with the manufacturer's instructions.

**705.23.3 Threaded joints.** Threads shall conform to ASME B1.20.1. Pipe-joint compound or tape shall be applied on the male threads only.

**705.23.4 Welded joints.** All joint surfaces shall be cleaned. The joint shall be welded with an *approved* filler metal.

**SECTION 706  
CONNECTIONS BETWEEN  
DRAINAGE PIPING AND FITTINGS**

**706.1 Connections and changes in direction.** ~~All connections~~ Connections and changes in direction of the sanitary drainage system shall be made with *approved* drainage fittings. Connections between drainage piping and fixtures shall conform to Section 405.

**706.2 Obstructions.** The fittings shall not have ledges, shoulders or reductions capable of retarding or obstructing flow in the piping. Threaded drainage pipe fittings shall be of the recessed drainage type. This section shall not be applicable to tubular waste fittings used to convey vertical flow upstream of the trap seal liquid level of a fixture trap.

**706.3 Installation of fittings.** Fittings shall be installed to guide sewage and waste in the direction of flow. Change in direction shall be made by fittings installed in accordance with Table 706.3. Change in direction by combination fittings, side inlets or increasers shall be installed in accordance with Table 706.3 based on the pattern of flow created by the fitting. Double sanitary tee patterns shall not receive the discharge of appliances with pumping action discharge.

**Exception: DELETED**

TABLE 706.3  
FITTINGS FOR CHANGE IN DIRECTION

TYPE OF FITTING PATTERN	CHANGE IN DIRECTION		
	Horizontal to vertical	Vertical to horizontal	Horizontal to horizontal
Sixteenth bend	X	X	X
Eighth bend	X	X	X

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Sixth bend	X	X	X
Quarter bend	X	d,f X	e X
Short sweep	X	a,b X	a X
Long sweep	X	X	X
Sanitary tee	X <sup>c</sup>	—	—
Wye	X	X	X
Combination wye and eighth bend	X	X	X

For SI: 1 inch = 25.4 mm.

- a. The fittings shall only be permitted for a 2-inch or smaller sink or lavatory ~~fixture drain~~fixture drain.
- b. Two inches or larger.
- c. For a limitation on double sanitary tees, see Section 706.3.
- d. May be used only within 12 inches below water closet flange measured to centerline of the quarter bend.
- e. This fitting shall only be permitted to be used as the first fitting directly behind the fixture for drains 2 inches and smaller, except clothes washers.
- f. The heel inlet connection of a quarter bend may be used as a wet or dry vent if the heel inlet connection of the quarter bend is located in the vertical position. The heel or side inlet connection may be used as a wet vent if the quarter bend is located directly below a water closet or other fixture with one integral trap.

**706.4 Heel- or side-inlet quarter bends. DELETED.**

**SECTION 707  
PROHIBITED JOINTS AND CONNECTIONS**

**707.1 Prohibited joints.** The following types of joints and connections shall be prohibited:

1. Cement or concrete joints.
2. Mastic or hot-pour bituminous joints.
3. Joints made with fittings not *approved* for the specific installation.
4. Joints between different diameter pipes made with elastomeric rolling O-rings.
5. Solvent-cement joints between different types of plastic pipe.
6. Saddle-type fittings.

**SECTION 708  
CLEANOUTS**

**708.1 Cleanouts required.** Cleanouts shall be provided for drainage piping in accordance with Sections 708.1.1 through 708.1.12.

**708.1.1 Gravity ~~horizontal~~Horizontal drains and building drains.** Horizontal drainage pipes in buildings shall have cleanouts located at intervals of not more than 100 feet (30 480 mm). *Building drains* shall have cleanouts located at intervals of not more than 100 feet (30 480 mm) except where manholes are used instead of cleanouts, the manholes shall be located at intervals of not more than 400 feet (122 m). The interval length shall be measured from the cleanout or manhole opening, along the *developed length* of the piping to the next drainage fitting providing access for cleaning, the end of the horizontal drain or the end of the *building drain*.

**Exception:** Horizontal *fixture drain* piping serving a nonremovable trap shall not be required to have a cleanout for the section of piping between the trap and the vent connection for such trap.

**708.1.2 Gravity ~~building~~Building sewers.** *Building sewers* smaller than 8 inches (203 mm) shall have cleanouts located at intervals of not more than 100 feet (30 480 mm). *Building sewers* 8 inches (203 mm) and larger shall have a manhole located not more than 200 feet (60 960 mm) from the junction of the *building drain* and *building sewer* and at intervals of not more than 400 feet (122 m). The interval length shall be measured from the cleanout or manhole opening, along the *developed length* of the piping to the next drainage fitting providing access for cleaning, a manhole or the end of the *building sewer*.

**708.1.3 Building drain and building sewer junction.** There shall be a cleanout at the junction of the building drain and the building sewer. The cleanout shall be outside the building wall and shall be brought up to the finished ground level. An approved two-way cleanout is allowed to be used at this location to serve as a required cleanout for both the building drain and building sewer. The cleanout at the junction of the building drain and building sewer shall not be required if the cleanout on a 3-inch (76 mm) or larger diameter soil stack is located within a developed length of not more than 15 feet (4572 mm) from of the building drain and building sewer connection and is extended to the outside of the building. The minimum size of the cleanout at the junction of the building drain and building sewer shall comply with Section 708.1.5.

**708.1.4 Changes of direction.** One cleanout shall be required for every four horizontal 45-degree (0.79 rad) changes located in series [a long sweep is equivalent to two 45-degree (0.79 rad) bends].

**708.1.5 Cleanout size.** Cleanouts shall be the same size as the piping served by the cleanout, except that cleanouts for piping larger than 4 inches (102 mm) need not be larger than 4 inches (102 mm).

**Exceptions:**

1. P"P" traps connected to the drainage piping with slip joints or ground joint connections.
2. P"P" traps into which floor drains, shower drains or tub drains with removable strainers discharge.
3. P"P" traps into which the straight-through type waste and overflow discharge with the overflow connecting to the top of the tee.
4. P"P" traps into which residential washing machines discharge.
5. Test tees or cleanouts in a vertical pipe.
6. Cleanout near the junction of the building drain and the building sewer which may be rodded both ways.
7. Water closets for the water closet fixture drain only.
8. Cast-iron cleanout sizing shall be in accordance with referenced standards in Table 702.4, ASTM A74 for hub and spigot fittings or ASTM A888 or CISPI 301 for hubless fittings.
9. Cleanouts located on stacks can be one size smaller than the ~~stack~~stack size.
10. A removable P-trapP-trap with slip or ground joint connections can serve as a cleanout for drain piping that is one size larger than the P-trapP-trap size.

**708.1.6 Cleanout equivalent.** A fixture trap or a fixture with integral trap, removable without altering concealed piping, shall be acceptable as a cleanout equivalent.

**708.1.6708.1.7 Cleanout plugs.** Cleanout plugs shall be of ~~brass, copper-alloy~~ plastic or other *approved* materials. Cleanout plugs for borosilicate glass piping systems shall be of borosilicate glass. ~~Brass~~Copper-alloy cleanout plugs shall conform to ASTM A74 and shall be limited for use only on metallic piping systems. Plastic cleanout plugs shall conform to the referenced standards for plastic pipe fittings, as indicated in Table 702.4. Cleanout plugs shall have a raised square head, a countersunk square head or a countersunk slot head. Where a cleanout plug will have a trim cover screw installed into the plug, the plug shall be manufactured with a blind end threaded hole for such purpose.

**708.1.7708.1.8 Manholes.** Manholes and manhole covers shall be of an *approved* type. Manholes located inside of a building shall have gas-tight covers that require tools for removal.

**708.1.8708.1.9 Installation arrangement.** The installation arrangement of a cleanout shall enable cleaning of drainage piping only in the direction of drainage flow.

**Exceptions:**

1. Test tees serving as cleanouts.
2. A two-way cleanout installation that is *approved* for meeting the requirements of Section 708.1.3.

**708.1.9708.1.10 Required clearance.** Cleanouts for 6-inch (153 mm) and smaller piping shall be provided with a clearance of not less than 18 inches (457 mm) from, and perpendicular to, the face of the opening to any obstruction. Cleanouts for 8-inch (203 mm) and larger piping shall be provided with a clearance of not less than 36 inches (914 mm) from, and perpendicular to, the face of the opening to any obstruction.

**708.1.10708.1.11 Cleanout access.** Required cleanouts shall not be installed in concealed locations. For the purposes of this section, concealed locations include, but are not limited to, the inside of plenums, within walls, within floor/ceiling assemblies, below grade and in crawl spaces where the height from the crawl space floor to the nearest obstruction along the path from the crawl space opening to the cleanout location is less than 24 inches (610 mm). Clean-outs with openings at a finished wall shall have the face of the opening located within 1½ inches (38 mm) of the finished wall surface. Cleanouts located below grade shall be extended to grade level so that the top of the cleanout plug is at or above grade. A cleanout installed in a floor or walkway that will not have a trim cover installed shall have a countersunk plug installed so the top surface of the plug is flush with the finished surface of the floor or walkway.

**708.1.10.1708.1.11.1 Cleanout plug trim covers.** Trim covers and access doors for cleanout plugs shall be designed for such purposes and shall be *approved*. Trim cover fasteners that thread into cleanout plugs shall be corrosion resistant. Cleanout plugs shall not be covered with mortar, plaster or any other permanent material.

**708.1.10.2708.1.11.2 Floor cleanout assemblies.** Where it is necessary to protect a cleanout plug from the loads of vehicular traffic, cleanout assemblies in accordance with ASME A112.36.2M shall be installed.

**708.1.11708.1.12 Prohibited use.** The use of a threaded cleanout opening to add a fixture or to extend piping shall be prohibited except where another cleanout of equal size is installed with the required access and clearance.

**SECTION 709  
FIXTURE UNITS**

**709.1 Values for fixtures.** *Drainage fixture unit* values as given in Table 709.1 designate the relative load weight of different kinds of fixtures that shall be employed in estimating the total load carried by a soil or waste pipe, and shall be used in connection with Tables 710.1(1) and 710.1(2) of sizes for soil, waste and vent pipes for which the permissible load is given in terms of fixture units.

**TABLE 709.1  
DRAINAGE FIXTURE UNITS FOR FIXTURES AND GROUPS**

FIXTURE TYPE	DRAINAGE FIXTURE UNIT VALUE AS LOAD FACTORS	MINIMUM SIZE OF TRAP (inches)
Automatic clothes washers, commercial <sup>a,g</sup>	3	2
Automatic clothes washers, residential <sup>g</sup>	2	2
Bathroom group as defined in Section 202 (1.6 gpf water closet) <sup>f</sup>	5	—
Bathroom group as defined in Section 202 (water closet flushing greater than 1.6 gpf) <sup>f</sup>	6	—
Bathtub <sup>b</sup> (with or without overhead shower or whirlpool attachments)	2	1½
Bidet	1	1¼

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Combination sink and tray	2	1½
Dental lavatory	1	1¼
Dental unit or cuspidor	1	1¼
Dishwashing machine <sup>c</sup> , domestic	2	1½
Drinking fountain	½	1¼
Emergency floor drain	0	2
Floor drains <sup>h</sup>	2 <sup>h</sup>	2
Floor sinks	Note h	2
Kitchen sink, domestic	2	1½
Kitchen sink, domestic with food waste <del>disposer</del> <del>disposer</del> , and/or dishwasher or both <sup>i</sup>	2	1½
Laundry tray (1 or 2 compartments)	2	1½
Lavatory	1	1¼
Shower (based on the total flow rate through showerheads and body sprays) Flow rate: 5.7 gpm or less Greater than 5.7 gpm to 12.3 gpm Greater than 12.3 gpm to 25.8 gpm Greater than 25.8 gpm to 55.6 gpm	2 3 5 6	2 2 3 4
Service sink	2	1½
Sink	2	1½
Urinal	4	Note d
Urinal, 1 gallon per flush or less	2 <sup>e</sup>	Note d
Urinal, nonwater supplied	½	Note d
Wash sink (circular or multiple) each set of faucets	2	1½
Water closet, flushometer tank, public or private	4 <sup>e</sup>	Note d
Water closet, private (1.6 gpf)	3 <sup>e</sup>	Note d
Water closet, private (flushing greater than 1.6 gpf)	4 <sup>e</sup>	Note d
Water closet, public (1.6 gpf)	4 <sup>e</sup>	Note d
Water closet, public (flushing greater than 1.6 gpf)	6 <sup>e</sup>	Note d

For SI: 1 inch = 25.4 mm, 1 gallon = 3.785 L, gpf = gallon per flushing cycle, ~~gpm = gallon per minute~~, 1 gallon per minute (gpm) = 3.785 L/m.

- a. For traps larger than 3 inches, use Table 709.2.
- b. A showerhead over a bathtub or whirlpool bathtub attachment does not increase the ~~drainage fixture unit~~ drainage fixture unit value.
- c. See Sections 709.2 through 709.4.1 for methods of computing unit value of fixtures not listed in this table or for rating of devices with intermittent flows.
- d. Trap size shall be consistent with the fixture outlet size.
- e. For the purpose of computing loads on ~~building drains~~ building drains and ~~sewers~~ sewers, water closets and urinals shall not be rated at a lower ~~drainage fixture unit~~ drainage fixture unit unless the lower values are confirmed by testing.
- f. For fixtures added to a ~~bathroom group~~ bathroom group, add the ~~dfu~~ dfu value of those additional fixtures to the ~~bathroom group~~ bathroom group fixture count.
- g. See Section 406.2 for sizing requirements for ~~fixture drain~~ fixture drain, branch drain and drainage ~~stack~~ stack for an automatic clothes washer standpipe.
- h. See Sections 709.4 and 709.4.1.
- i. Fixture arm and trap shall be ~~1½ inches~~ 1-1/2-inch minimum; vertical drain shall be ~~2 inches~~ 2-inch minimum.

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**709.2 Fixtures not listed in Table 709.1.** Fixtures not listed in Table 709.1 shall have a *drainage fixture unit* load based on the outlet size of the fixture in accordance with Table 709.2. The minimum trap size for unlisted fixtures shall be the size of the drainage outlet but not less than 1<sup>1</sup>/<sub>4</sub> inches (32 mm).

**TABLE 709.2  
DRAINAGE FIXTURE UNITS FOR FIXTURE DRAINS OR TRAPS**

FIXTURE DRAIN OR TRAP SIZE (inches)	DRAINAGE FIXTURE UNIT VALUE
1 <sup>1</sup> / <sub>4</sub>	1
1 <sup>1</sup> / <sub>2</sub>	2
2	3
2 <sup>1</sup> / <sub>2</sub>	4
3	5
4	6

For SI: 1 inch = 25.4 mm.

**709.3 Values for continuous and semicontinuous flow.** Conversion of gpm flow to dfu values. *Drainage fixture unit values for continuous and semicontinuous flow into* Where discharges to a waste receptor or to a drainage system (hub drains, sewage lift pumps, etc.) are only known in gallons per minute (liters per second) values, the *drainage fixture unit* values for those flows shall be computed on the basis that 1 gpm (0.06 L/s) of flow is equivalent to two ~~*drainage fixture units*~~ *fixture units*.

**709.4 Values for indirect waste receptor.** The *drainage fixture unit* load of an indirect waste receptor receiving the discharge of indirectly connected fixtures shall be the sum of the *drainage fixture unit* values of the fixtures that discharge to the receptor, but not less than the *drainage fixture unit* value given for the indirect waste receptor in Table 709.1 or 709.2.

**709.4.1 Clear-water waste receptors.** Where waste receptors such as floor drains, floor sinks and hub drains receive only clear-water waste from display cases, refrigerated display cases, ice bins, coolers and freezers, such receptors shall have a *drainage fixture unit* value of one-half.

**SECTION 710  
DRAINAGE SYSTEM SIZING**

**710.1 Maximum fixture unit load.** The maximum number of *drainage fixture units* connected to a given size of *building sewer*, *building drain* or horizontal *branch* of the *building drain* shall be determined using Table 710.1(1). The maximum number of *drainage fixture units* connected to a given size of horizontal *branch* or vertical soil or waste *stack* shall be determined using Table 710.1(2).

**TABLE 710.1(1)  
BUILDING DRAINS AND SEWERS**

DIAMETER OF PIPE (inches)	MAXIMUM NUMBER OF DRAINAGE FIXTURE UNITS CONNECTED TO ANY PORTION OF THE BUILDING DRAIN OR THE BUILDING SEWER, INCLUDING BRANCHES OF THE BUILDING DRAIN <sup>a,b,d</sup>			
	Slope per foot			
	1 <sup>1</sup> / <sub>16</sub> inch	1 <sup>1</sup> / <sub>8</sub> inch	1 <sup>1</sup> / <sub>4</sub> inch	1 <sup>1</sup> / <sub>2</sub> inch
1 <sup>1</sup> / <sub>4</sub>	—	—	1	1
1 <sup>1</sup> / <sub>2</sub>	—	—	3	3
2	—	—	21	26



2 <sup>1/2</sup>	—	—	24	31
3 <sup>c</sup>	—	36	42	50
4	—	180	216	250
5	—	390	480	575
6	—	700	840	1,000
8	1,400	1,600	1,920	2,300
10	2,500	2,900	3,500	4,200
12	3,900	4,600	5,600	6,700
15	7,000	8,300	10,000	12,000

For SI: 1 inch = 25.4 mm, 1 inch per foot = 83.3 mm/m.

- a. The minimum size of any *building drain* serving a water closet shall be 3 inches.
- b. No building sewer shall be less than 4 inches in size.
- c. No more than ~~three~~four water closets.
- d. Minimum of 2-inch diameter underground.

**TABLE 710.1(2)**  
**HORIZONTAL FIXTURE BRANCHES AND STACKS<sup>a,fa</sup>**

DIAMETER OF PIPE (inches)	MAXIMUM NUMBER OF DRAINAGE FIXTURE UNITS (dfu)			
	Total for horizontal branch <sup>e</sup>	Stacks <sup>b</sup>		
		Total discharge into one branch interval	Total for stack of three branch intervals <u>in intervals or less</u>	Total for stack greater than three branch intervals
1 <sup>1/2</sup>	3	2	4	8
2	6	6	10	24
2 <sup>1/2</sup>	12	9	20	42
3 <sup>a</sup>	20 <sup>d</sup>	20 <sup>d</sup>	48	72
4	160	90	240	500
5	360	200	540	1,100
6	620	350	960	1,900
8	1,400	600	2,200	3,600
10	2,500	1,000	3,800	5,600
12	3,900	1,500	6,000	8,400
15	7,000	Note c	Note c	Note c

For SI: 1 inch = 25.4 mm.

- a. Does not include branches of the building drain. Refer to Table 710.1(1).

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- b. Stacks shall be sized based on the total accumulated connected load at each story or branch interval. As the total accumulated connected load decreases, stacks are permitted to be reduced in size. Stack diameters shall not be reduced to less than one-half of the diameter of the largest stack size required.
- c. Sizing load based on design criteria.
- d. No more than ~~three~~four water closets.
- e. 50 percent less for circuit-vented fixture branches.
- f. Minimum of 2-inch diameter underground.
- g. The minimum size of any branches serving a water closet shall be 3 inches.

**710.1.1 Horizontal stack offsets.** Horizontal *stack* offsets shall be sized as required for ~~building drains~~building drains in accordance with Table 710.1(1), except as required by Section 711.3.

**710.1.2 Vertical stack offsets.** Vertical *stack* offsets shall be sized as required for straight ~~stacks~~stacks in accordance with Table 710.1(2), except where required to be sized as a *building drain* in accordance with Section 711.1.1.

**710.2 Future fixtures.** Where provision is made for the future installation of fixtures, those provided for shall be considered in determining the required sizes of drain pipes.

### SECTION 711 OFFSETS IN DRAINAGE PIPING IN BUILDINGS OF FIVE STORIES OR MORE

**711.1 Horizontal branch connections above or below vertical stack offsets.** If a horizontal *branch* connects to the *stack* within 2 feet (610 mm) above or below a vertical *stack* offset, and the offset is located more than four *branch intervals* below the top of the *stack*, the offset shall be vented in accordance with Section 907.

**711.1.1 Omission of vents for vertical stack offsets.** Vents for vertical offsets required by Section 711.1 shall not be required where the *stack* and its offset are sized as a *building drain* [see Table 710.1(1)].

**711.2 Horizontal stack offsets.** A *stack* with a horizontal offset located more than four *branch intervals* below the top of the *stack* shall be vented in accordance with Section 907 and sized as follows:

1. The portion of the *stack* above the offset shall be sized as for a vertical *stack* based on the total number of *drainage fixture units* above the offset.
2. The offset shall be sized in accordance with Section 710.1.1.
3. The portion of the *stack* below the offset shall be sized as for the offset or based on the total number of *drainage fixture units* on the entire *stack*, whichever is larger [see Table 710.1(2), Column 5].

**711.2.1 Omission of vents for horizontal stack offsets.** Vents for horizontal ~~stack~~stack offsets required by Section 711.2 shall not be required where the ~~stack~~stack and its offset are one pipe size larger than required for a ~~building drain~~building drain [see Table 710.1(1)] and the entire ~~stack~~stack and offset are not less in cross-sectional area than that required for a straight ~~stack~~stack plus the area of an offset vent as provided for in Section 907.

**711.3 Offsets below lowest branch.** Where a vertical offset occurs in a soil or waste *stack* below the lowest horizontal *branch*, a change in diameter of the *stack* because of the offset shall not be required. If a horizontal offset occurs in a soil or waste *stack* below the lowest horizontal *branch*, the required diameter of the offset and the *stack* below it shall be determined as for a *building drain* in accordance with Table 710.1(1).

### SECTION 712 SUMPS AND EJECTORS

**712.1 Building subdrains.** *Building subdrains* that cannot be discharged to the *sewer* by gravity flow shall be discharged into a tightly covered and vented sump from which the liquid shall be lifted and discharged into the building gravity drainage system by automatic pumping equipment or other *approved* method. In other than existing structures, the sump shall not receive drainage from any piping within the building capable of being discharged by gravity to the *building sewer*.

**712.2 Valves required.** A check valve, a ~~full-open~~full-open valve and a means for cleanout located on the discharge side of the check valve shall be installed in the pump or ejector discharge piping between the pump or ejector and the gravity drainage

system. *Access* shall be provided to such valves. Such valves shall be located above the sump cover required by Section 712.1 or, where the discharge pipe from the ejector is below grade, the valves shall be accessibly located outside the sump below grade in an access pit with a removable *access* cover.

**712.3 Sump design.** The sump pump, pit and discharge piping shall conform to the requirements of Sections 712.3.1 through 712.3.5.

**712.3.1 Sump pump.** The sump pump capacity and head shall be appropriate to anticipated use requirements.

**712.3.2 Sump pit.** The sump pit shall be not less than 18 inches (457 mm) in diameter and not less than 24 inches (610 mm) in depth, unless otherwise *approved*. The pit shall be ~~accessible~~ provided with *access* and shall be located such that all drainage flows into the pit by gravity. The sump pit shall be constructed of tile, concrete, steel, plastic or other *approved* materials. The pit bottom shall be solid and provide permanent support for the pump. The sump pit shall be fitted with a gastight removable cover that is installed ~~flush with grade or floor level, or above~~ not more than 2 inches (51 mm) below grade or floor level. The cover shall be adequate to support anticipated loads in the area of use. The sump pit shall be vented in accordance with Chapter 9.

**712.3.3 Discharge pipe and fittings.** Discharge pipe and fittings serving sump pumps and ejectors shall be constructed of materials pressure-rated for not less than the maximum discharge pressure of the pump in accordance with Sections 712.3.3.1 and ~~712.3.3.2 and shall be *approved*.~~ 712.3.3.2.

**712.3.3.1 Materials.** Pipe and fitting materials shall be constructed of copper or ABS plastic pipe, ~~brass, copper, copper-alloy,~~ CPVC, ductile iron, PE, or PVC, excluding cell-core products.

**712.3.3.2 Ratings.** Pipe and fittings shall be rated for the maximum system operating pressure and temperature. Pipe fitting materials shall be compatible with the pipe material. Where pipe and fittings are buried in the earth, they shall be suitable for burial. DWV fittings with that are properly rated and allowed by the manufacturer's installation instructions shall be acceptable.

**712.3.4 Maximum effluent level.** The effluent level control shall be adjusted and maintained to at all times prevent the effluent in the sump from rising to within 2 inches (51 mm) of the invert of the gravity drain inlet into the sump.

**712.3.4.1 Sump alarms.** Sumps that discharge by means of automatic pumping equipment shall be provided with an approved, electrically operated high-water indicating alarm. A remote sensor shall activate the alarm when the fluid level exceeds a preset level that is less than the maximum capacity of the sump. The alarm shall function to provide an audiovisual signal to occupants within the building. Electrical power for the alarm shall be supplied through a branch circuit separate from that supplying the pump motor.

**Exception:** Sump alarms are not required for single point-of-use sump pumps and macerating toilet systems.

**712.3.5 Pump connection to the drainage system.** Pumps connected to the drainage system shall connect to a *building sewer, building drain, soil stack, waste stack* or *horizontal branch drain*. Where the discharge line connects into horizontal drainage piping, the connection shall be made through a wye fitting into the top of the drainage piping and such wye fitting shall be located not less than 10 pipe diameters from the base of any *soil stack, waste stack* or *fixture drain*.

**712.4 Sewage pumps and sewage ejectors.** A sewage pump or sewage ejector shall automatically discharge the contents of the sump to the building drainage system. The ejector pump discharge pipe shall not discharge directly into a septic tank. The pumped line shall discharge laterally into a 3 or 4-inch (102 mm) gravity line not less than 10 feet (3048 mm) from the connection to the tank through a lateral wye branch.

**712.4.1 Macerating toilet systems.** Macerating toilet systems shall comply with ASME A112.3.4/CSA B45.9 and shall be installed in accordance with the manufacturer's instructions.

**712.4.2 Capacity.** A sewage pump or sewage ejector shall have the capacity and head for the application requirements. Pumps or ejectors that receive the discharge of water closets shall be capable of handling spherical solids with a diameter of up to and including 2 inches (51 mm). Other pumps or ejectors shall be capable of handling spherical solids with a diameter of up to and including  $\pm \frac{1}{2}$  inch ~~(25 mm)~~ (13 mm). The capacity of a pump or ejector based on the diameter of the discharge pipe shall be not less than that indicated in Table 712.4.2.

**Exceptions:**

## SANITARY DRAINAGE

1. Grinder pumps or grinder ejectors that receive the discharge of water closets shall have a discharge opening of not less than 1<sup>1</sup>/<sub>4</sub> inches (32 mm).
2. Macerating toilet assemblies that serve single water closets shall have a discharge opening of not less than 3<sup>3</sup>/<sub>4</sub> inch (19.1 mm).

TABLE 712.4.2  
MINIMUM CAPACITY OF  
SEWAGE PUMP OR SEWAGE EJECTOR

DIAMETER OF THE DISCHARGE PIPE (inches)	CAPACITY OF PUMP OR EJECTOR (gpm)
2	21
2 <sup>1</sup> / <sub>2</sub>	30
3	46

For SI: 1 inch = 25.4 mm, 1 gallon per minute = 3.785 L/m.

## SECTION 713 HEALTH CARE PLUMBING COMPUTERIZED DRAINAGE DESIGN

**713.1 Scope.** This section shall govern those aspects of health care plumbing systems that differ from plumbing systems in other structures. Health care plumbing systems shall conform to this section in addition to the other requirements of this code. The provisions of this section shall apply to the special devices and equipment installed and maintained in the following occupancies: nursing homes; homes for the aged; orphanages; infirmaries; first aid stations; psychiatric facilities; clinics; professional offices of dentists and doctors; mortuaries; educational facilities; surgery, dentistry, research and testing laboratories; establishments manufacturing pharmaceutical drugs and medicines; and other structures with similar apparatus and equipment classified as plumbing.

**713.2 Bedpan washers and clinical sinks.** Bedpan washers and clinical sinks shall connect to the drainage and vent system in accordance with the requirements for a water closet. Bedpan washers shall also connect to a local vent.

**713.3 Indirect waste.** Sterilizers, steamers and condensers shall discharge to the drainage through an indirect waste pipe by means of an *air gap*. Where a battery of not more than three sterilizers discharges to an individual receptor, the distance between the receptor and a sterilizer shall not exceed 8 feet (2438 mm). The indirect waste pipe on a bedpan steamer shall be trapped.

**713.4 Vacuum system station.** Ready *access* shall be provided to vacuum system station receptacles. Such receptacles shall be built into cabinets or recesses and shall be visible.

**713.5 Bottle system.** Vacuum (fluid suction) systems intended for collecting, removing and disposing of blood, pus or other fluids by the bottle system shall be provided with receptacles equipped with an overflow prevention device at each vacuum-outlet station.

**713.6 Central disposal system equipment.** Central vacuum (fluid suction) systems shall provide continuous service. Systems equipped with collecting or control tanks shall provide for draining and cleaning of the tanks while the system is in operation. In hospitals, the system shall be connected to the emergency power system. The exhausts from a vacuum pump serving a vacuum (fluid suction) system shall discharge separately to open air above the roof.

**713.7 Central vacuum or disposal systems.** Where the waste from a central vacuum (fluid suction) system of the barometric-lag, collection-tank or bottle disposal type is connected to the drainage system, the waste shall be directly connected to the sanitary drainage system through a trapped waste.

**713.7.1 Piping.** The piping of a central vacuum (fluid suction) system shall be of corrosion resistant material with a smooth interior surface. A *branch* shall be not less than 1/2-inch (12.7 mm) nominal pipe size for one outlet and shall

be sized in accordance with the number of vacuum outlets. A main shall be not less than 1 inch (25 mm) nominal pipe size. The pipe sizing shall be increased in accordance with the manufacturer's instructions as stations are increased.

**713.7.2 Velocity.** The velocity of airflow in a central vacuum (fluid suction) system shall be less than 5,000 feet per minute (25 m/s).

**713.8 Vent connections prohibited.** Connections between local vents serving bedpan washers or sterilizer vents serving sterilizing apparatus and normal sanitary plumbing systems are prohibited. Only one type of apparatus shall be served by a local vent.

**713.9 Local vents and stacks for bedpan washers.** Bedpan washers shall be vented to open air above the roof by means of one or more local vents. The local vent for a bedpan washer shall be not less than a 2-inch diameter (51 mm) pipe. A local vent serving a single bedpan washer is permitted to drain to the fixture served.

**713.9.1 Multiple installations.** Where bedpan washers are located above each other on more than one floor, a local vent *stack* is permitted to be installed to receive the local vent on the various floors. Not more than three bedpan washers shall be connected to a 2-inch (51 mm) local vent *stack*, not more than six to a 3-inch (76 mm) local vent *stack* and not more than 12 to a 4-inch (102 mm) local vent *stack*. In multiple installations, the connections between a bedpan washer local vent and a local vent *stack* shall be made with tee or tee wye sanitary pattern drainage fittings installed in an upright position.

**713.9.2 Trap required.** The bottom of the local vent *stack*, except where serving only one bedpan washer, shall be drained by means of a trapped and vented waste connection to the sanitary drainage system. The trap and waste shall be the same size as the local vent *stack*.

**713.9.3 Trap seal maintenance.** A water supply pipe not less than  $\frac{1}{4}$  inch (6.4 mm) in diameter shall be taken from the flush supply of each bedpan washer on the discharge or fixture side of the vacuum breaker, shall be trapped to form not less than a 3-inch (76 mm) water seal and shall be connected to the local vent *stack* on each floor. The water supply shall be installed so as to provide a supply of water to the local vent *stack* for cleansing and drain trap seal maintenance each time a bedpan washer is flushed.

**713.10 Sterilizer vents and stacks.** Multiple installations of pressure and nonpressure sterilizers shall have the vent connections to the sterilizer vent *stack* made by means of inverted wye fittings. Access shall be provided to vent connections for the purpose of inspection and maintenance.

**713.10.1 Drainage.** The connection between sterilizer vent or exhaust openings and the sterilizer vent *stack* shall be designed and installed to drain to the funnel or basket type waste fitting. In multiple installations, the sterilizer vent *stack* shall be drained separately to the lowest sterilizer funnel or basket type waste fitting or receptor.

**713.11 Sterilizer vent stack sizes.** Sterilizer vent *stack* sizes shall comply with Sections 713.11.1 through 713.11.4.

**713.11.1 Bedpan steamers.** The minimum size of a sterilizer vent serving a bedpan steamer shall be  $1\frac{1}{2}$  inches (38 mm) in diameter. Multiple installations shall be sized in accordance with Table 713.11.1.

**713.11.2 Boiling type sterilizers.** The size of a sterilizer vent *stack* shall be not less than 2 inches (51 mm) in diameter where serving a utensil sterilizer and not less than  $1\frac{1}{2}$  inches (38 mm) in diameter where serving an instrument sterilizer. Combinations of boiling type sterilizer vent connections shall be sized in accordance with Table 713.11.1.

**713.11.3 Pressure sterilizers.** Pressure sterilizer vent *stacks* shall be  $2\frac{1}{2}$  inches (64 mm) minimum. Those serving combinations of pressure sterilizer exhaust connections shall be sized in accordance with Table 713.11.3.

**713.11.4 Pressure instrument washer sterilizer sizes.**

The diameter of a sterilizer vent *stack* serving an instrument washer sterilizer shall be not less than 2 inches (51 mm). Not more than two sterilizers shall be installed on a 2-inch (51 mm) *stack*, and not more than four sterilizers shall be installed on a 3-inch (76 mm) *stack*.

TABLE 713.11.1

**STACK SIZES FOR BEDPAN STEAMERS AND BOILING-TYPE STERILIZERS (Number of Connections of Various Sizes Permitted to Various-sized Sterilizer Vent Stacks)**

STACK SIZE (inches)	CONNECTION SIZE		
	1½"	or	2"
1½ <sup>a</sup>	1	or	0
2 <sup>a</sup>	2	or	1
2 <sup>b</sup>	1	and	1
3 <sup>a</sup>	4	or	2
3 <sup>b</sup>	2	and	2
4 <sup>a</sup>	8	or	4
4 <sup>b</sup>	4	and	4

For SI: 1 inch = 25.4 mm.  
 a. Total of each size.  
 b. Combination of sizes.

**TABLE 713.11.3  
 STACK SIZES FOR PRESSURE STERILIZERS  
 (Number of Connections of Various Sizes Permitted To Various-sized Vent Stacks)**

STACK SIZE (inches)	CONNECTION SIZE			
	¾"	1"	1½"	2"
1½ <sup>a</sup>	3 or	2 or	1	—
1½ <sup>b</sup>	2 and	1	—	—
2 <sup>a</sup>	6 or	3 or	2 or	1
2 <sup>b</sup>	3 and	2	—	—
2 <sup>b</sup>	2 and	1 and	1	—
2 <sup>b</sup>	1 and	1 and	—	1
3 <sup>a</sup>	15 or	7 or	5 or	3
3 <sup>b</sup>	1 and	1 and 5 and	2 and	2 1

For SI: 1 inch = 25.4 mm.  
 a. Total of each size.  
 b. Combination of sizes.

**Deleted.**

**713.1 Design of drainage system.** The sizing, design and layout of the drainage system shall be permitted to be designed by approved computer design methods.

**713.2 Load on drainage system.** The load shall be computed from the simultaneous or sequential discharge conditions from fixtures, appurtenances and appliances or the peak usage design condition.

**713.2.1 Fixture discharge profiles.** The discharge profiles for flow rates versus time from fixtures and appliances shall be in accordance with the manufacturer’s specifications.

**713.3 Selections of drainage pipe sizes.** Pipe shall be sized to prevent full-bore flow.

**713.3.1 Selecting pipe wall roughness.** Pipe size calculations shall be conducted with the pipe wall roughness factor (ks), in accordance with the manufacturer’s specifications and as modified for aging roughness factors with deposits and corrosion.

**713.3.2 Slope of horizontal drainage piping.** Horizontal drainage piping shall be designed and installed at slopes in accordance with Table 704.1.

**SECTION 714**  
**COMPUTERIZED DRAINAGE DESIGN BACKWATER VALVES**

**~~715.1714.1~~ Sewage backflow.** Where plumbing fixtures are installed on a floor with a finished floor elevation below the elevation of the manhole cover of the next upstream manhole in the public *sewer*, such fixtures shall be protected by a backwater valve installed in the *building drain*, or horizontal *branch* serving such fixtures. Plumbing fixtures installed on a floor with a finished floor elevation above the elevation of the manhole cover of the next upstream manhole in the public *sewer* shall not discharge through a backwater valve.

**Exception:**

1. In existing buildings, fixtures above the elevation of the manhole cover of the next upstream manhole in the public *sewer* shall not be prohibited from discharging through a backwater valve.
2. Where the sewer service line ties directly to a manhole, that manhole is considered to be the next upstream manhole.
3. Where hub drains are located in the crawl space for condensate waste, a backwater valve shall be installed.

**~~715.2714.2~~ Material.** ~~Bearing parts of backwater valves shall be of corrosion-resistant material.~~ Backwater valves shall comply with ASME A112.14.1, CSA B181.1 or CSA B181.2.

**~~715.3714.3~~ Seal.** Backwater valves shall be so constructed as to provide a mechanical seal against backflow.

**~~715.4714.4~~ Diameter.** Backwater valves, when fully opened, shall have a capacity not less than that of the pipes in which they are installed.

**~~715.5714.5~~ Location.** Backwater valves shall be installed so that *access* is provided to the working ~~parts for service and repair parts.~~

**~~715.6714.6~~ Crawl Spaces.** All hub drains or floor drains installed in crawl spaces shall be protected from backflow into the building by a ~~check valve or~~ backwater valve installed in the lateral serving the said hub drain or floor drain. Trap seal protection shall be by the use of a deep seal trap.

**SECTION 715**  
**BACKWATER VALVES VACUUM DRAINAGE SYSTEMS**

**~~716.1715.1~~ Scope.** Vacuum drainage systems shall be in accordance with Sections ~~716.2715.2~~ through ~~716.4.715.4~~.

**~~716.2715.2~~ System design.** Vacuum drainage systems shall be designed in accordance with the vacuum drainage system manufacturer's instructions. The system layout, including piping layout, tank assemblies, vacuum pump assembly and other components necessary for proper function of the system shall be in accordance with the manufacturer's instructions. Plans, specifications and other data for such systems shall be submitted to the code official for review and approval prior to installation.

**~~716.2.1715.2.1~~ Fixtures.** Gravity-type fixtures installed in vacuum drainage systems shall comply with Chapter 4.

**~~716.2.2715.2.2~~ Drainage fixture units.** *Drainage fixture units* for gravity drainage systems that discharge into, or receive discharge from, vacuum drainage systems shall be based on the values in this chapter.

**~~716.2.3715.2.3~~ Water supply fixture units.** Water supply fixture units shall be based on the values in Chapter 6 of this code, except that the water supply fixture unit for a vacuum-type water closet shall be 1.

**~~716.2.4715.2.4~~ Traps and cleanouts.** Gravity drainage fixtures shall be provided with traps and cleanouts in accordance with this chapter and Chapter 10.

**~~716.2.5715.2.5~~ Materials.** Vacuum drainage pipe, fitting and valve materials shall be in accordance with the vacuum drainage system manufacturer's instructions and the requirements of this chapter.

**~~716.3715.3~~ Testing and demonstrations.** After completion of the entire system installation, the system shall be subjected to a vacuum test of 19 inches (483 mm) of mercury and shall be operated to function as required by the code official and the manufacturer of the vacuum drainage system. Recorded proof of all tests shall be submitted to the code official.

**716.4715.4 Written instructions.** Written instructions for the operation, maintenance, safety and emergency procedures shall be provided to the building owner. The code official shall verify that the building owner is in receipt of such instructions.

**SECTION 716**  
**VACUUM DRAINAGE SYSTEMS REPLACEMENT OF UNDERGROUND**  
**BUILDING SEWERS AND BUILDING**  
**DRAINS BY PIPE-BURSTING METHODS**

**717.4716.1 General.** This section shall govern the replacement of existing *building sewer* and *building drain* piping by pipe-bursting methods.

**717.2716.2 Applicability.** The replacement of *building sewer* and *building drain* piping by pipe-bursting methods shall be limited to gravity drainage piping of sizes 6 inches (152 mm) and smaller. The replacement piping shall be of the same nominal size as the existing piping.

**717.3716.3 Pre-installation inspection.** The existing piping sections to be replaced shall be inspected internally by a recorded video camera survey. The survey shall include notations of the position of cleanouts and the depth of connections to the existing piping.

**717.4716.4 Pipe.** The replacement pipe shall be made of high-density polyethylene (HDPE) ~~that conforms to cell classification number PE3608, PE4608 or PE4710 as indicated in ASTM F714~~ and shall have a standard dimension ratio (SDR) of 17. The replacement piping pipe shall be ~~manufactured with a standard dimension ratio (SDR) of 17~~ and in compliance with ASTM F714.

**717.5716.5 Pipe fittings.** Pipe fittings to be connected to the replacement piping pipe shall be made of high-density polyethylene (HDPE) ~~that conforms to cell classification number PE3608, PE4608 or PE4710 as indicated in ASTM F714~~ and shall be in compliance with ASTM D2683, and shall be manufactured with an SDR of 17 and in compliance with ASTM D2683.

**717.6716.6 Cleanouts.** Where the existing *building sewer* or *building drain* did not have cleanouts meeting the requirements of this code, cleanout fittings shall be installed as required by this code.

**717.7716.7 Post-installation inspection.** The completed replacement piping section shall be inspected internally by a recorded video camera survey. The video survey shall be reviewed and *approved* by the code official prior to pressure testing of the replacement piping system.

**717.8716.8 Pressure testing.** The replacement piping system piping shall be tested in accordance with Section 312.

**SECTION 717**  
**REPLACEMENT OF UNDERGROUND-**  
**BUILDING SEWERS AND BUILDING-**  
**DRAINS BY PIPE-BURSTING METHODS RELINING BUILDING SEWERS**  
**AND BUILDING DRAINS**

**717.1 General.** This section shall govern the relining of existing *building sewers* and building drainage piping.

**717.2 Applicability.** The relining of existing *building sewers* and building drainage piping shall be limited to gravity drainage piping 4 inches (102 mm) in diameter and larger. The relined piping shall be of the same nominal size as the existing piping.

**717.3 Preinstallation requirements.** Prior to commencement of the relining installation, the existing piping sections to be relined shall be descaled and cleaned. After the cleaning process has occurred and water has been flushed through the system, the piping shall be inspected internally by a recorded video camera survey.

**717.3.1 Preinstallation recorded video camera survey.** The video survey shall include verification of the project address location. The video shall include notations of the cleanout and fitting locations, and the approximate depth of the existing piping. The video shall also include notations of the length of piping at intervals not greater than 25 feet (7620 mm).



**717.4 Permitting.** Prior to permit issuance, the code official shall review and evaluate the preinstallation recorded video camera survey to determine if the piping system is able to be relined in accordance with the proposed lining system manufacturer's installation requirements and applicable referenced standards.

**717.5 Prohibited applications.** Where review of the preinstallation recorded video camera survey reveals that piping systems are not installed correctly or defects exist, relining shall not be permitted. The defective portions of piping shall be exposed and repaired with pipe and fittings in accordance with this code. Defects include, but are not limited to, backgrade or insufficient slope, complete pipe wall deterioration or complete separations such as from tree root invasion or improper support.

**717.6 Relining materials.** The relining materials shall be manufactured in compliance with applicable standards and certified as required in Section 303. Fold-and-form pipe reline materials shall be manufactured in compliance with ASTM F1504 or ASTM F1871.

**717.7 Installation.** The installation of relining materials shall be performed in accordance with the manufacturer's installation instructions, applicable referenced standards and this code.

**717.7.1 Material data report.** The installer shall record the data as required by the relining material manufacturer and applicable standards. The recorded data shall include but is not limited to the location of the project, relining material type, amount of product installed and conditions of the installation. A copy of the data report shall be provided to the code official prior to final approval.

**717.8 Post-installation recorded video camera survey.** The completed, relined piping system shall be inspected internally by a recorded video camera survey after the system has been flushed and flow-tested with water. The video survey shall be submitted to the code official prior to finalization of the permit. The video survey shall be reviewed and evaluated to provide verification that no defects exist. Any defects identified shall be repaired and replaced in accordance with this code.

**717.9 Certification.** A certification shall be provided in writing to the code official, from the permit holder, that the relining materials have been installed in accordance with the manufacturer's installation instructions, the applicable standards and this code.

**717.10 Approval.** Upon verification of compliance with the requirements of Sections 717.1 through 717.9, the code official shall approve the installation.

## **SECTION 718 CURED-IN-PLACE PIPING (CIPP) REHABILITATION OF BUILDING SEWERS AND BUILDING DRAINS**

**718.1 General.** This section shall govern the replacement, rehabilitation or repair of existing *building sewer* piping by cured in-place piping methods.

**718.2 Scope.** Cured in Place Piping (CIPP) installations shall conform to the requirements of ASTM F1216 and be installed per the manufacturer's installation instructions.

**718.1 Cure-in-place.** Sectional cure-in-place rehabilitation of *building sewer* piping and sewer service lateral piping shall be in accordance with ASTM F2599. Main and lateral cure-in-place rehabilitation of *building sewer* and sewer service lateral pipe and their connections to the main sewer pipe shall be in accordance with ASTM F2561. Hydrophilic rings or gaskets in cure-in-place rehabilitation of *building sewer* piping and sewer service laterals shall be in accordance with ASTM F3240 to ensure water tightness and elimination of ground water penetration.

## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

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**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Tuesday, February 20, 2024 4:36 PM

**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>; Rules, Oah <oah.rules@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>; McGhee, Dana <dana.McGhee@oah.nc.gov>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

Actually, scratch that. I do still need to hear from y'all on the changes to Chapters 7 and 11 before I can recommend approval.

Thanks,  
Brian

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**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

David, thanks for the responses. I think I can recommend approval of the Plumbing Code at Thursday's meeting.

Brian

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## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

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**Sent:** Tuesday, February 20, 2024 3:13 PM

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**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

David and Nathan,

I was wondering, since the Plumbing Code is already at RRC for review, and you can make changes to it, why not just add the exceptions to 702 and 1102 back in now, rather than waiting for the separate code change?

The language at issue is in what you published, but is just marked as a deletion, if I recall correctly, so just remove the strikethroughs and add them back in. I don't see that as a substantial change, and given that the legislature told you to do it, I can't see any other issues.

Let me know what you think.

Brian

Brian Liebman

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## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

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**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

Thanks!

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**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

Brian,  
The 702 and 1102 changes are set to be adopted by the NCBCC on 3/19/24.

The Resource A is included in the code for informational purposes only.

Let me know if you have any questions.  
Thank you

**David B. Rittlinger, PE, LEED AP**  
**Division Chief - Codes & Interpretations**



**North Carolina Office of State Fire Marshal**  
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Link to free view of 2018 NC Codes  
<https://codes.iccsafe.org/codes/north-carolina>

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**From:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>

**Sent:** Tuesday, February 20, 2024 2:50 PM

**To:** Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>

**Cc:** Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>; Holder, Karen <[Karen.Holder@ncdoi.gov](mailto:Karen.Holder@ncdoi.gov)>; Childs, Nathan D <[nchilds@NCDOJ.GOV](mailto:nchilds@NCDOJ.GOV)>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

David, can you let me know when you anticipate the changes to 702 and 1102 that you're running separately to be adopted and sent to RRC? Also, with respect to the 2024 Plumbing Code filing, did you intend the IPC Resource A document that you sent in to be included with the Code? Or was that just for informational purposes?

Thanks,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

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**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Tuesday, February 20, 2024 2:16 PM

**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>; Rules, Oah <oah.rules@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>; McGhee, Dana <dana.McGhee@oah.nc.gov>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

David,

These look good to me. I'll wait on the responses to Chapter 1 before going any further.

Thanks!

Brian

Brian Liebman

Counsel to the North Carolina Rules Review Commission

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**From:** Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>

**Sent:** Tuesday, February 20, 2024 1:45 PM

**To:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>; Rules, Oah <[oah.rules@oah.nc.gov](mailto:oah.rules@oah.nc.gov)>

**Cc:** Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>; Holder, Karen <[Karen.Holder@ncdoi.gov](mailto:Karen.Holder@ncdoi.gov)>; Childs, Nathan D <[nchilds@NCDOJ.GOV](mailto:nchilds@NCDOJ.GOV)>; McGhee, Dana <[dana.McGhee@oah.nc.gov](mailto:dana.McGhee@oah.nc.gov)>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

**Importance:** High

Good afternoon RRC,

Attached are the following documents concerning the 2024 NC Plumbing Code

I have attached a separate pdf and MS Word copy of the amendment to be considered by the RRC as permanent rules.

Chapter 2, 3, 4, 5, 6, 7, 9 and 15. Chapter 1 is following in the other correspondence. Chapter 8, 10 through 14, and 16 through 21 were not changed and are not included.

Documents included:

1. Responses to RRC attorney comments: File: 2024-0220 DBR Responses-02.2024 - BCC - NC Plumbing Code - Request for Changes
2. Formatted Review Aide and 2024 North Carolina Plumbing Code: Chapter 1 through Resource A\*

TEXT THAT IS STRUCK THROUGH IS DELETED FROM THE 2018 EDITION TO CREATE THE 2024 EDITION.

TEXT THAT IS UNDERLINED IS NEW TEXT TO CREATE THE 2024 EDITION.

\*Of note, publishing edits to the Cover page, North Carolina Building Code Council members and committees lists, North Carolina Department of Insurance contact information, Preface, Table of Contents and Index are not included as those are publishing edits that do not contain permanent rule content. These publishing edits contain NCBCC and NCDOI contact information, instructions on how to use the code, and guidance on where to find information in the code for the public-at-large. Coordination of the correct page numbers tied to the Table of Contents and Index cannot be accurately completed until the first draft of publishing is completed for NCDOI-OSFM Engineering & Codes staff review prior to completion of publishing by the International Code Council. NCDOI-OSFM Engineering & Codes staff will be coordinating the publication of all these publishing edits with the International Code Council once the proposed 2024 North Carolina Building Codes are approved.

**David B. Rittlinger, PE, LEED AP**  
**Division Chief - Codes & Interpretations**

---



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## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

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**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Tuesday, February 20, 2024 9:58 AM

**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>; Rules, Oah <oah.rules@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>; McGhee, Dana <dana.McGhee@oah.nc.gov>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

Thanks, David. I think with this I will recommend approval of the Residential Code at the meeting on Thursday. I will confirm with Dana that the final version of all chapters has been filed with her.

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
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## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4  
**Attachments:** 2024 NCRC Chapter 2-10 RCC Full.docx; 2024 NCRC Chapter 2 RCC Full.pdf; D-2 20230314 Item B-4 2024 NC Residential Code 1-10 25-33 45 46 and Appendices Rev 4. Form\_0400\_for\_Permanent\_Rule\_September\_2023.pdf; D-2 20230314 Item B-4 2024 NC Residential Code 1-10 25-33 45 46 and Appendices Rev 4. Form\_0400\_for\_Permanent\_Rule\_September\_2023.docx

**Importance:** High

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**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Sent:** Tuesday, February 20, 2024 9:02 AM  
**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>; Rules, Oah <oah.rules@oah.nc.gov>  
**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>; McGhee, Dana <dana.McGhee@oah.nc.gov>  
**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4  
**Importance:** High

Brian,  
Good morning.

*DBR response: In studying the definitions further, “incidental” in the two definitions is changed to “appurtenant” to address the concerns of the RRC staff attorney while still meeting the intent of the definitions in the application R101.2.1 Accessory buildings and R101.2.2 Accessory structures.*

Attached are revised Chapter 2 and 400 Forms in word and pdf.

Let me know if you have any questions.  
Thank you for your work on this.

**David B. Rittlinger, PE, LEED AP**  
**Division Chief - Codes & Interpretations**




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# SUBMISSION FOR PERMANENT RULE

<b>1. Rule-Making Agency: NC Building Code Council</b>	
<b>2. Rule citation &amp; name (name not required for repeal):</b> 2024 North Carolina Residential Code Chapters 1-10, 25-33, 45, 46 and Appendices (230314 Item B-4)	
<b>3. Action:</b> <input type="checkbox"/> ADOPTION <input checked="" type="checkbox"/> AMENDMENT <input type="checkbox"/> REPEAL <input type="checkbox"/> READOPTIOIN <input type="checkbox"/> REPEAL through READOPTIOIN	
<b>4. Rule exempt from RRC review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No	<b>5. Rule automatically subject to legislative review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No
<b>6. Notice for Proposed Rule:</b> <input checked="" type="checkbox"/> Notice Required Notice of Text published on: May 15, 2023 in NC Register, April 24, 2023 agency website Link to Agency notice: <a href="https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice">https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice</a> Hearing on: June 13, 2023 Adoption by Agency on: September 12, 2023 <input type="checkbox"/> Notice not required under G.S.: Adoption by Agency on:	
<b>7. Rule establishes or increases a fee? (See G.S. 12-3.1)</b> <input type="checkbox"/> Yes Agency submitted request for consultation on: Consultation not required. Cite authority: <input checked="" type="checkbox"/> No	<b>8. Fiscal impact. Check all that apply.</b> <input type="checkbox"/> This Rule was part of a combined analysis. <input type="checkbox"/> State funds affected <input type="checkbox"/> Local funds affected <input type="checkbox"/> Substantial economic impact ( $\geq$ \$1,000,000) <input type="checkbox"/> Approved by OSBM <input checked="" type="checkbox"/> No fiscal note required
<b>9. REASON FOR ACTION</b>	
<b>9A. What prompted this action? Check all that apply:</b> <input checked="" type="checkbox"/> Agency <input type="checkbox"/> Court order / cite: <input type="checkbox"/> Federal statute / cite: <input type="checkbox"/> Federal regulation / cite: <input type="checkbox"/> Legislation enacted by the General Assembly Cite Session Law: <input checked="" type="checkbox"/> Petition for rule-making <input type="checkbox"/> Other:	
<b>9B. Explain:</b> <u>This amendment</u> The 2018 NC Residential Code Chapters 1-10, 25-33, 45, 46 and Appendices is amended to create the 2024 NC Residential Code Chapters 1-10, 25-33, 45, 46 and Appendices and is proposed to protect the public by updating the code to current standards of practice.  The delayed effective date of this Rule is January 1, 2025. The Statutory authority for Rule-making is G. S. 143-136; 143-138.	
<b>10. Rulemaking Coordinator: David Bruce Rittlinger</b> David B. Rittlinger Phone: (919)647-0008 E-Mail: david.rittlinger@ncdoi.gov  Additional agency contact, if any: Phone: E-Mail:	<b>11. Signature of Agency Head* or Rule-making Coordinator:</b>   *If this function has been delegated (reassigned) pursuant to G.S. 143B-10(a), submit a copy of the delegation with this form. Typed Name: David Bruce Rittlinger Title: <u>(Interim) Deputy commissioner of Engineering Division</u> <u>Chief of Codes &amp; Interpretations</u> & Chief Code Consultant
<b>RRC AND OAH USE ONLY</b>	
<b>Action taken:</b> <input type="checkbox"/> RRC extended period of review: <input type="checkbox"/> RRC determined substantial changes: <input type="checkbox"/> Withdrawn by agency <input type="checkbox"/> Subject to Legislative Review <input type="checkbox"/> Other:	

# SUBMISSION FOR PERMANENT RULE

The 2021 International Residential Code can be viewed for free at the following link:  
<https://codes.iccsafe.org/content/IRC2021P2>

Errata to the 2021 International Residential Code can be viewed for free at the following link:  
[https://www.iccsafe.org/wp-content/uploads/1659714279\\_2021-International-Residential-Code-Errata-Complete.pdf](https://www.iccsafe.org/wp-content/uploads/1659714279_2021-International-Residential-Code-Errata-Complete.pdf)

Amendments to the 2018 North Carolina Residential Code can be viewed for free at the following link:  
<https://www.ncosfm.gov/2017-2023-approved-amendments-230314residential-code>

Of note, North Carolina General Assembly Session Law 2023-108 prohibits the NCBC from amending Chapters 11 through 24 of the North Carolina Residential Code. Those chapters remain unchanged and are not included in this permanent rule change petition.

**~~THIS DOCUMENT CONTAINS PROPOSED NORTH CAROLINA AMENDMENTS TO THE 2021 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE (IRC) CHAPTERS 1-10, 25-33, 45, 46 AND APPENDICES FOR THE PURPOSE OF ESTABLISHING THE 2024 EDITION OF THE NORTH CAROLINA RESIDENTIAL CODE CHAPTERS 1-10, 25-33, 45, 46 AND APPENDICES.~~**

**UNDERLINED TEXT INDICATE NORTH CAROLINA PROPOSED AMENDMENTS TO THE 2021 INTERNATIONAL RESIDENTIAL CODE CHAPTERS 1-10, 25-33, 45, 46 AND APPENDICES FOR THE 2024 NORTH CAROLINA RESIDENTIAL CODE CHAPTERS 1-10, 25-33, 45, 46 AND APPENDICES.**

**~~STRUCKTHROUGH TEXT INDICATES IRC TEXT THAT IS PROPOSED TO BE REMOVED FROM THE 2024 NORTH CAROLINA RESIDENTIAL CODE CHAPTERS 1-10, 25-33, 45, 46 AND APPENDICES.~~**

**~~TEXT THAT IS HIGHLIGHTED IN YELLOW INDICATES PROPOSED NORTH CAROLINA AMENDMENTS THAT ARE NEW OR DIFFERENT THAN THE 2018 NORTH CAROLINA RESIDENTIAL CODE CHAPTERS 1-10, 25-33, 45, 46 AND APPENDICES.~~**

**Documents included:**

**1. Formatted Review Aide and 2024 North Carolina Residential Code Chapters 1-10, 25-33, 45, 46 and Appendices\***

**~~TEXT THAT IS STRUCKTHROUGH IS DELETED FROM THE 2018 EDITION TO CREATE THE 2024 EDITION.~~**

**TEXT THAT IS UNDERLINED IS NEW TEXT TO CREATE THE 2024 EDITION.**

\*Of note, publishing edits to the Cover page, North Carolina Building Code Council members and committees lists, North Carolina Department of Insurance contact information, Preface, Table of Contents and Index are not included as those are publishing edits that do not contain permanent rule content. These publishing edits contain NCBC and NCDOI contact information, instructions on how to use the code, and guidance on where to find information in the code for the public-at-large. Coordination of the correct page numbers tied to the Table of Contents and Index cannot be accurately completed until the first draft of publishing is completed for NCDOI-OSFM Engineering & Codes staff review prior to completion of publishing by the International Code Council. NCDOI-OSFM Engineering & Codes staff will be coordinating the publication of all these publishing edits with the International Code Council once the proposed 2024 North Carolina Building Codes are approved. Chapters 11 through 24 are unchanged from the 2018 NCRC per NC General Assembly Session Law 2023-108 that became law on 8/16/23. Chapters 11 through 24 are not included in this submission. Chapter 34 through Chapter 44 are unchanged from the 2018 NCRC and are not included in this submission

## SUBMISSION FOR PERMANENT RULE

2. Appendix C Code Change Proposal North Carolina Building Code Council (230314 Item B-4) 2024 North Carolina Residential Code Chapters 1-10, 25-33, 45, 46 and Appendices (File: B-4 2024 NCRC Chapters 1-10 and 25-33 and 45-46 and Appendices). A link to the petition can be found here: <https://www.ncosfm.gov/news/events/building-code-council-meeting-march-14-2023>

3. 2017-2023 Approved Amendments to the 2018 North Carolina Residential Code (File: 2017-2023 Approved Amendments 230314 Residential Code). A link to these amendments can be found here: <https://www.ncosfm.gov/2017-2023-approved-amendments-230314residential-code>

**(see attached documents)**

## CHAPTER 2 DEFINITIONS

*Definitions in this chapter preceded by a bracketed letter correlate with the chapters for Energy [RE], Plumbing [RP], Fuel Gas [RG], and Mechanical [RM] of this code. Definitions that are not preceded by a bracket are general definitions utilized throughout this code.*

### SECTION R201 GENERAL

**R201.1 Scope.** Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings indicated in this chapter.

**R201.2 Interchangeability.** Words used in the present tense include the future; words in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

**R201.3 Terms defined in other codes.** Where terms are not defined in this code such terms shall have the meanings ascribed in other code publications of the ~~North Carolina Building International~~ Code Council.

**R201.4 Terms not defined.** Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

### SECTION R202 DEFINITIONS

**[RE] ABOVE-GRADE WALL.** A wall more than 50 percent above grade and enclosing conditioned space. This includes between-floor spandrels, peripheral edges of floors, roof and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof and skylight shafts. For the definition applicable in Chapter 11, see Section N1101.6.

**[RP] ACCEPTED ENGINEERING PRACTICE.** Practice that conforms to accepted principles, tests or standards of nationally recognized technical or scientific authorities.

**[RP] ACCESS COVER.** A removable plate, usually secured by bolts or screws, to permit access to a pipe or pipe fitting for the purposes of inspection, repair or cleaning.

**[RB] ACCESS (TO).** That which enables a device, an *appliance* or equipment to be reached by *ready access* or by a means that first requires the removal or movement of a panel, door or similar obstruction.

**[RE] ACCESSIBLE.** Signifies access that requires the removal of an access panel or similar removable obstruction. For energy purposes, *accessible* means admitting close approach as a result of not being guarded by locked doors, elevation or other effective means (see “*accessible, readily*”).

**ACCESSORY BUILDING.** ~~In one and two family dwellings not more than three stories above grade plane in height with a separate means of egress, a building, the use of which is incidental to that of the main building and that is detached and located on the same lot. An accessory building is a building that is roofed over and more than 50 percent of its exterior walls are enclosed. Examples of accessory buildings are garages, storage buildings, workshops, boat houses, treehouses, and similar structures. A building that does not contain a sleeping room, the use of which is accessory incidental appurtenant to that of the dwelling, that is detached and located on the same lot as the dwelling and is roofed over with more than 50 percent of its exterior walls enclosed.~~

~~**ACCESSIBLE, READILY.** Signifies access without the necessity for removing a panel or similar obstruction.~~

**[RB] ACCESSORY STRUCTURE.** A ~~detached~~ structure that is accessory incidental appurtenant to the dwelling and not defined as an *accessory building*. Examples of accessory structures are fencing, decks, gazebos, arbors, retaining walls, barbecue pits, detached chimneys, playground equipment, yard art, *docks, piers*, etc.

**[RE] ACH50.** Air changes per hour of measured airflow in relation to the building volume while the building is maintained at a pressure difference of 50 Pascals.

**[RP] ADAPTER FITTING.** An *approved* connecting device that suitably and properly joins or adjusts pipes and fittings that do not otherwise fit together.

**[RB] ADDITION.** An extension or increase in floor ~~area~~area, number of stories or height of a building or structure. For energy purposes, an extension or increase in the conditioned space floor area or height of a building or structure. For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] ADHERED STONE OR MASONRY VENEER.** Stone or masonry veneer secured and supported through the adhesion of an *approved* bonding material applied to an *approved* backing.

**[MP] AIR ADMITTANCE VALVE.** A one-way valve designed to allow air into the plumbing drainage system where a negative pressure develops in the piping. This device shall close by gravity and seal the terminal under conditions of zero differential pressure (no flow conditions) and under positive internal pressure. The purpose of an air admittance valve is to provide a method of allowing air to enter the plumbing drainage system without the use of a vent extended to open air and to prevent *sewer* gases from escaping into a building.

**[RE] AIR BARRIER.** For the definition applicable in Chapter 11, see Section N1101.6.

**[RE] AIR BARRIER MATERIAL.** Material(s) that have an air permeability not to exceed 0.004 cfm/ft<sup>2</sup> under a pressure differential of 0.3 in. water (1.57 psf) (0.02 L/s.m<sup>2</sup>@75 Pa) when tested in accordance with ASTM E2178.

**[RE] AIR BARRIER SYSTEM.** Material(s) assembled and joined together to provide a barrier to air leakage through the building envelope. An air barrier is a combination of *air barrier materials* and sealants.

**[MP] AIR BREAK (DRAINAGE SYSTEM).** An arrangement where a discharge pipe from a fixture, *appliance* or device drains indirectly into a receptor below the flood-level rim of the receptor and above the trap seal.

**[MP] AIR CIRCULATION, FORCED.** A means of providing space conditioning utilizing movement of air through ducts or plenums by mechanical means.

**[RG] AIR CONDITIONER, GAS-FIRED.** A gas-burning, automatically operated *appliance* for supplying cooled air, ~~and/or~~ dehumidified air, or both chilled liquid.

**[RG] AIR CONDITIONING.** The treatment of air so as to control simultaneously the temperature, humidity, cleanness and distribution of the air to meet the requirements of a *conditioned space*.

**[MP] AIR-CONDITIONING SYSTEM.** A system that consists of heat exchangers, blowers, filters, supply, exhaust and return-air systems, and shall include any apparatus installed in connection therewith.

**[RG] AIR, EXHAUST.** Air being removed from any space or piece of *equipment* or *appliance* and conveyed directly to the atmosphere by means of openings or ducts. Relief air is classified as exhaust air.

**[MP] AIR GAP, DRAINAGE SYSTEM.** The unobstructed vertical distance through free atmosphere between the outlet of a waste pipe and the flood-level rim of the fixture or receptor into which it is discharging.

**[MP] AIR GAP, WATER-DISTRIBUTION SYSTEM.** The unobstructed vertical distance through free atmosphere between the lowest opening from a water supply discharge to the flood-level rim of a plumbing fixture.

**[RG] AIR-HANDLING UNIT.** A blower or fan used for the purpose of distributing supply air to a room, space or area.

**[RB] AIR-IMPERMEABLE INSULATION.** An insulation having an air permance equal to or less than 0.02 L/s-m<sup>2</sup> at 75 Pa pressure differential ~~as tested in accordance~~ with ASTM E2178 or E283 at the thickness applied.

**[RG] AIR, MAKEUP.** Any combination of outdoor and transfer air intended to replace exhaust air and exfiltration.

**[RM] AIR, OUTDOOR.** Ambient air that enters a building through a ventilation system, through intentional openings for natural ventilation, or by infiltration.

**[RM] AIR, TRANSFER.** Air moved from one indoor space to another.

**[RB] ALTERATION.** Any construction or renovation to an existing structure other than repair or addition that requires a permit. Also, a change in a building, electrical, gas, mechanical or plumbing system that involves an extension, addition or change to the arrangement, type or purpose of the original installation that requires a permit. For the definition applicable in Chapter 11, see Section N1101.6.

**[RP] ALTERNATE ON-SITE NON-POTABLE WATER.** Non-potable water from other than public utilities, on-site surface sources and subsurface natural freshwater sources. Examples of such water are gray water, on-site reclaimed water, collected rainwater, captured condensate and rejected water from reverse osmosis systems.

**[RP] ALTERNATIVE ENGINEERED DESIGN.** A plumbing system that performs in accordance with the intent of Chapters 29 through 33 and provides an equivalent level of performance for the protection of public health, safety and welfare. The system design is not specifically regulated by Chapters 29 through 33.

**[RB] ALTERNATING TREAD DEVICE.** A device that has a series of steps between 50 and 70 degrees (0.87 and 1.22 rad) from horizontal, usually attached to a center support rail in an alternating manner so that the user does not have both feet on the same level at the same time.

**[RB] ANCHORED STONE OR MASONRY VENEER.** Stone or masonry veneer secured with *approved* mechanical fasteners to an *approved* backing.

**[MP] ANCHORS.** See “*Supports.*”

**[RG] ANODELESS RISER.** A transition assembly in which plastic *pipng* is installed and terminated above ground outside of a building.

**[MP] ANTISIPHON.** A term applied to valves or mechanical devices that eliminate siphonage.

**[MP] APPLIANCE.** A device or apparatus that is manufactured and designed to utilize energy and for which this code provides specific requirements.

**[RG] APPLIANCE, AUTOMATICALLY CONTROLLED.** Appliances equipped with an automatic *burner* ignition and safety shut-off device and other automatic devices, ~~which that~~ accomplish complete turn-on and shut-off of the gas to the *main burner* or *burners*, and graduate the gas supply to the *burner* or *burners*, but do not affect complete shut-off of the gas.

**[RG] APPLIANCE, FAN-ASSISTED COMBUSTION.** An *appliance* equipped with an integral mechanical means to either draw or force products of combustion through the combustion chamber or heat exchanger.

**[RG] APPLIANCE, UNVENTED.** An *appliance* designed or installed in such a manner that the products of combustion are not conveyed by a vent or *chimney* directly to the outside atmosphere.

**[RG] APPLIANCE, VENTED.** An *appliance* designed and installed in such a manner that all of the products of combustion are conveyed directly from the *appliance* to the outside atmosphere through an *approved chimney* or vent system.

**[RB] APPROVED.** Acceptable to the ~~code~~ *building official*.

**[RB] APPROVED AGENCY.** An established and recognized agency that is regularly engaged in conducting tests, furnishing inspection services or furnishing product certification, and has been *approved* by the building official.

**[MP] APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *building official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**[RP] AREA DRAIN.** A receptacle designed to collect surface or storm water from an open area.

**[RB] ASPECT RATIO.** The ratio of longest to shortest perpendicular dimensions, or for wall sections, the ratio of height to length.

**[RP] ASPIRATOR.** A fitting or device supplied with water or other fluid under positive pressure that passes through an integral orifice or constriction, causing a vacuum. Aspirators are also referred to as suction apparatus, and are similar in operation to an ejector.

**[RG] ATMOSPHERIC PRESSURE.** The pressure of the weight of air and water vapor on the surface of the earth, approximately 14.7 pounds per square inch (psia) (101 kPa absolute) at sea level.

**[RB] ATTIC.** The unfinished space between the ceiling assembly and the *roof assembly*.

**[RB] ATTIC, HABITABLE.** ~~A finished or unfinished habitable space within an attic, attic area meeting the definition of *habitable space* and complying with all of the following requirements:~~

- ~~1. The occupiable floor area is not less than 70 square feet (6.5 m<sup>2</sup>), in accordance with Section R304.~~
- ~~2. The occupiable floor area has a ceiling height in accordance with Section R305.~~
- ~~3. The occupiable space is enclosed by the roof assembly above, knee walls (if applicable) on the sides and the floor ceiling assembly below.~~

**ATTIC STORAGE.** A floored area, regardless of size, within an attic space that is served by an attic access.

**Exception:** A floor walkway not less than 24 inches (610 mm) wide or greater than 48 inches (1219 mm) wide that serves as an access for the service of utilities or equipment, and a level service space not less than 30 inches

(762 mm) deep or greater than 48 inches (1219 mm) deep and not less than 30 inches (762 mm) wide or greater than 48 inches (1219 mm) wide at the front or service side of the appliance, shall not be considered as attic storage.

Such floored area shall be labeled at the attic access opening, "NOT FOR STORAGE." The lettering shall be a minimum of 2 inches (51 mm) in height.

**[RE] AUTOMATIC.** Self-acting, operating by its own mechanism when actuated by some impersonal influence, as, for example, a change in current strength, pressure, temperature or mechanical configuration (see "Manual"). For the definition applicable in Chapter 11, see Section N1101.6.

**[RG] AUTOMATIC IGNITION.** Ignition of gas at the *burner(s)* when the gas controlling device is turned on, including reignition if the flames on the *burner(s)* have been extinguished by means other than by the closing of the gas controlling device.

**[RP] BACKFLOW CONNECTION.** Any arrangement whereby backflow is possible.

**[MP] BACKFLOW, DRAINAGE.** A reversal of flow in the drainage system.

**[MP] BACKFLOW PREVENTER.** A backflow prevention assembly, a backflow prevention device or other means or method to prevent backflow into the potable water supply.

**[MP] BACKFLOW PREVENTER, REDUCED-PRESSURE-ZONE TYPE.** A backflow-prevention device consisting of two independently acting check valves, internally force loaded to a normally closed position and separated by an intermediate chamber (or zone) in which there is an automatic relief means of venting to atmosphere internally loaded to a normally open position between two tightly closing shutoff valves and with means for testing for tightness of the checks and opening of relief means.

**[MP] BACKFLOW, WATER DISTRIBUTION.** The flow of water or other liquids into the potable water-supply piping from any sources other than its intended source. Back-siphonage is one type of backflow.

**[MP] BACKPRESSURE.** Pressure created by any means in the water distribution system that by being in excess of the pressure in the water supply mains causes a potential backflow condition.

**[MP] BACKPRESSURE, LOW HEAD.** A pressure less than or equal to 4.33 psi (29.88 kPa) or the pressure exerted by a 10-foot (3048 mm) column of water.

**[MP] BACKSIPHONAGE.** The flowing back of used or contaminated water from piping into a potable water-supply pipe due to a negative pressure in such pipe.

**[MP] BACKWATER VALVE.** ~~A device installed in a drain or pipe to prevent backflow of sewage.~~ A device or valve installed in the *building drain* or *sewer* pipe where a *sewer* is subject to backflow, and that prevents drainage or waste from backing up into a lower level or fixtures and causing a flooding condition.

**[MP] BALANCED VENTILATION.** Any combination of concurrently operating mechanical exhaust and mechanical supply whereby the total mechanical exhaust airflow rate is within 10 percent of the total mechanical supply airflow rate.

**[MP] BALANCED VENTILATION SYSTEM.** A ventilation system where the total supply airflow and total exhaust airflow are simultaneously within 10 percent of their averages. The balanced ventilation system airflow is the average of the supply and exhaust airflows.

**BALCONY, EXTERIOR.** An exterior floor projecting from and supported by a structure without additional independent supports.

**[RG] BAROMETRIC DRAFT REGULATOR.** A balanced *damper* device attached to a *chimney*, *vent connector*, breeching or flue gas manifold to protect combustion *appliances* by controlling *chimney draft*. A double-acting *barometric draft regulator* is one whose balancing *damper* is free to move in either direction to protect combustion *appliances* from both excessive *draft* and backdraft.

**BASE FLOOD ELEVATION (BFE)** The elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.

**[RB] BASEMENT.** ~~That portion of a building that is partly or completely below grade~~ A story that is not a story above grade plane (see "Story above grade plane").

**[RB] BASEMENT WALL.** The opaque portion of a wall that encloses one side of a *basement* and has an average below *grade* wall area that is 50 percent or more of the total opaque and nonopaque area of that enclosing side. For energy purposes, a wall 50 percent or more below *grade* and enclosing conditioned space. For the definition applicable in Chapter 11, see Section N1101.6.



**[RB] BASIC WIND SPEED.** Three-second gust speed at 33 feet (10 058 mm) above the ground in Exposure C (see Section R301.2.1) as given in Table R301.2(4) and R301.2(5).

**[RM] BATHROOM.** A room containing a bathtub, shower, spa or similar bathing fixture (see also “Toilet room.”).

**[MP] BATHROOM GROUP.** A group of fixtures, including or excluding a bidet, consisting of a water closet, lavatory, and bathtub or shower. Such fixtures are located together on the same floor level.

**[RP] BATTERY OF FIXTURES.** Any group of two or more similar adjacent fixtures that discharge into a common horizontal waste or soil branch.

**BED AND BREAKFAST HOME.** A detached single-family *dwelling* occupied by the *dwelling* owner and containing eight or fewer guest rooms for rent for a period of less than one week.

**BEDROOM.** *Sleeping room.*

**[MP] BEND.** A drainage fitting, designed to provide a change in direction of a drain pipe of less than the angle specified by the amount necessary to establish the desired slope of the line (see “Elbow” and “Sweep”).

**BOAT SLIP.** A berthing place for one or two watercraft where the watercraft can be securely moored to cleats, piling, or other devices while the boats are in the water. Boat slips are commonly configured as “side-ties” or as single- or double-

loaded “U” shaped berths.

**[MP] BOILER.** A self-contained *appliance* from which hot water is circulated for heating purposes and then returned to the boiler, and that operates at water pressures not exceeding 160 pounds per square inch gage (psig) (1102 kPa gauge) and at water temperatures not exceeding 250°F (121°C).

**[RG] BOILER, LOW-PRESSURE.** A self-contained *appliance* for supplying steam or hot water.

**Hot water heating boiler.** A boiler in which no steam is generated, from which hot water is circulated for heating purposes and then returned to the boiler, and that operates at water pressures not exceeding 160 pounds per square inch gauge (psig) (1100 kPa gauge) and at water temperatures not exceeding 250°F (121°C) at or near the boiler outlet.

**Hot water supply boiler.** A boiler, completely filled with water, which furnishes hot water to be used externally to itself, and that operates at water pressures not exceeding 160 psig (1100 kPa gauge) and at water temperatures not exceeding 250°F (121°C) at or near the boiler outlet.

**Steam heating boiler.** A boiler in which steam is generated and that operates at a steam pressure not exceeding 15 psig (100 kPa gauge).

**[RB] BOND BEAM.** A horizontal grouted element within masonry in which reinforcement is embedded.

**[RG] BONDING JUMPER.** A conductor installed to electrically connect metallic gas *piping* to the grounding electrode system.

~~**[RE] BPI ENVELOPE PROFESSIONAL.** An individual that has passed the Building Performance Institute written and field examination requirements for the Building Envelope certification and has a current certification.~~

**[RB] BRACED WALL LINE.** A straight line through the building plan that represents the location of the lateral resistance provided by the wall bracing.

**[RB] BRACED WALL LINE, CONTINUOUSLY SHEATHED.** A *braced wall line* with structural sheathing applied to all sheathable surfaces including the areas above and below openings.

**[RB] BRACED WALL PANEL.** A full-height section of wall constructed to resist in-plane shear loads through interaction of framing members, sheathing material and anchors. The panel’s length meets the requirements of its particular bracing method, and contributes toward the total amount of bracing required along its *braced wall line* in accordance with Section R602.10.1.

**[MP] BRANCH.** Any part of the piping system other than a riser, main or stack.

**[MP] BRANCH, FIXTURE.** See “*Fixture branch, drainage.*”

**[MP] BRANCH, HORIZONTAL.** See “*Horizontal branch, drainage.*”

**[MP] BRANCH INTERVAL.** A distance along a soil or waste stack corresponding, in general, to a story height, but not less than 8 feet (2438 mm) within which the horizontal branches from one floor or story of a structure are connected to the stack. Measurements are taken down the stack from the highest horizontal branch connection.

**[MP] BRANCH, MAIN.** A water-distribution pipe that extends horizontally off a main or riser to convey water to branches or fixture groups.

**[MP] BRANCH, VENT.** A vent connecting two or more individual vents with a vent stack or stack vent.

**[RM] BRAZED JOINT.** A gas-tight joint obtained by the joining of metal parts with metallic mixtures or alloys that melt at a temperature above 1,000°F (538°C), but lower than the melting temperature of the parts to be joined.

**[RG] BRAZING.** A metal-joining process wherein coalescence is produced by the use of a nonferrous filler metal having a melting point above 1,000°F (538°C), but lower than that of the base metal being joined. The filler material is distributed between the closely fitted surfaces of the joint by capillary action.

**BREAKAWAY WALL** A wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system. Any walls below the lowest floor in a building in a V Zone should give way under wind and water loads without causing collapse, displacement, or other damage to the elevated portion of the building or the supporting pilings or columns.

**[RG] BROILER.** A general term including salamanders, barbecues and other appliances cooking primarily by radiated heat, excepting toasters.

**[RG] BTU.** Abbreviation for British thermal unit, which is the quantity of heat required to raise the temperature of 1 pound (454 g) of water 1°F (0.56°C) (1 *Btu* = 1055 J).

**[MP] BTU/H.** The *listed* maximum capacity of an *appliance*, absorption unit or burner expressed in British thermal units input per hour.

**[RB] BUILDING.** ~~Building shall mean any one- and/or two family dwelling or townhouse, or portion thereof, including townhouses, that is used, or designed or intended to be used for human habitation, for living, sleeping, cooking or eating purposes, or any combination thereof, and shall include accessory structures thereto or any accessory building.~~ For the definition applicable in Chapter 11, see Section N1101.6.

**[MP] BUILDING DRAIN.** The lowest piping that collects the discharge from all other drainage piping inside the house and extends to 10 feet (3048 mm) beyond the exterior walls of the building and conveys the drainage to the *building sewer*.

**Exception:** Drain lines connecting to septic tanks within 25 feet (7620 mm) of the building foundation wall for one- and two-family dwellings with 4 water closets or less shall be considered to be building drain with a minimum size of 3 inches (76.2 mm).

**[RB] BUILDING, EXISTING.** Existing building is a building erected prior to the adoption of this code, or one for which a legal building *permit* has been issued.

**[RB] BUILDING-INTEGRATED PHOTOVOLTAIC ROOF PANEL (BIPV Roof Panel).** A *photovoltaic panel* that functions as a component of the building envelope.

**[RB] BUILDING OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. For the definition applicable in Chapter 11, see Section N1101.6.

**[MP] BUILDING SEWER.** That part of the drainage system that extends from the end of the *building drain* and conveys its discharge to a public sewer, private sewer, individual sewage-disposal system or other point of disposal.

**Sanitary.** A *building sewer* that conveys sewage only.

**Storm.** A *building sewer* that conveys storm water or other drainage, but not sewage.

**[RE] BUILDING SITE.** A contiguous area of land that is under the ownership or control of one entity. For the definition applicable in Chapter 11, see Section N1101.6.

**[RP] BUILDING SUBDRAIN.** That portion of a drainage system that does not drain by gravity into the *building sewer*.

**[RE] BUILDING THERMAL ENVELOPE.** The basement walls, exterior walls, floor, roof and any other building element that enclose conditioned spaces. This boundary also includes the boundary between conditioned space and any exempt or unconditioned space. For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] BUILDING-INTEGRATED PHOTOVOLTAIC PRODUCT.** A building product that incorporates *photovoltaic modules* and functions as a component of the building envelope.

**[RB] BUILDING-INTEGRATED PHOTOVOLTAIC ROOF PANEL (BIPV Roof Panel).** A *photovoltaic panel* that functions as a component of the building envelope.

**[RB] BUILT-UP ROOF COVERING.** Two or more layers of felt cemented together and surfaced with a cap sheet, mineral aggregate, smooth coating or similar surfacing material.

**[RG] BURNER.** A device for the final conveyance of the gas, or a mixture of gas and air, to the combustion zone.

**Induced-draft.** A *burner* that depends on *draft* induced by a fan that is an integral part of the *appliance* and is located downstream from the *burner*.

**Power.** A *burner* in which gas, air or both are supplied at pressures exceeding, for gas, the line pressure, and for air, atmospheric pressure, with this added pressure being applied at the *burner*.

**[RB] CAP PLATE.** The top plate of the double top plates used in *structural insulated panel* (SIP) construction. The cap plate is cut to match the *panel thickness* such that it overlaps the wood structural panel facing on both sides.

**[RB] CARBON MONOXIDE ALARM.** A single- or multiple-station alarm intended to detect carbon monoxide gas and alert occupants by a distinct audible signal. It incorporates a sensor, control components and an alarm notification appliance in a single unit.

**[RB] CARBON MONOXIDE DETECTOR.** A device with an integral sensor to detect carbon monoxide gas and transmit an alarm signal to a connected alarm control unit.

**[RB] CEILING HEIGHT.** The clear vertical distance from the finished floor to the finished ceiling.

**[RB] CEMENT PLASTER.** A mixture of Portland or blended cement, Portland cement or blended cement and hydrated lime, masonry cement or plastic cement and aggregate and other *approved* materials as specified in this code.

**[RE] C FACTOR (THERMAL CONDUCTANCE).** ~~The coefficient of heat transmission (surface to surface) through a building component or assembly, equal to the time rate of heat flow per unit area and the unit temperature difference between the warm side and cold side surfaces (Btu/h-ft<sup>2</sup>-°F)[W/(m<sup>2</sup>-K)].~~

**[RE] CFM25.** Cubic feet per minute of measured air flow while the building is maintained at a pressure difference of 25 pascals (0.1 inches w.p.).

**[RE] CFM50.** Cubic feet per minute of measured air flow while the building is maintained at a pressure difference of 50 pascals (0.2 inches w.p.).

**[RB] CHANGE OF OCCUPANCY.** A change in the use of a building or portion of a building that involves a change in the application of the requirements of this code.

**[RG] CHIMNEY.** A primary vertical structure containing one or more flues, for the purpose of carrying gaseous products of combustion and air from a fuel-burning *appliance* to the outside atmosphere.

**Factory-built chimney.** A *listed* and *labeled* chimney composed of factory-made components, assembled in the field in accordance with manufacturer's instructions and the conditions of the listing.

**Masonry chimney.** A field-constructed chimney composed of solid masonry units, bricks, stones or concrete.

**[MP] CHIMNEY CONNECTOR.** A pipe that connects a fuel-burning *appliance* to a chimney.

**[MP] CHIMNEY TYPES.**

**Residential-type appliance.** An *approved* chimney for removing the products of combustion from fuel-burning, residential-type *appliances* producing combustion gases not in excess of 1,000°F (538°C) under normal operating conditions, and capable of producing combustion gases of 1,400°F (760°C) during intermittent forces firing for periods up to 1 hour. All temperatures shall be measured at the *appliance* flue outlet. Residential-type *appliance* chimneys include masonry and factory-built types.

**[MP] CIRCUIT VENT.** A vent that connects to a *horizontal* drainage branch and vents two traps to not more than eight traps or trapped fixtures connected into a battery.

**[MP] CIRCULATING HOT WATER SYSTEM.** A specifically designed water distribution system where one or more pumps are operated in the service hot water piping to circulate heated water from the water-heating equipment to fixtures and back to the water-heating equipment. For the definition applicable in Chapter 11, see Section N1101.6.

**[RP] CISTERN.** A small covered tank for storing water for a home or farm. Generally, this tank stores rainwater to be utilized for purposes other than in the potable water supply, and such tank is placed underground in most cases.

**[RB] CLADDING.** The exterior materials that cover the surface of the building envelope that is directly loaded by the wind.

**CLEANOUT.** An ~~accessible~~ access opening in the drainage system ~~used~~ utilized for the removal of ~~possible~~ obstruction. Types of cleanouts include a removable plug or cap, and a removable fixture or fixture trap.

**[RG] CLEARANCE.** The minimum distance through air measured between the heat-producing surface of the mechanical *appliance*, device or *equipment* and the surface of the *combustible material* or assembly.

**[RE] CLIMATE ZONE.** A geographical region based on climatic criteria as specified in this code. For the definition applicable in Chapter 11, see Section N1101.6.

**CLOSED CRAWLSPACE.** A foundation without wall vents that uses air sealed walls, ground and foundation moisture control, and mechanical drying potential to control crawl space moisture. Insulation may be located at the floor level or at the exterior walls.

**[RB] CLOSET.** A small room or chamber used for storage.

**[RG] CLOTHES DRYER.** An *appliance* used to dry wet laundry by means of heated air.

**Type 1.** Factory-built package, multiple production. Primarily used in the family living environment. Usually the smallest unit physically and in function output.

**COASTAL HIGH HAZARD AREA.** An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The coastal high hazard area is identified as either V Zone or Coastal A Zone on Flood Insurance Rate Maps (FIRMs).

**[RG] CODE.** These regulations, subsequent amendments thereto, or any emergency rule or regulation that the administrative authority having *jurisdiction* has lawfully adopted.

**CODE OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.

**[RB] COLLAPSIBLE SOILS.** Soils that exhibit volumetric reduction in response to partial or full wetting under load.

**[MP] COLLECTION PIPE.** Unpressurized pipe used within the collection system that drains on-site nonpotable water or rainwater to a storage tank by gravity.

**[RP] COMBINATION FIXTURE.** A fixture combining one sink and laundry tray or a two- or three-compartment sink or laundry tray in one unit.

**[MP] COMBINATION WASTE AND VENT SYSTEM.** A specially designed system of waste piping embodying the horizontal wet venting of one or more sinks, lavatories or floor drains by means of a common waste and vent pipe adequately sized to provide free movement of air above the flow line of the drain.

**[RG] COMBUSTIBLE ASSEMBLY.** Wall, floor, ceiling or other assembly constructed of one or more component materials that are not defined as noncombustible.

**[RB] COMBUSTIBLE MATERIAL.** Any material not defined as noncombustible.

**[RG] COMBUSTION.** In the context of this code, refers to the rapid oxidation of fuel accompanied by the production of heat or heat and light.

**COMBUSTION AIR.** Air necessary for complete combustion of a fuel, including theoretical air and excess air. The air provided to fuel-burning equipment including air for fuel combustion, draft hood dilution and ventilation of the equipment enclosure.

**[RG] COMBUSTION CHAMBER.** The portion of an *appliance* within which combustion occurs.

**[RG] COMBUSTION PRODUCTS.** Constituents resulting from the combustion of a fuel with the oxygen of the air, including the inert gases, but excluding excess air.

**[MP] COMMON VENT.** A vent connecting at the junction of two *fixture drains* or to a fixture *branch* and serving as a vent for both fixtures.

**[RB] COMPRESSIBLE SOILS.** Soils that exhibit volumetric reduction in response to the application of load even in the absence of wetting or drying.

**[RP] CONCEALED FOULING SURFACE.** ~~Any surface of a plumbing fixture that is not readily visible and is not scoured or cleansed with each fixture operation.~~

**[RG] CONCEALED LOCATION.** A location that cannot be accessed without damaging permanent parts of the building structure or finish surface. Spaces above, below or behind readily removable panels or doors shall not be considered as concealed.

**[RG] CONCEALED PIPING.** *Piping* that is located in a *concealed location* (see “*Concealed location*”).

**[MP] CONDENSATE.** The liquid that separates from a gas due to a reduction in temperature; for example, water that condenses from flue gases and water that condenses from air circulating through the cooling coil in air conditioning equipment.

**[MP] CONDENSING APPLIANCE.** An *appliance* that condenses water generated by the burning of fuels.

**[RB] CONDITIONED AIR.** Air treated to control its temperature, relative humidity or quality.

**[RE] CONDITIONED FLOOR AREA.** The horizontal projection of the floors associated with *conditioned space*. For the definition applicable in Chapter 11, see Section N1101.6.

**CONDITIONED CRAWL SPACE.** A conditioned crawl space is a foundation without wall vents that encloses an intentionally heated or cooled space. Insulation is located at the exterior walls.

**[RE] CONDITIONED SPACE.** A space within a building that is provided with heating or cooling equipment or systems capable of maintaining, through design or heat loss/gain, 50°F (10°C) during the heating season or 85°F (29°C) during the cooling season, or communicates directly with a conditioned space. Spaces within the building thermal envelope are considered conditioned space. For the definition applicable in Chapter 11, see Section N1101.6.

**[RG] CONNECTOR, APPLIANCE (Fuel).** Rigid metallic *pipe* and fittings, semirigid metallic *tubing* and fittings or a *listed* and *labeled* device that connects an *appliance* to the *gas piping system*.

**[RG] CONNECTOR, CHIMNEY OR VENT.** The *pipe* that connects an *appliance* to a chimney or vent.

**[RB] CONSTRUCTION DOCUMENTS.** Written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a building *permit*. Construction drawings shall be drawn to an appropriate scale.

**CONTAMINATION.** ~~An~~ A hazard impairment of the quality of the potable water that creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids or waste.

**[RE] CONTINUOUS AIR BARRIER.** For the definition applicable in Chapter 11, see Section N1101.6.

**[RE] CONTINUOUS INSULATION (ci).** Insulating material that is continuous across all structural members without thermal bridges other than fasteners and service openings. It is installed on the interior or exterior or is integral to any opaque surface of the building envelope. For the definition applicable in Chapter 11, see Section N1101.6.

**[MP] CONTINUOUS WASTE.** A drain from two or more similar adjacent fixtures connected to a single trap.

**[RG] CONTROL.** A manual or automatic device designed to regulate the gas, air, water or electrical supply to, or operation of, a mechanical system.

**[MP] CONTROL, LIMIT.** An automatic control responsive to changes in liquid flow or level, pressure, or temperature for limiting the operation of an *appliance*.

**[MP] CONTROL, PRIMARY SAFETY.** A safety control responsive directly to flame properties that senses the presence or absence of flame and, in event of ignition failure or unintentional flame extinguishment, automatically causes shutdown of mechanical equipment.

**[MP] CONVECTOR.** A system incorporating a heating element in an enclosure in which air enters an opening below the heating element, is heated and leaves the enclosure through an opening located above the heating element.

**[RG] CONVERSION BURNER.** A unit consisting of a *burner* and its *controls* for installation in an *appliance* originally utilizing another fuel.

**[RG] COPPER ALLOY.** A homogeneous mixture of not less than two metals where not less than 50 percent of the finished metal is copper.

**[RB] CORE.** The lightweight middle section of a *structural insulated panel*, composed of foam plastic insulation, that provides the link between the two facing shells.

**[RB] CORROSION RESISTANCE.** The ability of a material to withstand deterioration of its surface or its properties where exposed to its environment.

**CORROSION RESISTANCE AREA.** Areas within hurricane prone regions defined as that area east of the Intracoastal Waterway from the NC/SC state line north to Beaufort Inlet and from that point to include the barrier islands to the NC/VA state line.

**[RB] COURT.** A space, open and unobstructed to the sky, located at or above *grade* level on a *lot* and bounded on three or more sides by walls or a building.

**[RB] CRAWL SPACE.** An underfloor space that is not a *basement*.

**[RE] CRAWL SPACE WALL.** The opaque portion of a wall that encloses a crawl space and is partially or totally below grade. For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] CRIPPLE WALL.** A framed wall extending from the top of the foundation to the underside of the floor framing of the first *story above grade plane*.

**[RB] CRIPPLE WALL CLEAR HEIGHT.** The vertical height of a *cripple wall* from the top of the foundation to the underside of floor framing above.

**[RP] CRITICAL LEVEL (C-L).** An elevation (height) reference point that determines the minimum height at which a backflow preventer or vacuum breaker is installed above the *flood level rim* of the fixture or receptor served by the device. The critical level is the elevation level below which there is a potential for backflow to occur. If the critical level marking is not indicated on the device, the bottom of the device shall constitute the critical level.

**[MP] CROSS CONNECTION.** ~~Any connection between two otherwise separate piping systems that allows a flow from one system to the other.~~ Any physical connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other either water of unknown or questionable safety or steam, gas or chemical, whereby there exists the possibility for flow from one system to the other, with the direction of flow depending on the pressure differential between the two systems (see “Backflow”).

**[RB] CROSS-LAMINATED TIMBER.** A prefabricated engineered wood product consisting of not less than three layers of solid-sawn lumber or *structural composite lumber* where the adjacent layers are cross-oriented and bonded with structural adhesive to form a solid wood element.

**[RG] CUBIC FOOT.** The amount of gas that occupies 1 cubic foot (0.02832 m<sup>3</sup>) when at a temperature of 60°F (16°C), saturated with water vapor and under a pressure equivalent to that of 30 inches of mercury (101 kPa).

**[RE] CURTAIN WALL.** For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] DALLE GLASS.** A decorative composite glazing material made of individual pieces of glass that are embedded in a cast matrix of concrete or epoxy.

**[RG] DAMPER.** A manually or automatically controlled device to regulate *draft* or the rate of flow of air or combustion gases.

**[MP] DAMPER, VOLUME.** A device that will restrict, retard or direct the flow of air in any duct, or the products of combustion of heat-producing equipment, vent connector, vent or chimney.

**DAMPPROOFING.** A coating or the application of coatings applied to retard the penetration of water vapor and moisture through or into walls or into interior spaces.

**DEAD END.** A *branch* leading from a soil, waste or vent pipe; a *building drain*; or a *building sewer*, and terminating at a *developed length* of 2 feet (610 mm) or more by means of a plug, cap or other closed fitting.

**[RB] DEAD LOADS.** The weight of the materials of construction incorporated into the building, including but not limited to walls, floors, roofs, ceilings, *stairways*, built-in partitions, finishes, cladding, and other similarly incorporated architectural and structural items, and fixed service equipment.

**DECK.** An exterior floor system supported on at least two opposing sides by an adjoining structure or posts, piers, or other independent supports.

**[RG] DECORATIVE APPLIANCE, VENTED.** A *vented appliance* wherein the primary function lies in the aesthetic effect of the flames.

**[RG] DECORATIVE APPLIANCES FOR INSTALLATION IN VENTED FIREPLACES.** A *vented appliance* designed for installation within the fire chamber of a *vented fireplace*, wherein the primary function lies in the aesthetic effect of the flames.

**[RB] DECORATIVE GLASS.** A carved, leaded or Dalle glass or glazing material with a purpose that is decorative or artistic, not functional; with coloring, texture or other design qualities or components that cannot be removed without destroying the glazing material; and with a surface, or assembly into which it is incorporated, that is divided into segments.

**[RG] DEMAND.** The maximum amount of gas input required per unit of time, usually expressed in cubic feet per hour, or *Btu/h* (1 *Btu/h* = 0.2931 W).

**[RE] DEMAND RECIRCULATION WATER SYSTEM.** A water distribution system where pump(s) prime the service hot water piping with heated water upon a demand for hot water. For the definition applicable in Chapter 11, see Section N1101.6.

**[RG] DESIGN FLOOD ELEVATION.** The elevation of the “design flood,” including wave height, relative to the datum specified on the community’s legally designated flood hazard map. In areas designated as Zone AO, the *design flood elevation* shall be the elevation of the highest existing grade of the *building’s* perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where a depth number is not specified on the map, the depth number shall be taken as being equal to 2 feet (610 mm).

**[MP] DESIGN PROFESSIONAL.** See “*Registered design professional*.”

**[RM] DESIGN WORKING PRESSURE.** The maximum allowable working pressure for which a specific part of a system is designed.

**[MP] DEVELOPED LENGTH.** The length of a pipeline measured along the center line of the pipe and fittings.

**[MP] DIAMETER.** Unless specifically stated, the term “diameter” is the nominal diameter as designated by the *approved* material standard.

**[RB] DIAPHRAGM.** A horizontal or nearly horizontal system acting to transmit lateral forces to the vertical resisting elements. Where the term “*diaphragm*” is used, it includes horizontal bracing systems.

**[MP] DILUTION AIR.** Air that enters a draft hood or draft regulator and mixes with flue gases.

**[MP] DIRECT SYSTEM.** A solar thermal system in which the gas or liquid in the solar collector loop is not separated from the load.

**[MP] DIRECT-VENT APPLIANCE.** A fuel-burning *appliance* with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

**[RP] DISCHARGE PIPE.** A pipe that conveys the discharge from plumbing fixtures or appliances.

**[RM] DISCRETE PRODUCT.** Products that are noncontinuous, individual, distinct pieces such as, but not limited to, electrical, plumbing and mechanical products and duct straps, duct fittings, duct registers and pipe hangers.

**DOCK.** A structure extending alongshore or out from the shore into a body of water, usually accommodating multiple boat slips, to which boats may be moored in order to load or unload people or cargo.

**[MP] DRAFT.** The pressure difference existing between the *appliance* or any component part and the atmosphere, that causes a continuous flow of air and products of combustion through the gas passages of the *appliance* to the atmosphere.

**Induced draft.** The pressure difference created by the action of a fan, blower or ejector, that is located between the *appliance* and the chimney or vent termination.

**Natural draft.** The pressure difference created by a vent or chimney because of its height, and the temperature difference between the flue gases and the atmosphere.

**[MP] DRAFT HOOD.** A device built into an *appliance*, or a part of the vent connector from an *appliance*, that is designed to provide for the ready escape of the flue gases from the *appliance* in the event of no draft, backdraft or stoppage beyond the draft hood; prevent a backdraft from entering the *appliance*; and neutralize the effect of stack action of the chimney or gas vent on the operation of the *appliance*.

**[MP] DRAFT REGULATOR.** A device that functions to maintain a desired draft in the *appliance* by automatically reducing the draft to the desired value.

**[RB] DRAFT STOP.** A material, device or construction installed to restrict the movement of air within open spaces of concealed areas of building components such as crawl spaces, floor-ceiling assemblies, roof-ceiling assemblies and *attics*.

**[MP] DRAIN.** Any pipe that carries soil and waterborne wastes in a building drainage system.

**[MP] DRAINAGE FITTING.** The type of fitting or fittings utilized in the drainage system. Drainage fittings are similar to cast-iron fittings, except that instead of having a bell and spigot, drainage fittings are recessed and tapped to eliminate ridges on the inside of the installed pipe.

**[RP] DRAINAGE SYSTEM.** Piping within a *public* or *private* premise that conveys sewage, rainwater or other liquid waste to a point of disposal. A drainage system does not include the mains of a *public sewer* system or a private or public sewage treatment or disposal plant.

**Building gravity.** A drainage system that drains by gravity into the *building sewer*.

**Sanitary.** A drainage system that carries sewage and excludes storm, surface and ground water.

**Storm.** A drainage system that carries rainwater, surface water, subsurface water and similar liquid waste.

**[MP] DRAIN-BACK SYSTEM.** A solar thermal system in which the fluid in the solar collector loop is drained from the collector into a holding tank under prescribed circumstances.

**[RG] DRIP.** The container placed at a low point in a system of *piping* to collect *condensate* and from which the *condensate* is removable.

**[RE] DUCT.** A tube or conduit utilized for conveying air. The air passages of self-contained systems are not to be construed as air ducts. For the definition applicable in Chapter 11, see Section N1101.6.

**[RG] DUCT FURNACE.** A warm-air *furnace* normally installed in an air distribution duct to supply warm air for heating. This definition shall apply only to a warm-air heating *appliance* that depends for air circulation on a blower not furnished as part of the *furnace*.

**DUCT SYSTEM.** A continuous passageway for the transmission of air that, in addition to ducts, includes duct fittings, dampers, plenums, fans and accessory air-handling *equipment* and *appliances*. For the definition applicable in Chapter 11, see Section N1101.6.

**[RM] DUCTLESS MINI-SPLIT SYSTEM.** A heating and cooling system that is comprised of one or multiple indoor evaporator/air-handling units and an outdoor condensing unit that is connected by refrigerant piping and electrical wiring. A ductless mini-split system is capable of cooling or heating one or more rooms without the use of a traditional ductwork system.

**DURHAM FITTING.** A special type of drainage fitting for use in the durham systems installations in which the joints are made with recessed and tapered threaded fittings, as opposed to bell and spigot lead/oakum or solvent/cemented or soldered joints. The tapping is at an angle (not 90 degrees) to provide for proper slope in otherwise rigid connections.

**DURHAM SYSTEM.** A term used to describe soil or waste systems where all piping is of threaded pipe, tube or other such rigid construction using recessed drainage fittings to correspond to the types of piping.



**[RB] DWELLING.** Any building that contains one or two *dwelling units (duplex) on the same parcel of land*, used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

**[RB] DWELLING UNIT.** A single unit providing complete independent living facilities for ~~one or more persons~~, a single family, including permanent provisions for living, sleeping, eating, cooking and sanitation.

**[MP] DWV.** Abbreviated term for drain, waste and vent piping as used in common plumbing practice.

**[RP] EFFECTIVE OPENING.** The minimum cross-sectional area at the point of water-supply discharge, measured or expressed in terms of diameter of a circle and if the opening is not circular, the diameter of a circle of equivalent cross-sectional area. (This is ~~used in the determination of the~~ applicable to air gap.)

**EGRESS ROOF ACCESS WINDOW.** A skylight or roof window designed and installed to satisfy the emergency escape and rescue opening requirements in Section R310.2.

**[MP] ELBOW.** A pressure pipe fitting designed to provide an exact change in direction of a pipe run. An elbow provides a sharp turn in the flow path (see “Bend” and “Sweep”).

**[RM] ELECTRIC HEATING APPLIANCE.** An *appliance* that produces heat energy to create a warm environment by the application of electric power to resistance elements, refrigerant compressors or dissimilar material junctions.

**[RB] EMERGENCY ESCAPE AND RESCUE OPENING.** An operable exterior window, door or other similar device that provides for a means of escape and access for rescue in the event of an emergency. (See also “Grade floor emergency escape and rescue opening.”)

**[RE] ENERGY ANALYSIS.** A method for estimating the annual energy use of the proposed design and standard reference design based on estimates of energy use. For the definition applicable in Chapter 11, see Section N1101.6.

**[RE] ENERGY COST.** The total estimated annual cost for purchased energy for the building functions regulated by this code, including applicable demand charges. For the definition applicable in Chapter 11, see Section N1101.6.

**[RM] ENERGY RECOVERY VENTILATION SYSTEM.** Systems that employ air-to-air heat exchangers to recover energy from or reject energy to *exhaust air* for the purpose of preheating, pre-cooling, humidifying or dehumidifying outdoor *ventilation air* prior to supplying such air to a space, either directly or as part of an HVAC system.

**[RE] ENERGY SIMULATION TOOL.** An approved software program or calculation-based methodology that projects the annual energy use of a building. For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] ENERGY STORAGE SYSTEMS (ESS).** One device or multiple devices, assembled together, capable of storing electrical energy to be supplied at a future time.

**[RB] ENGINEERED WOOD RIM BOARD.** A full-depth *structural composite lumber*, wood structural panel, structural glued laminated timber or prefabricated wood I-joint member designed to transfer horizontal (shear) and vertical (compression) loads, provide attachment for *diaphragm* sheathing, siding and exterior deck ledgers and provide lateral support at the ends of floor or roof joists or rafters.

**[RM] ENVIRONMENTAL AIR.** Air that is conveyed to or from occupied areas through ducts ~~which that~~ are not part of the heating or air-conditioning system, such as ventilation for human usage, domestic kitchen range exhaust, bathroom exhaust, domestic clothes dryer exhaust.

**[MP] EQUIPMENT.** Piping, ducts, vents, control devices and other components of systems other than *appliances* that are permanently installed and integrated to provide control of environmental conditions for buildings. This definition shall also include other systems specifically regulated in this code.

**[RM]EQUIPMENT, EXISTING.** Any *equipment* regulated by this code which was legally installed prior to the effective date of this code, or for which a permit to install has been issued.

**[MP] EQUIVALENT LENGTH.** For determining friction losses in a piping system, the effect of a particular fitting equal to the friction loss through a straight piping length of the same nominal diameter.

**[RE] ERI REFERENCE DESIGN.** A version of the rated design that meets the minimum requirements of the 2006 International Energy Conservation Code. For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] ESCARPMENT.** With respect to topographic wind effects, a cliff or steep slope generally separating two levels or gently sloping areas.

**[MP] ESSENTIALLY NONTOXIC TRANSFER FLUIDS.** Fluids having a Gosselin rating of 1, including propylene glycol; mineral oil; polydimethyl ether; hydrochlorofluorocarbon, chlorofluorocarbon and hydrofluorocarbon refrigerants; and FDA-approved boiler water additives for steam boilers.

**[MP] ESSENTIALLY TOXIC TRANSFER FLUIDS.** Soil, water or graywater and fluids having a Gosselin rating of 2 or more including ethylene glycol, hydrocarbon oils, ammonia refrigerants and hydrazine.

**[MP] EVAPORATIVE COOLER.** A device used for reducing air temperature by the process of evaporating water into an airstream.

**[MP] EXCESS AIR.** Air that passes through the combustion chamber and the *appliance* flue in excess of what is theoretically required for complete combustion.

**[RG] EXCESS FLOW VALVE (EFV).** A valve designed to activate when the fuel gas passing through it exceeds a prescribed flow rate.

**[RM] EXFILTRATION.** Uncontrolled outward air leakage from conditioned spaces through unintentional openings in ceilings, floors and walls to unconditioned spaces or the outdoors caused by pressure differences across these openings resulting from wind, the stack effect created by temperature differences between indoors and outdoors, and imbalances between supply and exhaust airflow rates.

**[MP] EXHAUST HOOD, FULL OPENING.** An exhaust hood with an opening not less than the diameter of the connecting vent.

**[RM] EXHAUST SYSTEM.** An assembly of connected ducts, *plenums*, fittings, registers, grilles and hoods through which air is conducted from the space or spaces and exhausted to the outdoor atmosphere.

**[MP] EXISTING INSTALLATIONS.** Any plumbing system regulated by this code that was legally installed prior to the effective date of this code, or for which a *permit* to install has been issued.

**[RB] EXPANSIVE SOILS.** Soils that exhibit volumetric increase or decrease (swelling or shrinking) in response to partial or full wetting or drying under load.

**[RB] EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS).** EIFS are nonstructural, nonload-bearing exterior wall cladding systems that consist of an insulation board attached either adhesively or mechanically, or both, to the substrate; an integrally reinforced base coat; and a textured protective finish coat.

**[RB] EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) WITH DRAINAGE.** An EIFS that incorporates a means of drainage applied over a *water-resistive barrier*.

**[RG] EXTERIOR MASONRY CHIMNEYS.** Masonry chimneys exposed to the outdoors on one or more sides below the roof line.

**[RB] EXTERIOR WALL.** An above-grade wall that defines the exterior boundaries of a building. Includes between-floor spandrels, peripheral edges of floors, roof and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof and basement walls with an average below-grade wall area that is less than 50 percent of the total opaque and nonopaque area of that enclosing side. For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] EXTERIOR WALL COVERING.** A material or assembly of materials applied on the exterior side of exterior walls for the purpose of providing a weather-resistive barrier, insulation or for aesthetics, including but not limited to, veneers, siding, exterior insulation and finish systems, architectural *trim* and embellishments such as cornices, soffits, and fascias.

**[RB] FACING.** The wood structural panel facings that form the two outmost rigid layers of the *structural insulated panel*.

**[MP] FACTORY-BUILT CHIMNEY.** A *listed* and *labeled* chimney composed of factory-made components assembled in the field in accordance with the manufacturer's instructions and the conditions of the *listing*.

**[MP] FACTORY-MADE AIR DUCT.** A *listed* and *labeled* duct manufactured in a factory and assembled in the field in accordance with the manufacturer's instructions and conditions of the *listing*.

**FAMILY.** Family is an individual, two or more persons related by blood, marriage or law, or a group of not more than any ~~five~~ eight persons living together in a dwelling unit. Servants having common housekeeping facilities with a family consisting of an individual, or more persons related by blood, marriage or law, are a part of the family for this code.

**FARM BUILDING.** Any building not used for sleeping purposes that is not accessed by the general public and is used primarily for a farm purpose. Farm purposes includes structures or buildings for equipment, storage and processing of agricultural products or commodities such as: crops, fruits, vegetables, ornamental or flowering plants, dairy, timber, livestock, poultry and all other such forms of agricultural products by the specific farm on which the structure or building is located. Farm purposes do not include structures or buildings for uses such as education facilities, research facilities, or aircraft hangers. Limited use of farm buildings for public and private events is permitted by law per N.C.G.S. 143-138 (b4)(1a) and 160D-903(a).

**[RP] FAUCET.** A valve end of a water pipe through which water is drawn from or held within the pipe.

**[RE] FENESTRATION.** Skylights, roof windows, vertical windows (whether fixed or moveable); opaque doors; glazed doors; glass block; and combination opaque and glazed doors. Products classified as either vertical fenestration or skylights and sloped glazing, installed in such a manner as to preserve the weather-resistant barrier of the wall or roof in which they are installed. Fenestration includes products with glass or other transparent or translucent materials. For the definition applicable in Chapter 11, see Section N1101.6.

**[RE] FENESTRATION PRODUCT, FIELD-FABRICATED.** A fenestration product whose frame is made at the construction site of standard dimensional lumber or other materials that were not previously cut, or otherwise formed with the specific intention of being used to fabricate a fenestration product or exterior door. Field fabricated does not include site built fenestration.

**[RE] FENESTRATION PRODUCT, SITE-BUILT.** A fenestration designed to be made up of field-glazed or field assembled units using specific factory cut or otherwise factory- formed framing and glazing units. For the definition applicable in Chapter 11, see Section N1101.6.

**[RE] FENESTRATION, VERTICAL.** Windows (~~fixed or moveable~~) that are fixed or movable, opaque doors, glazed doors, glazed block and combination ~~opaque/glazed~~ opaque and glazed doors composed of glass or other transparent or translucent glazing materials and installed at a slope of a least 60 degrees (1.05 rad) from horizontal. installed in a wall at less than 15 degrees (0.26 rad) from vertical. For the definition applicable in Chapter 11, see Section N1101.6.

**[RE] FENESTRATION PRODUCT, SITE-BUILT.** For the definition applicable in Chapter 11, see Section N1101.6.

**[RE] F FACTOR.** The perimeter heat loss factor for slab-on-grade floors (Btu/h-ft<sup>2</sup>-°F) [W/(m-K)].

**FIBER-CEMENT SIDING.** A manufactured, fiber-reinforcing product made with an inorganic hydraulic or calcium silicate binder formed by chemical reaction and reinforced with discrete organic or inorganic non-asbestos fibers, or both. Additives that enhance manufacturing or product performance are permitted. Fiber cement siding products have either smooth or textured faces and are intended for *exterior wall* and related applications.

**[RB] FIBER-CEMENT (BACKERBOARD, SIDING, SOFFIT, TRIM AND UNDERLAYMENT) PRODUCTS.** Manufactured thin section composites of hydraulic cementitious matrices and discrete nonasbestos fibers.

**[RP] FILL VALVE.** A water supply valve, opened or closed by means of a float or similar device, utilized to supply water to a tank. An antisiphon fill valve contains an antisiphon device in the form of an *approved air gap* or vacuum breaker that is an integral part of the fill valve unit and that is positioned on the discharge side of the water supply control valve.

**[RB] FIRE SEPARATION DISTANCE.** The distance measured from the building face to one of the following:

1. To the closest interior *lot line*.
2. To the centerline of a street, an alley or public way.
3. To an imaginary line between two buildings on the *lot*.

The distance shall be measured at a right angle from the face of the wall.

**[RB] FIREBLOCKING.** Building materials or materials *approved* for use as fireblocking, installed to resist the free passage of flame to other areas of the building through concealed spaces.

**[RB] FIREPLACE.** An assembly consisting of a hearth and fire chamber and smoke chamber, beginning at the hearth and ending at the top of the smoke chamber, of noncombustible material and provided with a chimney, for use with solid fuels.

~~**Factory-built fireplace.** A listed and labeled fireplace and chimney system composed of factory-made components, and assembled in the field in accordance with manufacturer's instructions and the conditions of the listing.~~

~~**Masonry chimney.** A field-constructed chimney composed of solid masonry units, bricks, stones or concrete, beginning at the top of the smoke chamber and ending at the flue termination.~~

~~**Masonry fireplace.** A field-constructed fireplace composed of *solid masonry* units, bricks, stones or concrete, beginning at the hearth and ending at the top of the smoke chamber.~~

~~**Smoke chamber.** That part of a masonry fireplace that extends from the top of the firebox to the start of the chimney flue lining. A smoke chamber shall have a damper and a smoke shelf.~~

**[MP] FIREPLACE STOVE.** A free-standing, chimney-connected solid-fuel-burning heater designed to be operated with the fire chamber doors in either the open or closed position.

**[RB] FIREPLACE THROAT.** The opening between the top of the firebox and the smoke chamber.

**[RB] FIRE-RETARDANT-TREATED WOOD.** ~~Pressure treated lumber and plywood that~~ Wood products that, when impregnated with chemicals by a pressure process or other means during manufacture, exhibit reduced surface burning characteristics and resist propagation of fire.

**Other means during manufacture.** A process where the wood raw material is treated with a fire-retardant formulation while undergoing creation as a finished product.

**Pressure process.** A process for treating wood using an initial vacuum followed by the introduction of pressure above atmospheric.

**[MP] FIXTURE.** See "*Plumbing fixture.*"

**[MP] FIXTURE BRANCH, DRAINAGE.** A drain serving two or more fixtures that discharges into another drain or to a *stack*.

**[MP] FIXTURE BRANCH, WATER-SUPPLY.** A water-supply pipe between the fixture supply and a main water-distribution pipe or fixture group main.

**[MP] FIXTURE DRAIN.** The drain from the trap of a fixture to the junction of that drain with any other drain pipe.

**[MP] FIXTURE FITTING.**

**Supply fitting.** A fitting that controls the volume or directional flow or both of water and that is either attached to or accessed from a fixture or is used with an open or atmospheric discharge.

**Waste fitting.** A combination of components that conveys the sanitary waste from the outlet of a fixture to the connection of the sanitary drainage system.

**[MP] FIXTURE GROUP, MAIN.** The main water-distribution pipe (or secondary branch) serving a plumbing fixture grouping such as a bath, kitchen or laundry area to which two or more individual fixture branch pipes are connected.

**[MP] FIXTURE SUPPLY.** The water-supply pipe connecting a fixture or fixture fitting to a *branch* water supply pipe or directly to a main water supply pipe branch.

**[MP] FIXTURE UNIT, DRAINAGE (d.f.u.).** A measure of probable discharge into the drainage system by various types of plumbing fixtures, used to size DWV piping systems. The drainage fixture-unit value for a particular fixture depends on its volume rate of drainage discharge, on the time duration of a single drainage operation and on the average time between successive operations.

**[MP] FIXTURE UNIT, WATER-SUPPLY (w.s.f.u.).** A measure of the probable hydraulic demand on the water supply by various types of plumbing fixtures used to size water-piping systems. The water-supply fixture-unit value for a particular fixture depends on its volume rate of supply, on the time duration of a single supply operation and on the average time between successive operations.

**[RG] FLAME SAFEGUARD.** A device that will automatically shut off the fuel supply to a *main burner* or group of *burners* when the means of ignition of such *burners* becomes inoperative, and when flame failure occurs on the *burner* or group of *burners*.

**[RB] FLAME SPREAD.** The propagation of flame over a surface.

**[RB] FLAME SPREAD INDEX.** A comparative measure, expressed as a dimensionless number, derived from visual measurements of the spread of flame versus time for a material tested in accordance with ASTM E84 or UL 723.

**[RG] FLASHBACK ARRESTOR CHECK VALVE.** A device that will prevent the backflow of one gas into the supply system of another gas and prevent the passage of flame into the gas supply system.

**[MP] FLEXIBLE AIR CONNECTOR.** A conduit for transferring air between an air duct or plenum and an air terminal unit, an air inlet or an air outlet. Such conduit is limited in its use, length and location.

**[RB] FLIGHT.** A continuous run of rectangular treads or *winders* or combination thereof from one landing to another.

**FLOOD HAZARD AREA.** For definition, see Section R322.

**[MP] FLOOD-LEVEL RIM.** The edge of the receptor or fixture from which water overflows.

**FLOOD PLAIN.** Land below base flood elevation, which of record has in the past been flooded by storm water-surface runoffs, or tidal influx, and as defined by the Corps of Engineers' maps, the Federal Emergency Management Agency maps.

**[MP] FLOOR DRAIN.** A plumbing fixture for recess in the floor having a floor-level strainer intended for the purpose of the collection and disposal of wastewater used in cleaning the floor and for the collection and disposal of accidental spillage to the floor.

**[RG] FLOOR FURNACE.** A completely self-contained *furnace* suspended from the floor of the space being heated, taking air for combustion from outside such space, and with means for lighting the *appliance* from such space.

**Fan type.** A floor furnace equipped with a fan that provides the primary means for circulating air.

**Gravity type.** A floor furnace depending primarily ~~upon~~on circulation of air by gravity. This classification shall also include floor furnaces equipped with booster-type fans that do not materially restrict free circulation of air by gravity flow when such fans are not in operation.

**[MP] FLOW PRESSURE.** The static pressure reading in the water-supply pipe near the faucet or water outlet while the faucet or water outlet is open and flowing at capacity.

**[MP] FLUE.** See “Vent.”

**[MP] FLUE, APPLIANCE.** The passages within an *appliance* through which combustion products pass from the combustion chamber to the flue collar.

**[MP] FLUE COLLAR.** The portion of a fuel-burning *appliance* designed for the attachment of a draft hood, vent connector or venting system.

**[RM] FLUE CONNECTION (BREECHING).** A passage for conducting the products of *combustion* from a fuel-fired *appliance* to the vent or *chimney* (see also *Chimney connector* and *Vent connector*).

**[MP] FLUE GASES.** Products of combustion plus excess air in *appliance* flues or heat exchangers.

**[RG] FLUE LINER (LINING).** A system or material used to form the inside surface of a flue in a *chimney* or vent, for the purpose of protecting the surrounding structure from the effects of *combustion products* and for conveying *combustion products* without leakage to the atmosphere.

**[MP] FLUSH VALVE.** A device located at the bottom of a flush tank that is operated to flush water closets.

**[MP] FLUSHOMETER TANK.** A device integrated within an air accumulator vessel that is designed to discharge a predetermined quantity of water to fixtures for flushing purposes.

**[MP] FLUSHOMETER VALVE.** A valve attached to a pressurized water supply pipe and so designed that when activated it opens the line for direct flow into the fixture at a rate and quantity to operate the fixture properly, and then gradually closes to reseal fixture traps and avoid water hammer.

**[RB] FOAM BACKER BOARD.** Foam plastic used in siding applications where the foam plastic is a component of the siding.

**[RB] FOAM PLASTIC INSULATION.** A plastic that is intentionally expanded by the use of a foaming agent to produce a reduced-density plastic containing voids consisting of open or closed cells distributed throughout the plastic for thermal insulating or acoustic purposes and that has a density less than 20 pounds per cubic foot (320 kg/m<sup>3</sup>) unless it is used as interior *trim*.

**[RB] FOAM PLASTIC INTERIOR TRIM.** Exposed foam plastic used as picture molds, chair rails, crown moldings, baseboards, *handrails*, ceiling beams, door *trim* and window *trim* and similar decorative or protective materials used in fixed applications.

~~**[RP] FLUSH TANK.** A tank designed with a fill valve and flush valve to flush the contents of the bowl or usable portion of the fixture.~~

**[RB] FUEL CELL POWER SYSTEM, STATIONARY.** A stationary energy generation system that converts the chemical energy of a fuel and oxidant to electric energy (DC or AC electricity) by an electrochemical process.

**Field-fabricated fuel cell power system.** A *stationary fuel cell power system* that is assembled at the job site and is not a preengineered or prepackaged factory-assembled fuel cell power system.

**Preengineered fuel cell power system.** A *stationary fuel cell power system* consisting of components and modules that are produced in a factory, and shipped to the job site for assembly.

**Prepackaged fuel cell power system.** A *stationary fuel cell power system* that is factory assembled as a single, complete unit and shipped as a complete unit for installation at the job site.

**[RG] FUEL GAS.** A natural gas, manufactured gas, *liquefied petroleum gas* or mixtures of these gases.

**[RM] FUEL OIL.** Kerosene or any hydrocarbon oil having a flash point not less than 100°F (38°C).

**[RM] FUEL-OIL PIPING SYSTEM.** A closed piping system that connects a combustible liquid from a source of supply to a fuel-oil-burning *appliance*.

**[MP] FUEL-PIPING SYSTEM.** All piping, tubing, valves and fittings used to connect fuel utilization equipment to the point of fuel delivery.

~~**[RE] FULLY ENCLOSED ATTIC FLOOR SYSTEM.** The ceiling insulation is enclosed on all six sides by an air barrier system, such as taped drywall below, solid framing joists on the sides, solid blocking on the ends, and solid sheathing on top that totally enclose the insulation.~~

**[MP] FULL-OPEN VALVE.** A water control or shutoff component in the water supply system piping that, where adjusted for maximum flow, the flow path through the component's closure member is not a restriction in the component's through-flow area.

**[MP] FULLWAY VALVE.** A valve that in the full open position has an opening cross-sectional area that is not less than 85 percent of the cross-sectional area of the connecting pipe.

**[MP] FURNACE.** A vented heating *appliance* designed or arranged to discharge heated air into a *conditioned space* or through a duct or ducts.

**[RG] FURNACE, CENTRAL.** A self-contained *appliance* for heating air by transfer of heat of *combustion* through metal to the air, and designed to supply heated air through ducts to spaces remote from or adjacent to the *appliance* location.

~~**Downflow furnace.** A furnace designed with airflow discharge vertically downward at or near the bottom of the furnace.~~

~~**Forced-air furnace with cooling unit.** A single package unit, consisting of a gas fired forced air furnace of one of the types listed below combined with an electrically or fuel gas powered summer air conditioning system, contained in a common casing.~~

~~**Forced-air type.** A central furnace equipped with a fan or blower that provides the primary means for circulation of air.~~

~~**Gravity furnace with booster fan.** A furnace equipped with a booster fan that does not materially restrict free circulation of air by gravity flow when the fan is not in operation.~~

~~**Gravity type.** A central furnace depending primarily on circulation of air by gravity.~~

~~**Horizontal forced-air type.** A furnace with airflow through the *appliance* essentially in a horizontal path.~~

~~**Multiple-position furnace.** A furnace designed so that it can be installed with the airflow discharge in the upflow, horizontal or downflow direction.~~

~~**Upflow furnace.** A furnace designed with airflow discharge vertically upward at or near the top of the furnace. This classification includes "highboy" furnaces with the blower mounted below the heating element and "lowboy" furnaces with the blower mounted beside the heating element.~~

**[RG] FURNACE PLENUM.** An air compartment or chamber to which one or more ducts are connected and that forms part of an air distribution system.

**[RM] FURNACE ROOM.** A room primarily utilized for the installation of fuel-burning, space-heating and water-heating appliances other than boilers (see also **Boiler room**).

**[RM] FUSIBLE PLUG.** A device arranged to relieve pressure by operation of a fusible member at a predetermined temperature.

**[RG] GAS CONVENIENCE OUTLET.** A permanently mounted, manually operated device that provides the means for connecting an *appliance* to, and disconnecting an *appliance* from, the supply *pipng*. The device includes an integral, manually operated valve with a nondisplaceable valve member and is designed so that disconnection of an *appliance* only occurs when the manually operated valve is in the closed position.

**[RG] GAS PIPING.** An installation of pipe, valves or fittings installed on a premises or in a building and utilized to convey fuel gas.

**[RB] GLASS MAT GYPSUM PANEL.** A gypsum panel consisting of a noncombustible core primarily of gypsum, surfaced with glass mat partially or completely embedded in the core.

**[RB] GLAZING AREA.** The interior surface area of all glazed fenestration, including the area of sash, curbing or other framing elements, that enclose *conditioned space*. Includes the area of glazed fenestration assemblies in walls bounding conditioned *basements*.

**[RB] GRADE.** The finished ground level adjoining the building at all exterior walls.

**[MP] GRADE, PIPING.** See “*Slope*.”

~~**[RB] GRADE FLOOR OPENING.** A window or other opening located such that the sill height of the opening is not more than 44 inches (1118 mm) above or below the finished ground level adjacent to the opening.~~

**[RB] GRADE FLOOR EMERGENCY ESCAPE AND RESCUE OPENING.** An emergency escape and rescue opening located such that the bottom of the clear opening is not more than 44 inches (1118 mm) above or below the finished ground level adjacent to the opening. (See also “*Emergency escape and rescue opening*.”)

**[RB] GRADE PLANE.** A reference plane representing the average of the finished ground level adjoining the building at all exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the *lot line* or, where the *lot line* is more than 6 feet (1829 mm) from the building between the structure and a point 6 feet (1829 mm) from the building.

**[MP] GRAYWATER.** Waste discharged from lavatories, bathtubs, showers, clothes washers and laundry trays.

**[MP] GRIDDED WATER DISTRIBUTION SYSTEM.** A water distribution system where every water distribution pipe is interconnected so as to provide two or more paths to each fixture supply pipe.

**[RB] GROSS AREA OF EXTERIOR WALLS.** The normal projection of all *exterior walls*, including the area of all windows and doors installed therein.

**[MP] GROUND-SOURCE HEAT PUMP LOOP SYSTEM.** Piping buried in horizontal or vertical excavations or placed in a body of water for the purpose of transporting heat transfer liquid to and from a heat pump. Included in this definition are closed loop systems in which the liquid is recirculated and open loop systems in which the liquid is drawn from a well or other source.

**[RB] GUARD.** A building component or a system of building components located near the open sides of elevated walking surfaces that minimizes the possibility of a fall from the walking surface to the lower level.

**[RB] GUESTROOM.** Any room or rooms used or intended to be used by one or more guests for living or sleeping purposes.

**[RB] GYPSUM BOARD.** The generic name for a family of sheet products consisting of a noncombustible core primarily of gypsum with paper surfacing. Gypsum wallboard, gypsum sheathing, gypsum base for gypsum *vener* plaster, exterior gypsum soffit board, predecorated gypsum board and water-resistant gypsum backing board complying with the standards listed in Section R702.3 and Part IX of this code are types of gypsum board.

**[RB] GYPSUM PANEL PRODUCT.** The general name for a family of sheet products consisting essentially of gypsum.

**[RB] GYPSUM SHEATHING.** Gypsum panel products specifically manufactured with enhanced water resistance for use as a substrate for exterior surface materials.

**[RB] GYPSUM WALLBOARD.** A gypsum board used primarily as interior surfacing for building structures.

**[RB] HABITABLE SPACE.** A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered *habitable spaces*.

**[RB] HANDRAIL.** A horizontal or sloping rail intended for grasping by the hand for guidance or support.

**[MP] HANGERS.** See “*Supports*.”

**[MP] HAZARDOUS LOCATION.** Any location considered to be a fire hazard for flammable vapors, dust, combustible fibers or other highly combustible substances.

**HAZARDOUS LOCATION, GLAZING.** See Section R308.4.

**[MP] HEAT PUMP.** An *appliance* having heating or heating and cooling capability and that uses refrigerants to extract heat from air, liquid or other sources.

**[RE] HEATING DEGREE DAYS (HDD).** The sum, on an annual basis, of the difference between 65°F (18°C) and the mean temperature for each day as determined from “NOAA Annual Degree Days to Selected Bases Derived from the 1960-1990 Normals” or other weather data sources acceptable to the code official.

**HEATED SLAB.** Slab-on-grade construction in which the heating elements, hydronic tubing, or hot air distribution system is in contact with, or placed within or under, the slab. For the definition applicable in Chapter 11, see Section N1101.6.

**[RM] HEAT TRANSFER LIQUID.** The operating or thermal storage liquid in a mechanical system, including water or other liquid base, and additives at the concentration present under operating conditions used to move heat from one location to another. Refrigerants are not included as heat transfer liquids.

**[RB] HEIGHT, BUILDING.** The vertical distance from *grade plane* to the average height of the highest roof surface.

**[RB] HEIGHT, STORY.** The vertical distance from top to top of two successive tiers of beams or finished floor surfaces; and, for the topmost *story*, from the top of the floor finish to the top of the ceiling joists or, where there is not a ceiling, to the top of the roof rafters.

**HEAT TRAP.** An arrangement of piping and fittings, such as elbows, or a commercially available heat trap that prevents thermosiphoning of hot water during standby periods.

**[RE] HERS RATER.** An individual that has completed training and been certified by RESNET (Residential Energy Services Network) Accredited Rating Provider and has a current certification.

**[RE] HIGH-EFFICACY LAMPS.** Compact fluorescent lamps, T-8 or smaller diameter linear fluorescent lamps, or lamps with a minimum efficacy of:

1. 60 lumens per watt for lamps over 40 watts;
2. 50 lumens per watt for lamps over 15 watts to 40 watts; and
3. 40 lumens per watt for lamps 15 watts or less.

**[RE] HIGH-EFFICACY LIGHT SOURCES.** For the definition applicable in Chapter 11, see Section N1101.6.

**[MP] HIGH-TEMPERATURE (H.T.) CHIMNEY.** A high-temperature chimney complying with the requirements of UL 103. A Type H.T. chimney is identifiable by the markings “Type H.T.” on each chimney pipe section.

**[RB] HILL.** With respect to topographic wind effects, a land surface characterized by strong relief in any horizontal direction.

**[RB] HISTORIC BUILDING.** Any A building or structure that is one or more of the following:

1. Listed, or certified as eligible for listing by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, in the National Register of Historic Places.
2. Designated as historic or contributing resource under an applicable state or local law.
3. Certified as a contributing resource within a National Register-listed, state designated or locally designated historic district.

For the definition applicable in Chapter 11, see Section N1101.6.

**[RM] HOOD, FULL OPENING.** An exhaust hood with an opening not less than the diameter of the connecting vent.

**[MP] HORIZONTAL BRANCH, DRAINAGE.** A drain pipe extending laterally from a soil or waste stack or building drain, that receives the discharge from one or more fixture drains. A drainage branch pipe extending laterally from a soil or waste stack or building drain, with or without vertical sections or branches, that receives the discharge from two or more fixture drains or branches and conducts the discharge to the soil or waste stack or to the building drain.



[MP] **HORIZONTAL PIPE.** Any pipe or fitting that makes an angle of less than 45 degrees (0.79 rad) with the horizontal.

**HOT WATER.** Water at a temperature greater than ~~110°F (43°C)~~ 120°F (49°C).

[RG] **HOUSE PIPING.** See “*Piping system.*”

**HUMIDISTAT.** A regulatory device, actuated by changes in humidity, used for automatic control of relative humidity.

[RB] **HURRICANE-PRONE REGIONS.** Areas vulnerable to hurricanes, defined as the U.S. Atlantic Ocean coast where the ultimate design wind speed,  $V_{ult}$ , is greater than 115 miles per hour (51 m/s), and Hawaii, Puerto Rico, Guam, Virgin Islands and America Samoa.

[MP] **HYDROGEN-GENERATING APPLIANCE.** A self-contained package or factory-matched packages of integrated systems for generating gaseous hydrogen. Hydrogen-generating *appliances* utilize electrolysis, reformation, chemical or other processes to generate hydrogen.

[RG] **IGNITION PILOT.** A *pilot* that operates during the lighting cycle and discontinues during *main burner* operation.

[MP] **IGNITION SOURCE.** A flame, spark or hot surface capable of igniting flammable vapors or fumes. Such sources include *appliance* burners, burner ignitions and electrical switching devices.

[RB] **IMPACT PROTECTIVE SYSTEM.** Construction that has been shown by testing to withstand the impact of test missiles and that is applied, attached, or locked over exterior glazing.

[MP] **INDIRECT SYSTEM.** A solar thermal system in which the gas or liquid in the solar collector loop circulates between the solar collector and a heat exchanger and such gas or liquid is not drained from the system or supplied to the load during normal operation.

[RP] **INDIRECT WASTE PIPE.** A waste pipe that discharges into the drainage system through an ~~air break or air gap~~ into a trap, fixture or receptor.

[RP] **INDIRECT WASTE RECEPTOR.** A plumbing fixture designed to collect and dispose of liquid waste from other plumbing fixtures, plumbing equipment or appliances that are required to discharge to the drainage system through an air gap. The following types of fixtures fall within the classification of indirect liquid waste receptors: floor sinks, mop receptors, service sinks and standpipe drains with integral air gaps.

[MP] **INDIVIDUAL SEWAGE DISPOSAL SYSTEM.** A system for disposal of sewage by means of a septic tank or mechanical treatment, designed for use apart from a public sewer to serve a single establishment or building.

[MP] **INDIVIDUAL VENT.** A pipe installed to vent a single *fixture* trap that connects with the vent system above the fixture served or terminates in the open air.

[MP] **INDIVIDUAL WATER SUPPLY.** A water supply that serves one or more families, and that is not an *approved* public water supply.

[RE] **INFILTRATION.** The uncontrolled inward air leakage into a building caused by the pressure effects of wind or the effect of differences in the indoor and outdoor air density or both. For the definition applicable in Chapter 11, see Section N1101.6.

[RG] **INFRARED RADIANT HEATER.** A heater that directs a substantial amount of its energy output in the form of infrared radiant energy into the area to be heated. Such heaters are of either the vented or unvented type.

[RB] **INSULATED SIDING.** A type of continuous insulation, with manufacturer-installed insulating material as an integral part of the cladding product, having a minimum  $R$  value of  $R-2$ . For the definition applicable in Chapter 11, see Section N1101.6.

[RB] **INSULATED VINYL SIDING.** A vinyl cladding product, with manufacturer-installed foam plastic insulating material as an integral part of the cladding product, having a thermal resistance of not less than  $R-2$ .

[RB] **INSULATING CONCRETE FORM (ICF).** A concrete forming system using stay-in-place forms of rigid foam plastic insulation, a hybrid of cement and foam insulation, a hybrid of cement and wood chips, or other insulating material for constructing cast-in-place concrete walls.

**[RE] INSULATING SHEATHING.** ~~An insulating board~~ A rigid panel or board insulation material having a thermal resistance of not less than R-2 of the core material-material with properties suitable for use on walls, floors, roofs or foundations. For the definition applicable in Chapter 11, see Section N1101.6.

**[RM] INTERLOCK.** A device actuated by another device with which it is directly associated, to govern succeeding operations of the same or allied devices. A circuit in which a given action cannot occur until after one or more other actions have taken place.

**[RB] INTERMODAL SHIPPING CONTAINER.** A six-sided steel unit originally constructed as a general cargo container used for the transport of goods and materials.

**[RP] JOINT.**

**Expansion.** A loop, return bend or return offset that provides for the expansion and contraction in a piping system and is utilized in tall buildings or where there is a rapid change of temperature, as in power plants, steam rooms and similar occupancies.

**Flexible.** Any joint between two pipes that permits one pipe to be deflected or moved without movement or deflection of the other pipe.

**Mechanical.** See “Mechanical joint.”

**Slip.** A type of joint made by means of a washer or a special type of packing compound in which one pipe is slipped into the end of an adjacent pipe.

**[RM] JOINT, FLANGED.** A joint made by bolting together a pair of flanged ends.

**[RG] JOINT, FLARED.** A metal-to-metal compression joint in which a conical spread is made on the end of a tube that is compressed by a flare nut against a mating flare.

**[RG] JOINT, MECHANICAL.** A general form of gastight joints obtained by the joining of metal parts through a positive-holding mechanical construction, such as a press-connect joint, flanged joint, threaded joint, flared joint or compression joint.

**[RG] JOINT, PLASTIC ADHESIVE.** A joint made in thermoset plastic piping by the use of an adhesive substance which that forms a continuous bond between the mating surfaces without dissolving either one of them.

**[RM] JOINT, PLASTIC HEAT FUSION.** A joint made in thermoplastic piping by heating the parts sufficiently to permit fusion of the materials when the parts are pressed together.

**[RM] JOINT, PLASTIC SOLVENT CEMENT.** A joint made in thermoplastic piping by the use of a solvent or solvent cement which that forms a continuous bond between the mating surfaces.

**[RM] JOINT, SOLDERED.** A gas-tight joint obtained by the joining of metal parts with metallic mixtures of alloys which that melt at temperatures between 400°F (204°C) and 1,000°F (538°C).

**[RM] JOINT, WELDED.** A gas-tight joint obtained by the joining of metal parts in molten state.

**[RB] JURISDICTION.** The governmental unit that has adopted this code under due legislative authority.

**[RB] KITCHEN.** An area used, or designated to be used, for the preparation of food.

**[RB] LABEL.** An identification applied on a product by the manufacturer that contains the name of the manufacturer, the function and performance characteristics of the product or material, and the name and identification of an *approved agency* and that indicates that the representative sample of the product or material has been tested and evaluated by an *approved agency*. (See also “*Manufacturer’s designation*” and “*Mark*.”)

**[RB] LABELED.** Appliances, *equipment*, materials or products to which have been affixed a *label*, seal, symbol or other identifying *mark* of a nationally recognized testing laboratory, approved inspection agency or other organization as approved by the North Carolina Building Code Council concerned with product evaluation that maintains periodic inspection of the production of the *labeled* items and whose labeling indicates either that the appliance, *equipment*, material or product meets identified standards or has been tested and found suitable for a specified purpose. For the definition applicable in Chapter 11, see Section N1101.6.

**LAMP.** The device in a lighting fixture that provides illumination, typically a bulb, fluorescent tube, or light emitting diode (LED).

**LAUNDRY TRAY.** a fixed tub with running water and drainpipe for washing clothes and other household linens, also called set tub.

**LAVATORY.** A hand-washing plumbing fixture located in a bathroom, or toilet room.

**[RP] LEAD-FREE PIPE AND FITTINGS.** Containing not more than a weighted average of 0.25-percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

**[RP] LEAD-FREE SOLDER AND FLUX.** Containing not more than 0.2-percent lead.

**[RP] LEADER.** An exterior drainage pipe for conveying storm water from roof or gutter drains to an *approved* means of disposal.

**[RG] LIQUEFIED PETROLEUM GAS or LPG (LP-GAS).** *Liquefied petroleum gas* composed predominately of propane, propylene, butanes or butylenes, or mixtures thereof that is gaseous under normal atmospheric conditions, but is capable of being liquefied under moderate pressure at normal temperatures.

**[RG] LEAK CHECK.** An operation performed on a gas *piping system* to verify that the system does not leak.

**[RB] LIGHT-FRAME CONSTRUCTION.** Construction whose vertical and horizontal structural elements are primarily formed by a system of repetitive wood or cold-formed steel framing members.

**[RB] LISTED.** Appliances, *equipment*, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of *listed equipment* or materials or periodic evaluation of services and whose listing states either that the appliance, *equipment*, material, product or service meets identified standards or has been tested and found suitable for a specified purpose. For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] LIVE LOADS.** Those loads produced by the use and occupancy of the building or other structure and do not include construction or environmental loads such as wind load, snow load, rain load, earthquake load, flood load or dead load.

**[RB] LIVE/WORK UNIT.** A dwelling unit in which more than 10 percent and less than 50 percent of the space includes a nonresidential use that is operated by the tenant.

**[MP] LIVING SPACE.** Space within a *dwelling unit* utilized for living, sleeping, eating, cooking, bathing, washing and sanitation purposes.

**[MP] LOCAL EXHAUST.** An exhaust system that uses one or more fans to exhaust air from a specific room or rooms within a dwelling.

**[MP] LOCKING-TYPE TAMPER-RESISTANT CAP.** A cap designed to be unlocked by a specially designed tool or key to prevent removal of the cap by means of hand-loosening or by commonly available tools.

**[RB] LODGING HOUSE.** A one-family dwelling where one or more occupants are primarily permanent in nature, and rent is paid for guestrooms.

**[RG] LOG LIGHTER.** A manually operated solid-fuel ignition *appliance* for installation in a vented solid-fuel-burning *fireplace*.

**[RB] LOT.** A measured portion or parcel of land considered as a unit having fixed boundaries.

**[RB] LOT LINE.** A line dividing one lot from another, or from a street or any public place. The line that bounds a plot of ground described as a lot in the title to the property.

**[RM] LOW-PRESSURE HOT-WATER-HEATING BOILER.** A boiler furnishing hot water at pressures not exceeding 160 psi (1103 kPa) and at temperatures not exceeding 250°F (121°C).

**[RM] LOW-PRESSURE STEAM-HEATING BOILER.** A boiler furnishing steam at pressures not exceeding 15 psi (103 kPa).

**[MP] LOCAL EXHAUST.** An exhaust system that uses one or more fans to exhaust air from a specific room or rooms within a dwelling.

**[MP] LOCKING-TYPE TAMPER-RESISTANT CAP.** A cap designed to be unlocked by a specially designed tool or key to prevent removal of the cap by means of hand-loosening or by commonly available tools.

**[RB] LODGING HOUSE.** A one-family dwelling where one or more occupants are primarily permanent in nature, and rent is paid for guestrooms.

**[RE] LOW-VOLTAGE LIGHTING.** Lighting equipment powered through a transformer such as a cable conductor, a rail conductor and track lighting. For the definition applicable in Chapter 11, see Section N1101.6.

**LOWEST FLOOR.** The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that unenclosed areas below the lowest floor of elevated buildings be free of obstructions and that enclosed areas be enclosed by open lattice-work, insect screening or non-supporting breakaway walls in accordance with the National Flood Insurance Program located in *coastal high hazard areas*.

**[MP] MACERATING TOILET SYSTEMS.** A system comprised of a sump with macerating pump and with connections for a water closet and other plumbing fixtures, that is designed to accept, grind and pump wastes to an *approved* point of discharge.

**[MP] MAIN.** The principal pipe artery to which branches may be connected.

**[RG] MAIN BURNER.** A device or group of devices essentially forming an integral unit for the final conveyance of gas or a mixture of gas and air to the combustion zone, and on which combustion takes place to accomplish the function for which the *appliance* is designed.

**[MP] MAIN SEWER.** See “*Public sewer*.”

**[MP] MANIFOLD WATER DISTRIBUTION SYSTEMS.** A fabricated piping arrangement in which a large supply main is fitted with multiple branches in close proximity in which water is distributed separately to fixtures from each branch.

**[RE] MANUAL.** Capable of being operated by personal intervention (see “Automatic”). For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] MANUFACTURED HOME.** A structure, transportable in one or more sections, that in the traveling mode is 8 body feet (2438 body mm) or more in width or 40 body feet (12 192 body mm) or more in length, or, where erected on site, is 320 square feet (30 m<sup>2</sup>) or more, and that is built on a permanent chassis and designed to be used as a *dwelling* with or without a permanent foundation where connected to the required utilities, and includes the plumbing, heating, air-conditioning and electrical systems contained therein; except that such term shall include any structure that meets all the requirements of this paragraph except the size requirements and with respect to which the manufacturer voluntarily files a certification required by the secretary (HUD) and complies with the standards established under this title. For mobile homes built prior to June 15, 1976, a *label* certifying compliance to the Standard for Mobile Homes, NFPA 501, in effect at the time of manufacture is required. For the purpose of these provisions, a mobile home shall be considered to be a *manufactured home*.

**[RE] MASS WALL.** Masonry or concrete walls having a mass greater than or equal to 30 pounds per square foot (146 kg/m<sup>2</sup>), solid wood walls having a mass greater than or equal to 20 pounds per square foot (98 kg/m<sup>2</sup>), and any other walls having a heat capacity greater than or equal to 6 Btu/ft<sup>2</sup> · °F [123 J/(m<sup>2</sup> · K)].

**[RB] MANUFACTURER'S DESIGNATION.** An identification applied on a product by the manufacturer indicating that a product or material complies with a specified standard or set of rules. (See also “*Mark*” and “*Label*.”)

**[RB] MANUFACTURER'S INSTALLATION INSTRUCTIONS.** Printed instructions included with equipment as part of the conditions of their *listing* and *labeling*.

**[RB] MARK.** An identification applied on a product by the manufacturer indicating the name of the manufacturer and the function of a product or material. (See also “*Manufacturer's designation*” and “*Label*.”)

**[RB] MASONRY, SOLID.** Masonry consisting of *solid masonry* units laid contiguously with the joints between the units filled with mortar.

**[RB] MASONRY CHIMNEY.** A field-constructed chimney composed of *solid masonry* units, bricks, stones or concrete.

**[RB] MASONRY HEATER.** A masonry heater is a solid fuel burning heating *appliance* constructed predominantly of concrete or *solid masonry* having a mass of not less than 1,100 pounds (500 kg), excluding the chimney and foundation. It is designed to absorb and store a substantial portion of heat from a fire built in the firebox by routing exhaust gases through internal heat exchange channels in which the flow path downstream of the firebox includes not less than one 180-degree (3.14-rad) change in flow direction before entering the chimney and that deliver heat by radiation through the masonry surface of the heater.

**[RB] MASONRY UNIT.** Brick, tile, stone, architectural cast stone, glass block or concrete block conforming to the requirements specified in Section 2103 of the *International Building Code*.

**Clay.** A building unit larger in size than a brick, composed of burned clay, shale, fire clay or mixtures thereof.

**Concrete.** A building unit or block larger in size than 12 inches by 4 inches by 4 inches (305 mm by 102 mm by 102 mm) made of cement and suitable aggregates.

**Glass.** Nonload-bearing masonry composed of glass units bonded by mortar.

**Hollow.** A *masonry unit* with a net cross-sectional area in any plane parallel to the loadbearing surface that is less than 75 percent of its gross cross-sectional area measured in the same plane.

**Solid.** A *masonry unit* with a net cross-sectional area in every plane parallel to the loadbearing surface that is 75 percent or more of its cross-sectional area measured in the same plane.

**[RB] MEAN ROOF HEIGHT.** The average of the roof eave height and the height to the highest point on the roof surface, except that eave height shall be used for roof angle of less than or equal to 10 degrees (0.18 rad).

**[MP] MECHANICAL DRAFT SYSTEM.** A venting system designed to remove flue or vent gases by mechanical means, that consists of an induced draft portion under nonpositive static pressure or a forced draft portion under positive static pressure.

**Forced draft venting system.** A portion of a venting system using a fan or other mechanical means to cause the removal of flue or vent gases under positive static pressure.

**Induced draft venting system.** A portion of a venting system using a fan or other mechanical means to cause the removal of flue or vent gases under nonpositive static vent pressure.

**Power venting system.** A portion of a venting system using a fan or other mechanical means to cause the removal of flue or vent gases under positive static vent pressure.

**[MP] MECHANICAL EXHAUST SYSTEM.** A system for removing air from a room or space by mechanical means.

**[MP] MECHANICAL JOINT.**

1. A connection between pipes, fittings or pipes and fittings that is not welded, brazed, caulked, soldered, solvent cemented or heat fused.
2. A general form of gastight or liquid-tight connections obtained by the joining of parts through a positive holding mechanical construction such as, but not limited to, flanged, screwed, clamped or flared connections.

**[MP] MECHANICAL SYSTEM.** A system specifically addressed and regulated in this code and composed of components, devices, *appliances* and *equipment*.

**[RB] METAL ROOF PANEL.** An interlocking metal sheet having an installed weather exposure of not less than 3 square feet (0.28 m<sup>2</sup>) per sheet.

**[RB] METAL ROOF SHINGLE.** An interlocking metal sheet having an installed weather exposure less than 3 square feet (0.28 m<sup>2</sup>) per sheet.

**METER.** The instrument installed to measure the volume of gas delivered through it or a measuring device used to collect data and indicate water usage.

**[RB] MEZZANINE.** An intermediate level or levels between the floor and ceiling of any *story*.

**[RB] MODIFIED BITUMEN ROOF COVERING.** One or more layers of polymer modified asphalt sheets. The sheet materials shall be fully adhered or mechanically attached to the substrate or held in place with an *approved* ballast layer.

**MSL.** Mean Sea Level as defined by National Geodetic Vertical Datum.

**[RG] MODULATING.** Modulating or throttling is the action of a *control* from its maximum to minimum position in either predetermined steps or increments of movement as caused by its actuating medium.

**[RB] MULTIPLE-STATION SMOKE ALARM.** Two or more single-station alarm devices that are capable of interconnection such that actuation of one causes all integral or separate audible alarms to operate.

**[RB] NAILABLE SUBSTRATE.** A product or material such as framing, sheathing or furring, composed of wood or wood-based materials, or other materials and fasteners providing equivalent fastener withdrawal resistance.

**[MP] NATURAL DRAFT SYSTEM.** A venting system designed to remove flue or vent gases under nonpositive static vent pressure entirely by natural draft.

**[RM] NATURAL VENTILATION.** The movement of air into and out of a space through intentionally provided openings, such as windows and doors, or through nonpowered ventilators.

**[RB] NATURALLY DURABLE WOOD.** The heartwood of the following species with the exception that an occasional piece with corner sapwood is permitted if 90 percent or more of the width of each side on which it occurs is heartwood.

**Decay resistant.** Redwood, cedar, black locust and black walnut.

**Termite resistant.** Alaska yellow cedar, redwood, Eastern red cedar and Western red cedar including all sapwood of Western red cedar.

**[RB] NONCOMBUSTIBLE MATERIAL.** ~~Materials~~ A material that pass ~~the test procedure for defining non~~ combustibility of elementary materials set forth in ASTM E136.

**[RB] NOSING.** The leading edge of treads of stairs and of landings at the top of *stairway* flights.

**[RM] OCCUPIABLE SPACE.** An enclosed space intended for human activities, excluding those spaces intended primarily for other purposes, such as storage rooms and *equipment* rooms, that are only intended to be occupied occasionally and for short periods of time.

**[RB] OCCUPIED SPACE.** The total area of all buildings or structures on any *lot* or parcel of ground projected on a horizontal plane, excluding permitted projections as allowed by this code.

**OCEAN HAZARD AREA.** An area, as identified by the North Carolina Coastal Resources Commission, near the shoreline of the Atlantic Ocean that has been identified as subject to at least one of the following hazards: (A) Historical or predicted future trends of long-term erosion, (B) erosion expected to occur during a coastal storm reaching the base flood elevation, or (C) shoreline fluctuations due to tidal inlets.

**[MP] OFFSET.** A combination of fittings that makes two changes in direction, bringing one section of the pipe out of line and into a line parallel with the other section.

**[RG] OFFSET (VENT).** A combination of *approved* bends that make two changes in direction bringing one section of the vent out of line, but into a line parallel with the other section.

**[MP] ON-SITE NONPOTABLE WATER REUSE SYSTEMS.** Water systems for the collection, treatment, storage, distribution, and reuse of nonpotable water generated on site, including but not limited to graywater systems. This definition does not include rainwater harvesting systems.

~~**[RE] ON-SITE RENEWABLE ENERGY.** Includes solar photovoltaic; active solar thermal that employs collection panels, heat transfer mechanical components; wind; small hydro; tidal; wave energy; geothermal (core earth); biomass energy systems; landfill gas and bio-fuel based electrical production. On-site energy shall be generated on or adjacent to the project site and shall not be delivered to the project through the utility service.~~

~~**[RP] OPEN AIR.** Outside the structure.~~

~~**[RE] OPAQUE DOOR.** For the definition applicable in Chapter 11, see Section N1101.6.~~

**[MP] OFFSET.** A combination of fittings that makes two changes in direction, bringing one section of the pipe out of line and into a line parallel with the other section.

**[RG] OFFSET (VENT).** A combination of *approved* bends that make two changes in direction bringing one section of the vent out of line, but into a line parallel with the other section.

**[MP] ON-SITE NONPOTABLE WATER REUSE SYSTEMS.** Water systems for the collection, treatment, storage, distribution, and reuse of nonpotable water generated on site, including but not limited to graywater systems. This definition does not include rainwater harvesting systems.

**[RB] PAN FLASHING.** Corrosion-resistant flashing at the base of an opening that is integrated into the building exterior wall to direct water to the exterior and is premanufactured, fabricated, formed or applied at the job site.

**[RM] PANEL HEATING.** A method of radiant space heating in which heat is supplied by large heated areas of room surfaces. The heating element usually consists of warm water piping, warm air ducts, or electrical resistance elements embedded in or located behind ceiling, wall or floor surfaces.

**[RB] PANEL THICKNESS.** Thickness of core plus two layers of structural wood panel facings.

**[MP] PELLET FUEL-BURNING APPLIANCE.** A closed combustion, vented *appliance* equipped with a fuel feed mechanism for burning processed pellets of solid fuel of a specified size and composition.

**[MP] PELLET VENT.** A vent *listed* and *labeled* for use with a *listed* pellet fuel-burning *appliance*.

**[RB] PERFORMANCE CATEGORY.** A designation of wood structural panels as related to the panel performance used in Chapters 4, 5, 6 and 8.

**[RB] PERMIT.** An official document or certificate issued by the *building official* that authorizes performance of a specified activity.

**[RB] PERSON.** An individual, heirs, executors, administrators or assigns, and a firm, partnership or corporation, its or their successors or assigns, or the agent of any of the aforesaid.

**[RB] PHOTOVOLTAIC MODULE.** A complete, environmentally protected unit consisting of solar cells, optics and other components, exclusive of a tracker, designed to generate DC power where exposed to sunlight.

**[RB] PHOTOVOLTAIC PANEL.** A collection of *photovoltaic modules* mechanically fastened together, wired, and designed to provide a field-installable unit.

**[RB] PHOTOVOLTAIC PANEL SYSTEM.** A system that incorporates discrete photovoltaic panels that convert solar radiation into electricity, including rack support systems.

**[RB] PHOTOVOLTAIC SHINGLES.** A *roof covering* that resembles shingles and that incorporates *photovoltaic modules*.

**PIER.** An elevated deck structure, usually pile supported, extending out into the water from the shore.

**[RG] PILOT.** A small flame that is utilized to ignite the gas at the *main burner* or *burners*.

**PIPE SIZES.** For the purposes of determining the minimum size of pipe required, cross-sectional areas are the essential characteristic, not the pipe diameter. When the Code instructs to “increase by one pipe size,” some pipe sizes may not be commercially available. The following pipe sizes are presumed to be commercially available: 1/2, 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2, 3, 3-1/2, 4, 4-1/2, 5, 6, 7, 8, 9, 10.

**[RG] PIPING.** Where used in this code, “*pipng*” refers to either *pipe* or *tubing*, or both.

**Pipe.** A rigid conduit of iron, steel, copper, copper-alloy or plastic.

**Tubing.** Semirigid conduit of copper, copper-alloy, aluminum, plastic or steel.

**[RG] PIPING SYSTEM.** The fuel *pipng*, valves and fittings from the outlet of the *point of delivery* to the outlets of the *appliance* shutoff valves.

**[MP] PITCH.** See “*Slope*.”

**PLANS.** Construction documents.

**[RB] PLASTIC COMPOSITE.** A generic designation that refers to wood-plastic composites and plastic lumber.

**[RG] PLASTIC, THERMOPLASTIC.** A plastic that is capable of being repeatedly softened by increase of temperature and hardened by decrease of temperature.

**[RB] PLATFORM CONSTRUCTION.** A method of construction by which floor framing bears on load bearing walls that are not continuous through the *story* levels or floor framing.

**[MP] PLENUM.** An enclosed portion of the building structure, other than an *occupiable space* being conditioned, that is designed to allow air movement, and thereby serve as part of an air distribution system.

**[MP] PLUMBING.** The practice, materials and fixtures utilized in the installation, maintenance, extension and alteration of all piping, fixtures, plumbing appliances and plumbing appurtenances, within or adjacent to any structure, in connection with sanitary drainage or storm drainage facilities; venting systems; and public or private water supply systems. For the purpose of this code, plumbing refers to those installations, repairs, maintenance and *alterations* regulated by Chapters 25 through 33.

**[MP] PLUMBING APPLIANCE.** An energized household *appliance* with plumbing connections, such as a dishwasher, food waste disposer, clothes washer or water heater. These devices have their operation or control dependent on one or more energized components, such as motors, controls or heating elements. Such devices are manually adjusted or controlled by the owner or operator, or are operated automatically through one or more of the following actions: a time cycle, a temperature range, a pressure range, a measured volume or weight.

**[MP] PLUMBING APPURTENANCE.** A manufactured device, prefabricated assembly or on-the-job assembly of component parts that is an adjunct to the basic piping system and plumbing fixtures. An appurtenance demands no additional water supply and does not add any discharge load to a fixture or to the drainage system. Examples include filters, relief valves and aerators.

**[MP] PLUMBING FIXTURE.** A receptacle or device that is either permanently or temporarily connected to the water distribution system of the premises and demands a supply of water therefrom; or discharges wastewater, liquid-borne waste materials or sewage either directly or indirectly to a drainage system of the premises; or requires both a water supply connection and a discharge to the drainage system of the premises.

**[MP] PLUMBING SYSTEMS.** Includes the water distribution pipes; plumbing fixtures and traps; water-treating or water-using equipment; soil, waste and vent pipes; and building drains; in addition to their respective connections, devices and appurtenances within a structure or premises; and the water service, building sewer and building storm sewer serving such structure or premises.

**[RG] POINT OF DELIVERY.** For natural gas systems, the *point of delivery* is the outlet of the service meter assembly or the outlet of the service regulator or service shutoff valve where a meter is not provided. Where a system shutoff valve is provided ~~at~~ after the outlet of the service meter assembly, such valve shall be considered to be downstream of the *point of delivery*. For undiluted liquefied petroleum gas systems, the point of delivery shall be considered to be the outlet of the first regulator that reduces pressure.

**[MP] POLLUTION.** An impairment of the quality of the potable water to a degree that does not create a hazard to the public health and that does adversely and unreasonably affect the aesthetic qualities of such potable water for domestic use.

**[RB] POLYPROPYLENE SIDING.** A shaped material, made principally from polypropylene homopolymer, or copolymer, that in some cases contains fillers or reinforcements, that is used to clad exterior walls or buildings.

**[MP] PORTABLE-FUEL-CELL APPLIANCE.** A fuel cell generator of electricity that is not fixed in place. A portable-fuel-cell *appliance* utilizes a cord and plug connection to a grid-isolated load and has an integral fuel supply.

**[RB] POSITIVE ROOF DRAINAGE.** The drainage condition in which consideration has been made for the loading deflections of the *roof deck*, and additional slope has been provided to ensure drainage of the roof within 48 hours of precipitation.

**[MP] POTABLE WATER.** Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming in bacteriological and chemical quality of the Public Health Service Drinking Water Standards or to the ~~requirements~~ regulations of the public health authority having *jurisdiction*.

**[RB] PRECAST CONCRETE.** A structural concrete element cast elsewhere than its final position in the structure.

**[RB] PRECAST CONCRETE FOUNDATION WALLS.** Preengineered, *precast concrete* wall panels that are designed to withstand specified stresses and used to build below-*grade* foundations.

**[RM] PRESS PRESS-CONNECT JOINT.** A permanent mechanical joint incorporating an elastomeric seal or an elastomeric seal and corrosion-resistant grip ring. The joint is made with a pressing tool and jaw or ring approved by the fitting manufacturer.

**[RG] PRESSURE DROP.** The loss in pressure due to friction or obstruction in pipes, valves, fittings, *regulators* and *burners*.

**[RM] PRESSURE RELIEF DEVICE.** A pressure-actuated valve or rupture member designed to relieve excessive pressure automatically.

**[RG] PRESSURE TEST.** An operation performed to verify the gastight integrity of *gas piping* following its installation or modification.

**[MP] PRESSURE-RELIEF VALVE.** A pressure-actuated valve held closed by a spring or other means and designed to automatically relieve pressure at the pressure at which it is set.

**PRIMARY STRUCTURAL FRAME.** The primary structural frame shall include all of the following structural members:

1. The columns.



2. Structural members having direct connections to the columns, including girders, beams, trusses and spandrels.
3. Members of the floor construction and roof construction having direct connections to the columns.
4. Members that are essential to the vertical stability of the *primary structural frame* under gravity loading.

**PRIVATE POND.** A body of water owned entirely by a single property owner and located on the same parcel of land as a detached single-family dwelling.

**[RM] PROTECTIVE ASSEMBLY (REDUCED CLEARANCE).** Any noncombustible assembly that is *labeled* or constructed in accordance with Table M1306.2 and is placed between combustible materials or assemblies and mechanical *appliances*, devices or *equipment*, for the purpose of reducing required airspace *clearances*. Protective assemblies attached directly to a combustible assembly shall not be considered as part of that combustible assembly.

**[RE] PROPOSED DESIGN.** A description of the proposed building used to estimate annual energy use for determining compliance based on total building performance. For the definition applicable in Chapter 11, see Section N1101.6.

**[MP] PUBLIC SEWER.** A common sewer directly controlled by public authority.

**[MP] PUBLIC WATER MAIN.** A water-supply pipe for public use controlled by public authority.

**[RB] PUBLIC WAY.** Any street, alley or other parcel of land open to the outside air leading to a public street, that has been deeded, dedicated or otherwise permanently appropriated to the public for public use and that has a clear width and height of not less than 10 feet (3048 mm).

**[MP] PURGE.** To clear of air, gas or other foreign substances.

**[MP] PUSH-FIT JOINTS.** A type of mechanical joint consisting of elastomeric seals and corrosion-resistant tube grippers. Such joints are permanent or removable depending on the design.

**[MP] QUICK-CLOSING VALVE.** A valve or faucet that closes automatically when released manually or controlled by mechanical means for fast-action closing.

**[RM] RADIANT HEATER.** A heater designed to transfer heat primarily by direct radiation.

**[RP] RAINWATER.** Water from natural precipitation.

**[RB] RAMP.** A walking surface that has a running slope steeper than 1 unit vertical in 20 units horizontal (5-percent slope).

**[RE] R-VALUE (THERMAL RESISTANCE).** The inverse of the time rate of heat flow through a body from one of its bounding surfaces to the other for a unit temperature difference between the two surfaces, under steady state conditions, per unit area ( $\text{h} \cdot \text{ft}^2 \cdot ^\circ\text{F}/\text{Btu}$ ) [ $\text{m}^2 \cdot \text{k}/\text{w}$ ].

**[RE] RATED DESIGN.** A description of the proposed building, used to determine the energy rating index. For the definition applicable in Chapter 11, see Section N1101.6.

**READY ACCESS (TO).** That which enables a device, *appliance* or *equipment* to be directly reached, without requiring the removal or movement of any panel, door or similar obstruction [see “Access (to)”].

**[RM] RECIRCULATED AIR.** Air removed from a conditioned space and intended for reuse as supply air.

**[RE] REFLECTIVE DUCT INSULATION.** A thermal insulation assembly consisting of one or more surfaces that have an emittance of 0.1 or less, and that bound an enclosed air space or spaces.

**[RG] REGULATOR.** A device for controlling and maintaining a uniform gas supply pressure, either pounds to inches water column (MP regulator) or inches to inches water column (*appliance regulator*).

**[RG] REGULATOR, GAS APPLIANCE.** A *pressure regulator* for controlling pressure to the manifold of the gas *appliance*.

**Adjustable.**

1. Spring type, limited adjustment. A regulator in which the regulating force acting upon the diaphragm is derived principally from a spring, the loading of which is adjustable over a range of not more than 15 percent of the outlet pressure at the midpoint of the adjustment range.

2. Spring type, standard adjustment. A regulator in which the regulating force acting upon the diaphragm is derived principally from a spring, the loading of which is adjustable. The adjustment means shall be concealed.

**Multistage.** A regulator for use with a single gas whose adjustment means is capable of being positioned manually or automatically to two or more predetermined outlet pressure settings. Each of these settings shall be adjustable or

~~nonadjustable. The regulator may modulate outlet pressures automatically between its maximum and minimum predetermined outlet pressure settings.~~

**Nonadjustable.**

1. Spring type, nonadjustable. A regulator in which the regulating force acting upon the diaphragm is derived principally from a spring, the loading of which is not field adjustable.

2. Weight type. A regulator in which the regulating force acting upon the diaphragm is derived from a weight or combination of weights.

**[MP] RECEPTOR.** A fixture or device that receives the discharge from indirect waste pipes.

**[MP] RECLAIMED WATER.** Nonpotable water that has been derived from the treatment of wastewater by a facility or system licensed or permitted to produce water meeting the *jurisdiction's* water requirements for its intended uses. Also known as "recycled water."

**[RP] REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY.** A backflow prevention device consisting of two independently acting check valves, internally force-loaded to a normally closed position and separated by an intermediate chamber (or zone) in which there is an automatic relief means of venting to the atmosphere, internally loaded to a normally open position between two tightly closing shutoff valves and with a means for testing for tightness of the checks and opening of the relief means.

**[MP] REFRIGERANT.** A substance used to produce refrigeration by its expansion or evaporation.

**[MP] REFRIGERANT COMPRESSOR.** A specific machine, with or without accessories, for compressing a given refrigerant vapor.

**[MP] REFRIGERATING SYSTEM.** A combination of interconnected parts forming a closed circuit in which refrigerant is circulated for the purpose of extracting, then rejecting, heat. A direct refrigerating system is one in which the evaporator or condenser of the refrigerating system is in direct contact with the air or other substances to be cooled or heated. An indirect refrigerating system is one in which a secondary coolant cooled or heated by the refrigerating system is circulated to the air or other substance to be cooled or heated.

**[RB] REGISTERED DESIGN PROFESSIONAL.** An individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the state or *jurisdiction* in which the project is to be constructed. Design by a registered design professional is not required where exempt under North Carolina general statutes or licensure laws.

**[RG] REGULATOR, LINE GAS PRESSURE.** A device placed in a gas line between the *service pressure regulator* and the *appliance* for controlling, maintaining or reducing the pressure in that portion of the *pipng system* downstream of the device.

**[RG] REGULATOR, MEDIUM-PRESSURE (MP Regulator).** A line *pressure regulator* that reduces gas pressure from the range of greater than 0.5 psig (3.4 kPa) and less than or equal to 5 psig (34.5 kPa) to a lower pressure.

**[RG] REGULATOR, MONITORING.** A pressure regulator set in series with another pressure regulator for the purpose of preventing an overpressure in the downstream piping system.

**[RG] REGULATOR, PRESSURE.** A device placed in a gas line for reducing, controlling and maintaining the pressure in that portion of the *pipng system* downstream of the device.

**[RG] REGULATOR, SERVICE PRESSURE.** For natural gas systems, a device installed by the serving gas supplier to reduce and limit the service line pressure to delivery pressure. For undiluted liquefied petroleum gas systems, the regulator located upstream from all line gas pressure regulators, where installed, and downstream from any first stage or a high pressure regulator in the system.

**[RG] RELIEF OPENING.** The opening provided in a *draft hood* to permit the ready escape to the atmosphere of the flue products from the *draft hood* in the event of no *draft*, backdraft or stoppage beyond the *draft hood*, and to permit air into the *draft hood* in the event of a strong chimney updraft.

**[RG] RELIEF VALVE (DEVICE).** A safety valve designed to forestall the development of a dangerous condition by relieving either pressure, temperature or vacuum in the hot water supply system.

**[RG] RELIEF VALVE, PRESSURE.** An *automatic valve* that opens and closes a relief vent, depending on whether the pressure is above or below a predetermined value.

**[RG] RELIEF VALVE, TEMPERATURE.**

**Manual reset type.** A valve that automatically opens a *relief* vent at a predetermined temperature and that must be manually returned to the closed position.

**Reseating or self-closing type.** An *automatic valve* that opens and closes a relief vent, depending on whether the temperature is above or below a predetermined value.

[MP] **RELIEF VALVE, VACUUM.** A device to prevent excessive buildup of vacuum in a pressure vessel.

[RP] **RELIEF VENT.** A vent whose primary function is to provide circulation of air between drainage and vent systems.

[RB] **REPAIR.** The ~~restoration~~ restoration, replacement or renewal of any part of an existing building for the purpose of its maintenance or to correct damage. For the definition applicable in Chapter 11, see Section N1101.6.

[RB] **REROOFING.** The process of recovering or replacing an existing roof covering. See “Roof recover.” For the definition applicable in Chapter 11, see Section N1101.6.

~~[RE] RESIDENTIAL BUILDING.~~ For the definition applicable in Chapter 11, see Section N1101.6.

[MP] **RETURN AIR.** Air removed from an *approved conditioned space* or location and recirculated or exhausted.

[RM] **RETURN AIR SYSTEM.** An assembly of connected ducts, *plenums*, fittings, registers and grilles through which air from the space or spaces to be heated or cooled is conducted back to the supply unit (see also *Supply air system*).

[RB] **RIDGE.** With respect to topographic wind effects, an elongated crest of a *hill* characterized by strong relief in two directions.

[RP] **RIM.** An unobstructed open edge of a fixture.

[RG] **RISER, GAS.** A vertical *pipe* supplying fuel gas.

~~[RB] RISER.~~

~~1. The vertical component of a step or stair.~~

~~2. A water pipe that extends vertically one full *story* or more to convey water to branches or to a group of fixtures.~~

[MP] **RISER (PLUMBING).** A water pipe that extends vertically one full *story* or more to convey water to branches or to a group of fixtures.

[RB] **RISER (STAIR).** The vertical component of a step or *stair*.

[RB] **ROOF ASSEMBLY.** A system designed to provide weather protection and resistance to design loads. The system consists of a roof covering and roof deck or a single component serving as both the roof covering and the roof deck. A roof assembly ~~includes the roof deck, vapor retarder, substrate or~~ can include an underlayment, thermal barrier, ignition barrier, insulation, or a vapor retarder, and roof covering retarder. For the definition applicable in Chapter 11, see Section N1101.6.

[RB] **ROOF COATING.** A fluid-applied, adhered coating used for roof maintenance or *roof repair*, or as a component of a *roof covering system* or *roof assembly*.

[RB] **ROOF COVERING.** The covering applied to the *roof deck* for weather resistance, fire classification or appearance.

[RB] **ROOF COVERING SYSTEM.** See “*Roof assembly*.”

[RB] **ROOF DECK.** The flat or sloped surface not including its supporting members or vertical supports.

[RB] **ROOF RECOVER.** The process of installing an additional roof covering over a prepared existing roof covering without removing the existing roof covering. For the definition applicable in Chapter 11, see Section N1101.6.

[RB] **ROOF REPAIR.** Reconstruction or renewal of any part of an existing roof for the purposes of its maintenance. For the definition applicable in Chapter 11, see Section N1101.6.

[RB] **ROOF REPLACEMENT.** The process of removing the existing *roof covering*, repairing any damaged substrate and installing a new *roof covering*. For the definition applicable in Chapter 11, see Section N1101.6.

~~[RB] ROOFTOP STRUCTURE.~~ An enclosed structure on or above the roof of any part of a building.

**[MP] ROOM HEATER.** A free-standing heating *appliance* installed in the space being heated and not connected to ducts.

**[RG] ROOM HEATER, UNVENTED.** An unvented heating *appliance* designed for stationary installation and utilized to provide comfort heating. Such *appliances* provide radiant heat or convection heat by gravity or fan circulation directly from the heater and do not utilize ducts. See “*Unvented room heater.*”

**[RG] ROOM HEATER, VENTED.** A free-standing heating unit used for direct heating of the space in and adjacent to that in which the unit is located. (See “*Vented room heater.*”)

**[MP] ROUGH-IN.** The installation of the parts of the plumbing system that must be completed prior to the installation of fixtures. This includes DWV, water supply and built-in fixture supports.

**[RB] RUNNING BOND.** The placement of *masonry units* such that head joints in successive courses are horizontally offset not less than one-quarter the unit length.

**[RE] R-VALUE (THERMAL RESISTANCE).** For the definition applicable in Chapter 11, see Section N1101.6.

**[RG] SAFETY SHUTOFF DEVICE.** See “*Flame safeguard.*”

**[MP] SANITARY SEWER.** A sewer that carries sewage and excludes storm, surface and groundwater.

**SCREEN ENCLOSURE.** A building or part thereof, in whole or in part self-supporting, and having walls of insect screening with or without removable vinyl or acrylic wind break panels 10 mil or less with a Class A Flame Spread, and a roof.

**[RB] SCUPPER.** An opening in a wall or parapet that allows water to drain from a roof.

**[RB] SEISMIC DESIGN CATEGORY (SDC).** A classification assigned to a structure based on its occupancy category and the severity of the design earthquake ground motion at the site.

**[RM] SELF-CONTAINED EQUIPMENT.** Complete, factory-assembled and tested, heating, air-conditioning or refrigeration *equipment* installed as a single unit, and having all working parts, complete with motive power, in an enclosed unit of said machinery.

**[MP] SEPTIC TANK.** A watertight receptor that receives the discharge of a building sanitary drainage system and is constructed so as to separate solids from the liquid, digest organic matter through a period of detention, and allow the liquids to discharge into the soil outside of the tank through a system of open joint or perforated piping or a seepage pit.

**SCREW LAMP HOLDERS.** A lamp base that requires a screw-in-type lamp, such as a compact fluorescent, incandescent, or tungsten halogen bulb.

**[RP] SELF-CLOSING FAUCET.** A faucet containing a valve that automatically closes upon deactivation of the opening means.

**SEMI-CONDITIONED SPACE.** A space within the building thermal envelope that is not directly heated and/or cooled.

**[RG] SERVICE METER ASSEMBLY.** The meter, valve, regulator, piping, fittings and equipment installed by the service gas supplier before the *point of delivery*.

**SERVICE WATER HEATING.** Supply of hot water for purposes other than comfort heating. For the definition applicable in Chapter 11, see Section N1101.6.

**[MP] SEWAGE.** Any liquid waste containing animal matter, vegetable matter or other impurity in suspension or solution. Any liquid waste containing animal or vegetable matter in suspension or solution, including liquids containing chemicals in solution.

**[RP] SEWAGE EJECTOR.** A device for lifting sewage by entraining the sewage in a high-velocity jet of steam, air or water.

**[MP] SEWAGE PUMP.** A permanently installed mechanical device for removing sewage or liquid waste from a sump.

**[RP] SEWER.**

**Building sewer.** See “*Building sewer.*”

**Public sewer.** That part of the drainage system of pipes, installed and maintained by a city, township, county, public utility company or other public entity, and located on public property, in the street or in an approved dedicated easement of public or community use.

**Sanitary sewer.** A *sewer* that carries sewage and excludes storm, surface and ground water.

**Storm sewer.** A *sewer* that conveys rainwater, surface water, subsurface water and similar liquid wastes.

**SHAFT.** An enclosed space extending through one or more stories of a building, connecting vertical openings in successive floors, or floors and the roof.

**SHAFT ENCLOSURE.** The walls or construction forming the boundaries of a shaft.

**[RB] SHALL.** The term, where used in the code, is construed as mandatory.

**[RB] SHEAR WALL.** A general term for walls that are designed and constructed to resist racking from seismic and wind by use of masonry, concrete, cold-formed steel or wood framing in accordance with Chapter 6 of this code and the associated limitations in Section R301.2 of this code.

**[RB] SHINGLE FASHION.** A method of installing roof or wall coverings, *water-resistive barriers*, flashing or other building components such that upper layers of material are placed overlapping lower layers of material to provide drainage and protect against water intrusion at unsealed penetrations and joints or in combination with sealed joints.

**SIDE VENT.** A vent connecting to the drain pipe through a fitting at an angle less than 45 degrees (0.79 rad) to the horizontal.

**[RB] SINGLE-PLY MEMBRANE.** A roofing membrane that is field applied using one layer of membrane material (either homogeneous or composite) rather than multiple layers.

**[RB] SINGLE-STATION SMOKE ALARM.** An assembly incorporating the detector, control equipment and alarm sounding device in one unit that is operated from a power supply either in the unit or obtained at the point of installation.

~~**[RE] SITE-RECOVERED ENERGY.** Waste energy recovered at the building site that is used to off set consumption of purchased fuel or electrical energy supplies.~~

**[RE] SKYLIGHT.** Glass or other transparent or translucent glazing material installed at a slope of less than 60 degrees (1.05 rad) from horizontal. Glazing material in skylights, including unit skylights, solariums, sunrooms, roofs and sloped walls is included in this definition. For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] SKYLIGHT, UNIT.** A factory assembled, glazed fenestration unit, containing one panel of glazing material, that allows for natural daylighting through an opening in the *roof assembly* while preserving the weather-resistant barrier of the roof.

**[RB] SKYLIGHT AND SLOPED GLAZING.** Glass or other transparent or translucent glazing material installed at a slope of 15 degrees (0.26 rad) or more from vertical. Glazing materials in skylights, including unit skylights, tubular daylighting devices, solariums, sunrooms, roofs and sloped walls are included in this definition. For the definition applicable in Chapter 11, see Section N1101.6.

**SLEEPING ROOM.** A room designated as sleeping or bedroom on the plans and permit application.

**[RB] SLEEPING UNIT.** A single unit that provides rooms or spaces for one or more persons, includes permanent provisions for sleeping and can include provisions for living, eating and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a *dwelling unit* are not sleeping units.

**[MP] SLIP JOINT.** A mechanical-type joint used primarily on fixture traps. The joint tightness is obtained by compressing a friction-type washer such as rubber, nylon, neoprene, lead or special packing material against the pipe by the tightening of a (slip) nut.

**[MP] SLOPE.** The fall (pitch) of a line of pipe in reference to a horizontal plane. In drainage, the slope is expressed as the fall in units vertical per units horizontal (percent) for a length of pipe.

**[RB] SMOKE-DEVELOPED INDEX.** A comparative measure, expressed as a dimensionless number, derived from measurements of smoke obscuration versus time for a material tested in accordance with ASTM E84 or UL 723.

**[MP] SOIL STACK OR PIPE.** A pipe that conveys sewage containing fecal material to the *building drain* or *building sewer*.

**[RE] SOLAR ENERGY SOURCE.** A source of thermal, chemical, or electrical energy derived from direct conversion of incident solar radiation at the building site.

**[RB] SOLAR ENERGY SYSTEM.** A system that converts solar radiation to usable energy, including *photovoltaic panel systems* and *solar thermal systems*.

**[RE] SOLAR HEAT GAIN COEFFICIENT (SHGC).** The ratio of the solar heat gain entering the space through the fenestration assembly to the incident solar radiation. Solar heat gain includes directly transmitted solar heat and absorbed solar radiation that is then reradiated, conducted or convected into the space. This value is related to the shading coefficient (SC) by the formula  $SHGC = 0.87 \times SC$ . For the definition applicable in Chapter 11, see Section N1101.6.

**[MP] SOLAR THERMAL COLLECTOR.** Components in a *solar thermal system* that collect and convert solar radiation to thermal energy.

**[MP] SOLAR THERMAL SYSTEM.** A system that converts solar radiation to thermal energy for use in heating or cooling.

**[RP] SPILLPROOF VACUUM BREAKER.** An assembly consisting of one check valve force loaded closed and an air inlet vent valve force loaded open to atmosphere, positioned downstream of the check valve, and located between and including two tightly closing shutoff valves and a test cock.

**[RB] SOLID MASONRY.** Load-bearing or nonload-bearing construction using *masonry units* where the net cross-sectional area of each unit in any plane parallel to the bearing surface is not less than 75 percent of its gross cross-sectional area. *Solid masonry* units shall conform to ASTM C55, C62, C73, C145 or C216.

**[RG] SPECIFIC GRAVITY.** As applied to gas, *specific gravity* is the ratio of the weight of a given volume to that of the same volume of air, both measured under the same condition.

**[RB] SPLINE.** A strip of wood structural panel cut from the same material used for the panel facings, used to connect two structural insulated panels. The strip (spline) fits into a groove cut into the vertical edges of the two structural insulated panels to be joined. Splines are used behind each facing of the structural insulated panels being connected as shown in Figure R613.8 R610.8.

**[MP] STACK.** A general term for any vertical line of soil, waste, vent or inside conductor piping that extends through at least one story with or without offsets as directly as possible to its vent terminal.

**[RB] STACK BOND.** The placement of *masonry units* in a bond pattern is such that head joints in successive courses are vertically aligned. For the purpose of this code, requirements for stack bond shall apply to all masonry laid in other than *running bond*.

**[RP] STACK VENT.** The extension of soil or waste stack above the highest horizontal drain connected to the ~~stack~~.

**[RP] STACK VENTING.** A method of venting a fixture or fixtures through the soil or waste *stack*.

**[RB] STAIR.** A change in elevation, consisting of one or more *risers*.

**[RB] STAIRWAY.** One or more flights of stairs, either interior or exterior, with the necessary landings and connecting platforms to form a continuous and uninterrupted passage from one level to ~~another within or attached to a building, porch or deck~~ another.

**[RB] STAIRWAY, SPIRAL.** A stairway with a plan view of closed circular form and uniform section-shaped treads radiating from a minimum-diameter circle.

**[RE] STANDARD REFERENCE DESIGN.** A version of the *proposed design* that meets the minimum requirements of this code and is used to determine the maximum annual energy use requirement for compliance based on total building performance. For the definition applicable in Chapter 11, see Section N1101.6.

**STORY, ATTIC.** Any story situated wholly or partly in the roof, so designated, arranged or built as to be used for storage or habitation. If an attic that is accessible by a fixed stairway has a 7-foot clear height for greater than 50 percent of the floor area of the story below, then the space shall be considered as a story.

**[RB] STANDARD TRUSS.** Any construction that does not permit the roof-ceiling insulation to achieve the required *R*-value over the exterior walls.

**[MP] STATIONARY FUEL CELL POWER PLANT.** A self-contained package or factory-matched packages that constitute an automatically operated assembly of integrated systems for generating useful electrical energy and recoverable thermal energy that is permanently connected and fixed in place.

**[RM] STEAM-HEATING BOILER.** A boiler operated at pressures not exceeding 15 psi (103 kPa) for steam.

**[MP] STORM SEWER, DRAIN.** A pipe used for conveying rainwater, surface water, subsurface water and similar liquid waste.

**[RB] STORM SHELTER.** A building, structure or portion thereof, constructed in accordance with ICC 500 and designated for use during a severe wind storm event, such as a hurricane or tornado.

**[RB] STORY.** That portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above. A flood-resistant enclosure, designed to break away so as not to cause collapse, shall not be considered as a story when determining height.

**[RB] STORY ABOVE GRADE PLANE.** Any *story* having its finished floor surface entirely above *grade plane*, except that a *basement* shall be considered as a *story above grade plane* where the finished surface of the floor above the *basement* meets any one of the following:

1. More than 6 feet (1829 mm) *above grade plane*.
2. More than 12 feet (3658 mm) above the finished ground level at any point.
3. More than 6 feet (1829 mm) above the finished ground level for more than 50 percent of the total building perimeter.

**[RB] STRUCTURAL COMPOSITE LUMBER.** Structural members manufactured using wood elements bonded together with exterior adhesives.

Examples of structural composite lumber are:

**Laminated strand lumber (LSL).** A composite of wood strand elements with wood fibers primarily oriented along the length of the member, where the least dimension of the wood strand elements is 0.10 inch (2.54 mm) or less and their average lengths are not less than 150 times the least dimension of the wood strand elements.

**Laminated veneer lumber (LVL).** A composite of wood veneer elements with wood fibers primarily oriented along the length of the member, where the veneer element thicknesses are 0.25 inch (6.4 mm) or less.

**Oriented strand lumber (OSL).** A composite of wood strand elements with wood fibers primarily oriented along the length of the member, where the least dimension of the wood strand elements is 0.10 inch (2.54 mm) or less and their average lengths are not less than 75 times and less than 150 times the least dimension of the wood strand elements.

**Parallel strand lumber (PSL).** A composite of wood strand elements with wood fibers primarily oriented along the length of the member, where the least dimension of the wood strand elements is 0.25 inch (6.4 mm) or less and their average lengths are not less than 300 times the least dimension of the wood strand elements.

**[RB] STRUCTURAL INSULATED PANEL (SIP).** A structural sandwich panel that consists of a lightweight foam plastic core securely laminated between two thin, rigid wood structural panel facings.

**[RB] STRUCTURE.** That which is built or constructed.

**[RB] SUBSOIL DRAIN.** A drain that collects subsurface water or seepage water and conveys such water to a place of disposal.

**[MP] SUMP.** A tank or pit that receives sewage or waste, located below the normal *grade* of the gravity system and that must be emptied by mechanical means.

**[MP] SUMP PUMP.** An automatic water pump powered by an electric motor for the removal of drainage, except raw sewage, from a sump, pit or low point. The pump is selected for the specific head and volume of the load and is usually operated by level controllers.

**SUMP PUMP, SINGLE POINT-OF-USE.** An automatic water pump powered by an electric motor for the removal of drainage, except raw sewage, from a single fixture trap. The pump is selected for the specific head and volume of the load and is usually operated by level controllers.

**[RP] SUMP VENT.** A vent from pneumatic sewage ejectors, or similar equipment, that terminates separately to the open air.

**[RB] SUNROOM.** A one-story structure attached to a *dwelling* with a *glazing area* in excess of 40 percent of the gross area of the structure's *exterior walls* and roof. For the definition applicable in Chapter 11, see Section N1101.6.

**[MP] SUPPLY AIR.** Air delivered to a *conditioned space* through ducts or plenums from the heat exchanger of a heating, cooling or ventilating system.

**[RM] SUPPLY AIR.** That air delivered to each or any space supplied by the air distribution system or the total air delivered to all spaces supplied by the air distribution system, which is provided for ventilating, heating, cooling, humidification, dehumidification and other similar purposes.

**[RM] SUPPLY AIR SYSTEM.** An assembly of connected ducts, *plenums*, fittings, registers and grilles through which air, heated or cooled, is conducted from the supply unit to the space or spaces to be heated or cooled (see also *Return air system*).

**[MP] SUPPORTS.** Devices for supporting, hanging and securing pipes, fixtures and equipment.

**[RP] SWEEP.** A ~~cast iron~~ drainage fitting designed to provide a change in direction of a drain pipe of less than the angle specified by the amount necessary to establish the desired slope of the line. Sweeps provide a longer turning radius than bends and a less turbulent flow pattern. (see "Bend" and "Elbow"). Sweeps can be plastic or metal.

**[RG] SYSTEM SHUTOFF.** A valve installed after the *point of delivery* to shut off the entire piping system.

**[MP] TEMPERATURE- AND PRESSURE-RELIEF (T AND P) VALVE.** A combination relief valve designed to function as both a temperature-relief and pressure-relief valve.

**[MP] TEMPERATURE-RELIEF VALVE.** A temperature-actuated valve designed to discharge automatically at the temperature at which it is set.

**[RP] TEMPERED WATER.** Water having a temperature range between 85°F (29°C) and 110°F (43°C).

**[RB] TERMITE-RESISTANT MATERIAL.** Pressure-preservative-treated wood in accordance with the AWPA standards in Section R317.1, naturally durable termite-resistant wood, steel, concrete, masonry or other *approved* material.

**[RB] THERMAL ISOLATION.** Physical and space conditioning separation from *conditioned space(s)* consisting of existing or new walls, doors or windows. The *conditioned space(s)* shall be controlled as separate zones for heating and cooling or conditioned by separate *equipment*. For the definition applicable in Chapter 11, see Section N1101.6.

**[RE] THERMAL RESISTANCE, R-VALUE.** See "*R-value*."

**[RE] THERMAL TRANSMITTANCE, U-FACTOR.** See "*U-factor*."

**[RE] THERMOSTAT.** For the definition applicable in Chapter 11, see Section N1101.6.

**[RG] THERMOSTAT. (See types that follow.)**

**Electric switch type.** A device that senses changes in temperature and controls electrically, by means of separate components, the flow of gas to the *burner(s)* to maintain selected temperatures.

**Integral gas valve type.** An automatic device, actuated by temperature changes, designed to control the gas supply to the *burner(s)* in order to maintain temperatures between predetermined limits, and in which the thermal actuating element is an integral part of the device.

1. Graduating thermostat. A thermostat in which the motion of the valve is approximately in direct proportion to the effective motion of the thermal element induced by temperature change.

2. Snap-acting thermostat. A thermostat in which the thermostatic valve travels instantly from the closed to the open position, and vice versa.

**[MP] THIRD-PARTY CERTIFICATION AGENCY.** An *approved* agency operating a product or material certification system that incorporates initial product testing, assessment and surveillance of a manufacturer's quality control system.

**[MP] THIRD-PARTY CERTIFIED.** Certification obtained by the manufacturer indicating that the function and performance characteristics of a product or material have been determined by testing and ongoing surveillance by an *approved* third-party certification agency. Assertion of certification is in the form of identification in accordance with the requirements of the third-party certification agency.



~~[RB] THIRD PARTY TESTED. Procedure by which an approved testing laboratory provides documentation that a product, material or system conforms to specified requirements.~~

**[RG] TOILET, GAS-FIRED.** A packaged and completely assembled *appliance* containing a toilet that incinerates refuse instead of flushing it away with water.

~~**TOILET ROOM.** A room containing a water closet and, frequently, a lavatory, but not a bathtub, shower, spa or similar bathing fixture.~~

**[RB] TOWNHOUSE.** A single-family *dwelling unit* constructed in a group of two or more attached units separated by property lines, or three or more attached units separated by assumed property lines based on the location of the double wall or common wall in which each unit extends from foundation to roof and with a *yard* or public way on not less than two sides.

**[RB] TOWNHOUSE UNIT.** A single-family *dwelling unit* in a *townhouse* that extends from foundation to roof and that has a *yard* or *public way* on not less than two sides.

**[MP] TRAP.** A fitting, either separate or built into a fixture, that provides a liquid seal to prevent the emission of sewer gases without materially affecting the flow of sewage or wastewater through it.

**[MP] TRAP ARM.** That portion of a *fixture drain* between a trap weir and the vent fitting.

**[MP] TRAP PRIMER.** A device or system of piping to maintain a water seal in a trap, typically installed where infrequent use of the trap would result in evaporation of the trap seal, such as floor drains.

**[MP] TRAP SEAL.** The trap seal is the maximum vertical depth of liquid that a trap will retain, measured between the crown weir and the top of the dip of the trap.

**[RB] TRIM.** Picture molds, chair rails, baseboards, *handrails*, door and window frames, and similar decorative or protective materials used in fixed applications.

**[RB] TRUSS DESIGN DRAWING.** The graphic depiction of an individual truss, that describes the design and physical characteristics of the truss.

**[RB] TUBULAR DAYLIGHTING DEVICE (TDD).** A nonoperable fenestration unit primarily designed to transmit daylight from a roof surface to an interior ceiling via a tubular conduit. The basic unit consists of an exterior glazed weathering surface, a light-transmitting tube with a reflective interior surface, and an interior-sealing device such as a translucent ceiling panel. The unit may be factory assembled, or field assembled from a manufactured kit.

**[MP] TYPE L VENT.** A *listed* and *labeled* vent conforming to UL 641 for venting oil-burning *appliances listed* for use with Type L vents or with gas *appliances listed* for use with Type B vents.

**[RE] U-FACTOR, THERMAL TRANSMITTANCE.** The coefficient of heat transmission (air to air) through a building component or assembly, equal to the time rate of heat flow per unit area and unit temperature difference between the warm side and cold side air films (Btu/h·ft<sup>2</sup>·°F)/[W/(m<sup>2</sup>·K)]. For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] UNDERLAYMENT.** One or more layers of felt, sheathing paper, nonbituminous saturated felt, or other *approved* material over which a roof covering, with a slope of 2 units vertical in 12 units horizontal (17-percent slope) or greater, is applied.

**[RG] UNIT HEATER.**

~~**High-static pressure type.** A self-contained, automatically controlled, vented *appliance* having integral means for circulation of air against 0.2 inch w.c. (50 Pa) or greater static pressure. Such *appliance* is equipped with provisions for attaching an outlet air duct and, where the *appliance* is for indoor installation remote from the space to be heated, is also equipped with provisions for attaching an inlet air duct.~~

~~**Low-static pressure type.** A self-contained, automatically controlled, vented *appliance*, intended for installation in the space to be heated without the use of ducts, having integral means for circulation of air. Such units are allowed to be equipped with louvers or face extensions made in accordance with the manufacturer's specifications.~~

A self-contained, automatically controlled, vented, fuel-gas-burning, space-heating *appliance*, intended for installation in the space to be heated without the use of ducts, and having integral means for circulation of air.

**[RG] UNVENTED ROOM HEATER.** An unvented heating *appliance* designed for stationary installation and utilized to provide comfort heating. Such *appliances* provide radiant heat or convection heat by gravity or fan circulation directly from the heater and do not utilize ducts.

**[RP] VACUUM.** Any pressure less than that exerted by the atmosphere.

**[MP] VACUUM BREAKER.** A device that prevents back-siphonage of water by admitting atmospheric pressure through ports to the discharge side of the device.

**[RG] VALVE.** A device used in piping to control the gas supply to any section of a system of *piping* or to an *appliance*.

**Appliance shutoff.** A *valve* located in the *piping system*, used to isolate individual *appliances* for purposes such as service or replacement.

**Automatic.** An automatic or semiautomatic device consisting essentially of a *valve* and an operator that control the gas supply to the *burner(s)* during operation of an *appliance*. The operator shall be actuated by application of gas pressure on a flexible diaphragm, by electrical means, by mechanical means or by other *approved* means.

**Automatic gas shutoff.** A *valve* used in conjunction with an automatic gas shutoff device to shut off the gas supply to a water-heating system. It shall be constructed integrally with the gas shutoff device or shall be a separate assembly.

**Individual main burner.** A *valve* that controls the gas supply to an individual *main burner*.

**Main burner control.** A *valve* that controls the gas supply to the *main burner* manifold.

**Manual main gas-control.** A manually operated *valve* in the gas line for the purpose of completely turning on or shutting off the gas supply to the *appliance*, except to *pilot* or pilots that are provided with independent shutoff.

**Manual reset.** An automatic shutoff valve installed in the gas supply *piping* and set to shut off when unsafe conditions occur. The device remains closed until manually reopened.

**Service shutoff.** A valve, installed by the serving gas supplier between the ~~service meter or~~ source of supply and the customer *piping system point of delivery*, to shut off the entire *piping system*.

**[RB] VAPOR DIFFUSION PORT.** An assembly constructed or installed within a *roof assembly* at an opening in the *roof deck* to convey water vapor from an unvented attic to the outside atmosphere.

**[RB] VAPOR PERMEABLE.** The property of having a moisture vapor permeance rating of 5 perms ( $2.9 \times 10^{-10}$  kg/Pa  $\times$  s  $\times$  m<sup>2</sup>) or greater, where tested in accordance with Procedure A or Procedure B of ASTM E96. A vapor permeable material permits the passage of moisture vapor.

**[RB] VAPOR RETARDER CLASS.** A measure of the ability of a material or assembly to limit the amount of moisture that passes through that material or assembly. Vapor retarder class shall be defined using the desiccant method with Procedure A of ASTM E96 as follows:

Class I:  $\leq 0.1$  perm rating

Class II:  $> 0.1$  to  $\leq 1.0$  perm rating

Class III:  $> 1.0$  to  $\leq 10$  perm rating

**[MP] VENT.** A passageway for conveying flue gases from fuel-fired *appliances*, or their vent connectors, to the outside atmosphere.

**[RG] VENT.** A *pipe* or other conduit composed of factory-made components, containing a passageway for conveying *combustion products* and air to the atmosphere, *listed* and *labeled* for use with a specific type or class of *appliance*.

**Special gas vent.** A vent *listed* and *labeled* for use with *listed* Category II, III and IV gas *appliances*.

**Type B vent.** A vent *listed* and *labeled* for use with *appliances* with *draft hoods* and other Category I *appliances* that are *listed* for use with Type B vents.

**Type BW vent.** A vent *listed* and *labeled* for use with wall *furnaces*.

**Type L vent.** A vent *listed* and *labeled* for use with *appliances* that are *listed* for use with Type L or Type B vents.

**[RG] VENT PIPING.**

**Breather.** *Piping* run from a pressure-regulating device to the outdoors, designed to provide a reference to *atmospheric pressure*. If the device incorporates an integral pressure *relief* mechanism, a breather vent can also serve as a *relief vent*.

**Relief.** *Piping* run from a pressure-regulating or pressure-limiting device to the outdoors, designed to provide for the safe venting of gas in the event of excessive pressure in the *gas piping system*.

**[MP] VENT COLLAR.** See "*Flue collar*."

**[MP] VENT CONNECTOR.** That portion of a venting system that connects the flue collar or draft hood of an *appliance* to a vent.

**[MP] VENT DAMPER DEVICE, AUTOMATIC.** A device intended for installation in the venting system, in the outlet of an individual, automatically operated fuel-burning *appliance* and that is designed to open the venting system automatically where the *appliance* is in operation and to close off the venting system automatically where the *appliance* is in a standby or shutdown condition.

**[MP] VENT GASES.** Products of combustion from fuel-burning *appliances*, plus excess air and dilution air, in the venting system above the draft hood or draft regulator.

**[RP] VENT PIPE.** See “Vent system.”

**[MP] VENT STACK.** A vertical vent pipe installed to provide circulation of air to and from the drainage system and that extends through one or more stories.

**[MP] VENT SYSTEM.** A pipe or pipes installed to provide a flow of air to or from a plumbing drainage system, or to provide a circulation of air within such system to protect trap seals from siphonage and backpressure.

**[RG] VENTED APPLIANCE CATEGORIES.** *Appliances* that are categorized for the purpose of vent selection are classified into the following four categories:

**Category I.** An *appliance* that operates with a nonpositive vent static pressure and with a vent gas temperature that avoids excessive *condensate* production in the vent.

**Category II.** An *appliance* that operates with a nonpositive *vent* static pressure and with a vent gas temperature that is capable of causing excessive *condensate* production in the vent.

**Category III.** An *appliance* that operates with a positive vent static pressure and with a vent gas temperature that avoids excessive *condensate* production in the vent.

**Category IV.** An *appliance* that operates with a positive vent static pressure and with a vent gas temperature that is capable of causing excessive *condensate* production in the vent.

**[RG] VENTED ROOM HEATER.** A vented self-contained, free-standing, nonrecessed *appliance* for furnishing warm air to the space in which it is installed, directly from the heater without duct connections.

**[RG] VENTED WALL FURNACE.** A self-contained vented *appliance* complete with grilles or equivalent, designed for incorporation in or permanent attachment to the structure of a building, mobile home or travel trailer, and furnishing heated air circulated by gravity or by a fan directly into the space to be heated through openings in the casing. This definition shall exclude *floor furnaces*, *unit heaters* and *central furnaces* as herein defined.

**[RM] VENTILATION AIR.** That portion of supply air that comes from the outside (outdoors), plus any recirculated air that has been treated to maintain the desired quality of air within a designated space.

**[RG] VENTING SYSTEM.** A continuous open passageway from the *flue collar* or *draft hood* of an *appliance* to the outdoor atmosphere for the purpose of removing flue or vent gases. A venting system is usually composed of a vent or a chimney and *vent connector*, if used, assembled to form the open passageway.

**Forced draft venting system.** A portion of a venting system using a fan or other mechanical means to cause the removal of flue or vent gases under positive static vent pressure.

**Induced draft venting system.** A portion of a venting system using a fan or other mechanical means to cause the removal of flue or vent gases under nonpositive static vent pressure.

**Mechanical draft venting system.** A venting system designed to remove flue or vent gases by mechanical means, that consists of an induced draft portion under non-positive static pressure or a forced draft portion under positive static pressure.

**Natural draft venting system.** A venting system designed to remove flue or vent gases under nonpositive static vent pressure entirely by natural draft.

**VENTILATION.** The natural or mechanical process of supplying conditioned or unconditioned air to, or removing such air from, any space. For the definition applicable in Chapter 11, see Section N1101.6.

**[RM] VENTILATION AIR.** That portion of supply air that comes from the outside (outdoors), plus any recirculated air that has been treated to maintain the desired quality of air within a designated space. For the definition applicable in Chapter 11, see Section N1101.6.

**[MP] VENTING.** Removal of combustion products to the outdoors.

**[MP] VENTING SYSTEM.** A continuous open passageway from the flue collar of an *appliance* to the outside atmosphere for the purpose of removing flue or vent gases. A venting system is usually composed of a vent or a chimney and vent connector, if used, assembled to form the open passageway.

**[MP] VERTICAL PIPE.** Any pipe or fitting that makes an angle of 45 degrees (0.79 rad) or more with the horizontal.

**[RB] VINYL SIDING.** A shaped material, made principally from rigid polyvinyl chloride (PVC), that is used to cover exterior walls of buildings.

~~**[RE] VERTICAL FENESTRATION.** Windows (fixed or moveable), opaque doors, glazed doors, glazed block and combination opaque/glazed doors composed of glass or other transparent or translucent glazing materials and installed at a slope of a least 60 degrees (1.05 rad) from horizontal.~~

**[RE] VISIBLE TRANSMITTANCE [VT].** The ratio of visible light entering the space through the fenestration product assembly to the incident visible light. Visible transmittance includes the effects of glazing material and frame and is expressed as a number between 0 and 1. For the definition applicable in Chapter 11, see Section N1101.6.

**WALL, ABOVE-GRADE.** A wall more than 50 percent above-grade and enclosing *conditioned space*. This includes between-floor spandrels, peripheral edges of floors, roof and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof and skylight shafts.

**WALL, CRAWLSPACE.** The opaque portion of a wall that encloses a crawl space and is partially or totally below grade.

**[RB] WALL, RETAINING.** A wall not laterally supported at the top, that resists lateral soil load and other imposed loads.

**[RG] WALL HEATER, UNVENTED TYPE.** A room heater of the type designed for insertion in or attachment to a wall or partition. Such heater does not incorporate concealed venting arrangements in its construction and discharges all products of *combustion* through the front into the room being heated.

**WALL VENTED CRAWL SPACE.** A foundation that uses foundation wall vents as a primary means to control space moisture. Insulation is located at the floor level.

**[RB] WALLS.** Walls shall be defined as follows:

**Load-bearing wall.** A wall supporting any vertical load in addition to its own weight.

**Nonbearing wall.** A wall which does not support vertical loads other than its own weight.

**[MP] WASTE.** Liquidborne waste ~~that is free of~~ does not contain fecal matter.

**[MP] WASTE PIPE OR STACK.** Piping that conveys only liquid sewage not containing fecal material.

**[MP] WASTE RECEPTOR.** A floor sink, standpipe, hub drain or a floor drain that receives the discharge of one or more indirect waste pipes.

**[MP] WATER DISTRIBUTION SYSTEM.** Piping that conveys water from the service to the plumbing fixtures, *appliances*, appurtenances, equipment, devices or other systems served, including fittings and control valves.

**WATER-HAMMER ARRESTOR.** A device utilized to absorb the pressure surge (water hammer) that occurs when water flow is suddenly stopped in a water supply system

**[MP] WATER HEATER.** Any heating *appliance* or equipment that heats potable water and supplies such water to the potable hot water distribution system.

**[MP] WATER MAIN.** A water supply pipe or system of pipes, installed and maintained by a city, township, county, public utility company or other public entity, on public property, in the street or in an approved dedicated easement of public or community use.

~~**[MP] WATER OUTLET.** A valved discharge opening, including a hose bibb, through which water is removed from the potable water system supplying water to a plumbing fixture or plumbing *appliance* that requires either an *air gap* or backflow prevention device for protection of the supply system.~~ A discharge opening through which water is supplied to a fixture, into the atmosphere, such as a hose bibb, (except into an open tank that is part of the water supply system), to a boiler or heating system, or to any devices or equipment requiring water to operate but which are not part of the plumbing system.

**[RP] WATER PIPE.**

**Riser.** A water supply pipe that extends one full story or more to convey water to *branches* or to a group of fixtures.

**Water distribution pipe.** A pipe within the structure or on the premises that conveys water from the water service pipe, or from the meter when the meter is at the structure, to the points of utilization.

**Water service pipe.** The pipe from the water main or other source of potable water supply, or from the meter when the meter is at the public right of way, to the water distribution system of the building served. Water service pipe shall terminate 5 feet (1524 mm) outside the foundation wall.

~~[MP] WATER SERVICE PIPE. The outside pipe from the water main or other source of potable water supply to the water distribution system inside the building, terminating at the service valve. Water service pipe shall terminate 5 feet (1524 mm) outside the foundation wall.~~

**[MP] WATER SUPPLY SYSTEM.** The water service pipe, the water-distributing pipes and the necessary connecting pipes, fittings, control valves and appurtenances in or adjacent to the building or premises.

**[RB] WATER-RESISTIVE BARRIER.** A material behind an exterior wall covering that is intended to resist liquid water that has penetrated behind the exterior covering from further intruding into the exterior wall assembly.

**[RP] WEIGHTED AVERAGE LEAD CONTENT.** The weighted average lead content of a pipe, pipe fitting, plumbing fitting, or fixture shall be calculated by using the following formula: For each wetted component, the percentage of lead in the component shall be multiplied by the ratio of the wetted surface area of that component to the total wetted surface area of the entire product to arrive at the weighted percentage of lead of the component. The weighted percentage of lead of each wetted component shall be added together, and the sum of these wetted percentages shall constitute the weighted average lead content of the product. For lead content of materials that are provided as a range, the maximum content of the range shall be used.

**[MP] WET VENT.** A vent that receives the discharge of wastes from other fixtures.

**[RP] WHIRLPOOL BATHTUB.** A plumbing appliance consisting of a bathtub fixture that is equipped and fitted with a circulating piping system designed to accept, circulate and discharge bathtub water upon each use.

**[MP] WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM.** An exhaust system, supply system, or combination thereof that is designed to mechanically exchange indoor air for outdoor air where operating continuously or through a programmed intermittent schedule to satisfy the whole-house ventilation rate.

For the definition applicable in Chapter 11, see Section N1101.6.

**[RB] WINDBORNE DEBRIS REGION.** Areas within *hurricane-prone regions* defined as that area east of the Intracoastal Waterway from the North Carolina/South Carolina state line north to Beaufort Inlet and from that point to include the barrier islands to the North Carolina/Virginia state line.

**[RB] WINDER.** A tread with nonparallel edges.

**[RB] WOOD STRUCTURAL PANEL.** A panel manufactured from veneers; or wood strands or wafers; bonded together with waterproof synthetic resins or other suitable bonding systems. Examples of wood structural panels are plywood, orientated strand board (OSB) or composite panels.

**[RB] YARD.** An open space, other than a court, unobstructed from the ground to the sky, except where specifically provided by this code, on the *lot* on which a building is situated.

**YARD HYDRANT.** A freeze proof yard hydrant is an outdoor water supply outlet that has a valve and outlet above ground and a drain opening below the frost level.

~~**WATERPROOFING.** A coating or the application of coatings applied to prevent the penetration of water through or into walls or into interior spaces.~~

~~**WINDOW.** See “*Fenestration*.”~~

**ZONE.** A space or group of spaces within a building with heating or cooling requirements that are sufficiently similar so that desired conditions can be maintained throughout using a single controlling device. For the definition applicable in Chapter 11, see Section N1101.6.

## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

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**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Monday, February 19, 2024 4:56 PM

**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>; Rules, Oah <oah.rules@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>; McGhee, Dana <dana.McGhee@oah.nc.gov>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

Would “appurtenant” capture the meaning better?

Brian Liebman

Counsel to the North Carolina Rules Review Commission

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**From:** Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>

**Sent:** Monday, February 19, 2024 11:36 AM

**To:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>; Rules, Oah <[oah.rules@oah.nc.gov](mailto:oah.rules@oah.nc.gov)>

**Cc:** Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>; Holder, Karen <[Karen.Holder@ncdoi.gov](mailto:Karen.Holder@ncdoi.gov)>; Childs, Nathan D <[nchilds@NCDOJ.GOV](mailto:nchilds@NCDOJ.GOV)>; McGhee, Dana <[dana.McGhee@oah.nc.gov](mailto:dana.McGhee@oah.nc.gov)>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

Brian,

Good morning.

*DBR response: In studying the definitions further, “accessory” in the two definitions is changed to “incidental” to address the concerns of the RRC staff attorney while still meeting the intent of the definitions in the application R101.2.1 Accessory buildings and R101.2.2 Accessory structures.*

Attached are revised Chapter 2 and 400 Forms in word and pdf.

Let me know if you have any questions.

Thank you for your work on this.

**David B. Rittlinger, PE, LEED AP**  
Division Chief - Codes & Interpretations



**North Carolina Office of State Fire Marshal**  
1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
919.647.0008

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Link to free view of 2018 NC Codes

## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's  
**Attachments:** 02.2024 - BCC - NC Plumbing Code - Request for Changes.docx

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**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Sent:** Monday, February 19, 2024 4:51 PM  
**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>; Rules, Oah <oah.rules@oah.nc.gov>  
**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>; McGhee, Dana <dana.McGhee@oah.nc.gov>  
**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

David,

Attached, please find my requests for changes for the balance of the Plumbing Code. I will have a follow up on the Chapter 1 responses to you soon.

Thanks,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
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## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

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**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Friday, February 16, 2024 10:47 AM

**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>

**Subject:** Re: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

David,

I think it'd be fine to resubmit only the chapters you change.

Brian

Brian Liebman

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## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

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**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>

**Sent:** Friday, February 16, 2024 6:47 AM

**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

Brian,

Great.

Thank you for your work on this.

Have a great day

**David B. Rittlinger, PE, LEED AP**  
**Division Chief - Codes & Interpretations**



**North Carolina Office of State Fire Marshal**  
1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
919.647.0008

[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)

Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

---

**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Thursday, February 15, 2024 11:58 PM

**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

David,

I'm fine with Ch. 1 of the Residential Code as revised. Thanks for your answers.

Brian

Brian Liebman

Counsel to the North Carolina Rules Review Commission

Office of Administrative Hearings

(984)236-1948

[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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## Burgos, Alexander N

---

**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

---

**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>

**Sent:** Friday, February 16, 2024 6:47 AM

**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

Brian,

Good morning.

Would it be okay to just send you the changed chapters or would you like the entire submittal resubmitted.

Thank you.

**David B. Rittlinger, PE, LEED AP**  
**Division Chief - Codes & Interpretations**



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Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

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**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Thursday, February 15, 2024 11:27 PM

**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

David,

Attached, please find requests for changes for the remainder of the Residential Code. I will get back to you on your responses to Ch. 1 and the fiscal note issue separately.

Thanks,

Brian

Brian Liebman

Counsel to the North Carolina Rules Review Commission

Office of Administrative Hearings

(984)236-1948

[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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Email correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties by an authorized state official.

## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

**Importance:** High

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**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>

**Sent:** Thursday, February 15, 2024 10:56 AM

**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>; Rules, Oah <oah.rules@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>; McGhee, Dana <dana.McGhee@oah.nc.gov>; Ventaloro, Julie W <julie.ventaloro@osbm.nc.gov>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

**Importance:** High

Brian,

Good morning.

Every petition that is received by the NCBCC is thoroughly reviewed and scrutinized by OSFM staff and the various NCBCC committees and built-environment stakeholders concerning the requirements of NCGS 143-138(a1)(1) as the petition proceeds through the permanent rule making process.

A large majority of the petitions that impact the codes related to residential housing involve rules that are not mandatory for all dwellings.

As you have noticed in your reviews up to this point, there are many different materials and means and methods to build a dwelling within the NC Residential Code, many of which have no impacts to specific dwellings as they are clarifying existing rules or are not mandatory code provisions applicable to all dwellings.

### § 143-138. North Carolina State Building Code.

(a) Preparation and Adoption. – The Building Code Council may prepare and adopt, in accordance with the provisions of this Article, a North Carolina State Building Code. Before the adoption of the Code, or any part of the Code, the Council shall hold at least one public hearing. A notice of the public hearing shall be published in the North Carolina Register at least 15 days before the date of the hearing. Notwithstanding G.S. 150B-2(8a)h., the North Carolina State Building Code as adopted by the Building Code Council is a rule within the meaning of G.S. 150B-2(8a) and shall be adopted in accordance with the procedural requirements of Article 2A of Chapter 150B of the General Statutes.

(a1) Additional Adoption Requirements. –

- (1) The Council shall request the Office of State Budget and Management to prepare a fiscal note for a proposed Code change that has a substantial economic impact, as defined in G.S. 150B-21.4(b1), or that increases the cost of residential housing by eighty dollars (\$80.00) or more per housing unit. The change can become effective only in accordance with G.S. 143-138(d). Neither the Department of Insurance nor the Council shall be required to expend any monies to pay for the preparation of any fiscal note under this section by any person outside of the Department or Council unless the Department or Council contracts with a third-party vendor to prepare the fiscal note.
- (2) The Council shall conduct a cost-benefit analysis for all proposed changes considered after January 1, 2018, to the North Carolina Energy Conservation Code.

For the 2024 NC Residential Code, the NCBCC and the various committees of stakeholders including architects, engineers, residential contractors, code officials and public representatives developed and adopted a code that does not increase the overall cost of every housing unit by \$80 or more.

During permanent rule development, the only objection to the 2024 NC Residential Code citing NCGS 143-138 (a1)(1) was by the NC Home Builders Association, the major association in NC that represents residential housing contractors

and builders, involving Chapter 11 Energy Conservation, which is why the petition under RRC review does not contain Chapters 11 through 24.

The chair of the Residential Standing Committee and Residential Ad-Hoc Committee that submitted the petition, Gary Embler, is a residential contractor and offered the amended petition to the NCBCC and concluded in the Appendix C code change proposal form that the cost of a dwelling collectively did not increase by \$80 or more for the 2024 NC Residential Code as long as Chapter 11 through 24 was not amended from the 2018 adopted and approved code language.

On 6/13/23, the 2024 NC Residential Code had a public hearing before the NCBCC in which the NC Home Builders Association, the major association in NC that represents residential housing contractors and builders, spoke in support of the 2024 NC Residential Code as Chapter 11 through 24 was not amended from the 2018 adopted and approved code language.

At no point during the adoption of the 2024 NC Residential Code did the public or any stakeholder in residential design and construction had cost increase concerns for the 2024 NC Residential Code as presented.

In passing NCGA Session Law 2023-108 on 8/16/23, the NC General Assembly restricted the NCBCC from amending Chapter 11 through Chapter 24 of the NC Residential Code because of the creation of the new Residential Code Council (Section 1) and because of public comments concerning increased home construction costs for contractors and consumers given the shortage of affordable housing across the state and the inflationary economic environment (Sections 7 and 8).

<https://www.ncleg.gov/BillLookup/2023/H488>

**Item C – 2 Request from the NC Building Code Council Residential Standing Committee to adopt the 2024 edition of the North Carolina Residential Code, Chapters 1-10, 25-33, 45, 46, and Appendices as presented by the committee as follows (230314 Item B-4):**

The proposed amendments to the 2021 International Residential Code, Chapters 1-10, 25-33, 45, 46 and Appendices to establish the 2024 NC Residential Code, Chapters 1-10, 25-33, 45, 46 and Appendices can be found at the following link on the NCDOT website. Select the link to “B-4 2024 NCRC Chapters 1-10 and 25-33 and 45-46 and Appendices”: <https://www.ncosfm.gov/news/events/building-code-council-meeting-march-14-2023>

The 2021 International Residential Code, Chapters 1-10, 25-33, 45, 46 and Appendices can be found at the following link on the ICC website: <https://codes.iccsafe.org/content/IRC2021P2>

David Sokal spoke to the omission of the energy code provision of Chapter 11 which does not apply to this item. Mr. Sokal also spoke to opposition of the proposed NC Legislature House Bill 488 and noted it is tied to the omission of Chapter 11 from this petition.

Ward Lenz, Executive Director NC Sustainable Energy Association, spoke to the omission of the energy code provision of Chapter 11, which does not apply to this item. Mr. Lenz encouraged that the energy code provisions be updated.

Chair Bridget Herring clarified that Chapter 11 of the Residential Code is a separate code change petition and public comments on that proposal are only appropriate during its respective public comment period and at the NCBCC public hearing on September 12, 2023.

Cliff Isaac with the NCHBA spoke in support of this item.

I offer this timeline to illustrate that NCGS 143-183(a1)(1) was considered and applied to the development and adoption of the 2024 NC Residential Code by NCBCC.

Please let me know if you have any questions or require further clarification.

**David B. Rittlinger, PE, LEED AP**  
**Division Chief - Codes & Interpretations**

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1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
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Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

## Burgos, Alexander N

---

**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

---

**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Tuesday, February 13, 2024 5:43 PM

**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>; Rules, Oah <oah.rules@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>; McGhee, Dana <dana.McGhee@oah.nc.gov>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's email #1 of 4

David,

I'm working my way through the Residential Code, and I wanted to confirm there's been no fiscal note prepared in connection with the Residential Code? That's what the form says, and I'm wondering how the Council has determined that the changes to the Residential Code don't increase the cost of a housing unit by \$80 or more. Can you address that for me?

Thanks,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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## Burgos, Alexander N

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**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's  
**Attachments:** 02.2024 - BCC - NC Plumbing Code Ch1 - Request for Changes.docx

---

**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Sent:** Thursday, February 8, 2024 11:20 AM  
**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>  
**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

David,

Attached are my requests for changes for Ch. 1 of the Plumbing Code. Again, responses due ASAP due to time constraints.

Let me know if you have any questions.

Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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## Burgos, Alexander N

---

**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's  
**Attachments:** 02.2024 - BCC - NC Residential Code Ch1 - Request for Changes.docx

---

**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Sent:** Tuesday, February 6, 2024 5:24 PM  
**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>  
**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

David,

Attached, please find my requests for changes for Ch 1 of the Residential Code. Considering the timeframe, responses are due ASAP.

I will have some requests on Ch. 1 of the Plumbing Code out to you within the next day or so.

Thanks,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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## Burgos, Alexander N

---

**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

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**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>

**Sent:** Friday, February 2, 2024 10:40 AM

**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

Brian,

You are welcome.

These should be fairly straightforward.

I look forward to receiving your comments.

Thank you for your work on this.

**David B. Rittlinger, PE, LEED AP**  
**Division Chief - Codes & Interpretations**



**North Carolina Office of State Fire Marshal**

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Raleigh, NC 27610

919.647.0008

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Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

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**From:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>

**Sent:** Friday, February 2, 2024 10:32 AM

**To:** Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>

**Cc:** Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>; Holder, Karen <[Karen.Holder@ncdoi.gov](mailto:Karen.Holder@ncdoi.gov)>; Childs, Nathan D <[nchilds@NCDOJ.GOV](mailto:nchilds@NCDOJ.GOV)>

**Subject:** RE: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's

Thanks, David. I will start reviewing ASAP.

Have a great weekend!

Brian

Brian Liebman

Counsel to the North Carolina Rules Review Commission

Office of Administrative Hearings

(984)236-1948

[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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## Burgos, Alexander N

---

**Subject:** FW: NC Building Code Council - 2024 NCPC and NCRC Chapter 1's  
**Attachments:** 2024 NCRC Chapter 1 RCC Full.pdf; 2024 NCRC Chapter 1 RCC Full.docx; RRC DRAFT-2024 NCPC PLUMBING CHAPTERS (01) (Marked-Up).pdf; RRC DRAFT-2024 NCPC PLUMBING CHAPTERS (01) (Marked-Up).docx

**Importance:** High

---

**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Sent:** Friday, February 2, 2024 7:31 AM  
**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>  
**Subject:** NC Building Code Council - 2024 NCPC and NCRC Chapter 1's  
**Importance:** High

Brian,

Good morning.

Attached are the formatted review aids for Chapter 1 of the 2024 NC Plumbing Code and the 2024 NC Residential Code to assist you in your review. As previously stated the Chapter 1's of these codes are tied to the 2024 NC Administrative Code and Policies, which was just approved on 1/31/24 by the RRC. Chapter 2 and beyond is all highly technical content, like all the NC codes except the 2024 NCACP.

Let me know if you have any questions.

Thank you for your work on this.

**David B. Rittlinger, PE, LEED AP**  
**Division Chief - Codes & Interpretations**



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Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

## Part I—Administrative

# CHAPTER 1 SCOPE AND ADMINISTRATION

## SECTION R101 SCOPE AND GENERAL REQUIREMENTS

**R101.1 Title.** These provisions shall be known as the North Carolina Residential Code for One- and Two-family Dwellings and shall be cited as such and will be referred to herein as “this code.” These regulations were adopted by the North Carolina Building Code Council on ~~June 13, 2017~~September 12, 2023 to be effective January 1, ~~2019~~2025. References to the International Codes shall mean the North Carolina Codes. The North Carolina Amendments to the International Codes are underlined.

**R101.2 Scope.** The provisions of ~~the International Residential Code for One- and Two-family Dwellings~~this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of one or more detached one- and two-family dwellings and townhouses located on a parcel not more than three stories above grade plane in height with a separate means of egress and their accessory structures not more than three stories above grade plane in height. Single family dwellings otherwise permitted by this code shall include bed and breakfast homes.

**Exceptions:Exception:**

~~1.~~ Live/work units complying with the requirements of Section ~~419~~508.5 of the International Building Code shall be permitted to be built as one- and two- family dwellings or townhouses. Fire suppression required by Section ~~419.5~~508.5.7 of the International Building Code where constructed under the International Residential Code for One- and Two-family Dwellings shall conform to Section P2904.

~~2. Deleted.~~

**R101.2.1 Accessory buildings.** Accessory buildings with any dimension greater than 12 feet (3658 mm) shall meet the provisions of this code. Accessory buildings are permitted to be constructed without a masonry or concrete foundation, except in coastal high hazard or ocean hazard areas, provided all of the following conditions are met:

1. The accessory building shall not exceed 400 square feet (37 m<sup>2</sup>) or one story in height;
2. The building is supported on a wood foundation of minimum 2-inch by 6-inch (51-mm by 152-mm) or 3-inch by 4-inch (76-mm by 102-mm) mudsill of approved wood in accordance with Section R317;  
~~and~~
3. The building is anchored to resist overturning and sliding by installing a minimum of one ground anchor at each corner of the building. The total resisting force of the anchors shall be equal to 20 psf (958 Pa) times the plan area of the building.

**R101.2.2 Accessory structures.** Only the following accessory structures shall meet the provisions of this code.

1. Decks, see Appendix M,
2. Gazebos,
3. Retaining walls, see Section R404.4,
4. Detached masonry chimneys located less than 10 feet (3048 mm) from other buildings or lot lines,
5. Swimming pools and spas, see Appendix ~~V~~NC-A,
6. Detached carports,

**Exception:** Portable, lightweight carports not exceeding 400 square feet (37 m<sup>2</sup>) or 12 feet (3658 mm) mean roof height.

7. Docks, piers, bulkheads, and waterway structures, see Section ~~R327~~R331.

8. Ground mounted photovoltaic system, see Section R324.7

**R101.3 Purpose.** The purpose of this code is to establish minimum requirements to ~~safeguard the public~~ provide a reasonable level of safety, health and general welfare through affordability, structural strength, means of egress facilities, stability, sanitation, light and ventilation, energy conservation and safety to life and property from fire and other hazards attributed to the built environment.

## SECTION R102 APPLICABILITY

**R102.1 General.** Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

**R102.2 Other laws.** The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

**R102.3 Application of references.** References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

**R102.4 Referenced codes and standards.** The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such ~~reference~~ reference and as further regulated in Sections R102.4.1 and R102.4.2.

**Exception:** Where enforcement of a code provision would violate the conditions of the *listing* of the *equipment* or *appliance*, the conditions of the *listing* and manufacturer's instructions shall apply.

**R102.4.1 Conflicts.** ~~Deleted.~~ Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

**R102.4.2 Provisions in referenced codes and standards.** ~~Deleted.~~ Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

**R102.5 Appendices.** Provisions in the appendices shall not apply unless specifically referenced in the code text.

**R102.6 Partial invalidity.** In the event any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

**R102.7 Existing structures.** For requirements of existing structures, refer to the *North Carolina Administrative Code and Policies* and the *North Carolina Existing Building Code*.

**R102.7.1 Additions, alterations or repairs.** Additions, alterations or repairs to any structure shall conform to the requirements for a new structure without requiring the existing structure to comply with the requirements of this code, unless otherwise stated. Additions, alterations, repairs and relocations shall not cause an existing structure to become ~~unsafe or adversely affect the performance of the building~~ less compliant with the provisions of this code than the existing building or structure was prior to the addition, alteration or repair. Where the alteration causes the use or occupancy to be changed to one not within the scope of this code, the provisions of the International Existing Building Code shall apply.

**PART 2—ADMINISTRATION AND ENFORCEMENT**

**SECTION R103  
DEPARTMENT OF BUILDING SAFETY**

Deleted. See the *North Carolina Administrative Code and Policies*.

**SECTION R104  
DUTIES AND POWERS OF  
THE BUILDING OFFICIAL**

Deleted. See the *North Carolina Administrative Code and Policies*.

**SECTION R105  
PERMITS**

Deleted. See the *North Carolina Administrative Code and Policies*.

**SECTION R106  
CONSTRUCTION DOCUMENTS**

Deleted. See the *North Carolina Administrative Code and Policies*.

**SECTION R107  
TEMPORARY STRUCTURES AND USES**

Deleted. See the *North Carolina Administrative Code and Policies*.

**SECTION R108  
FEES**

Deleted. See the *North Carolina Administrative Code and Policies*.

**SECTION R109  
INSPECTIONS**

Deleted. See the *North Carolina Administrative Code and Policies*.

**SECTION R110  
CERTIFICATE OF OCCUPANCY**

Deleted. See the *North Carolina Administrative Code and Policies*.

**SECTION R111  
SERVICE UTILITIES**

Deleted. See the *North Carolina Administrative Code and Policies*.

**SECTION R112  
BOARD OF APPEALS**

Deleted. See the *North Carolina Administrative Code and Policies*.



**SECTION R113  
VIOLATIONS**

Deleted. See the *North Carolina Administrative Code and Policies*.

**SECTION R114  
STOP WORK ORDER**

Deleted. See the *North Carolina Administrative Code and Policies*.

# CHAPTER 1

## SCOPE AND ADMINISTRATION

### PART 1—SCOPE AND APPLICATION

#### SECTION 101 SCOPE AND GENERAL REQUIREMENTS

**A] 101.1 Title.** These regulations shall be known as the *North Carolina Plumbing Code* as adopted by the North Carolina Building Code Council on ~~June 13, 2017~~, September 12, 2023, to be effective January 1, ~~2019~~, 2025. References to the *International Codes* shall mean the North Carolina Codes. The North Carolina amendments to the *International Codes* are underlined.

**[A] 101.2 Scope.** The provisions of this code shall apply ~~to and regulate~~ the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems within North Carolina. ~~This code shall regulate sanitary and vacuum collection systems.~~ The installation of fuel gas distribution piping and equipment, fuel-gas-fired water heaters and water heater venting systems shall be regulated by the ~~International~~North Carolina *Fuel Gas Code*. Provisions in the appendices shall not apply unless specifically adopted.

**Exception:** Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories ~~high above grade plane in height~~ with a separate means of ~~egress~~egress, and their accessory structures not more than three stories above grade plane in height, shall comply with this code or the ~~International~~North Carolina *Residential Code*.

**[A] 101.3 Intent, Purpose.** The purpose of this code is to establish minimum ~~standards~~requirements to provide a reasonable level of safety, health, property protection and ~~public~~general welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of plumbing equipment and systems.

**[A] 101.4 Severability.** If any section, subsection, sentence, clause or phrase of this code is for any reason held to be illegal or void, such decision shall not affect the validity of the remaining portions of this code.

**101.5 Appendices.** Provisions in the appendices shall not apply unless specifically referenced in the adopting ordinance adopted or referenced in this code.

**101.6 Requirements of other State agencies, occupational licensing board or commissions.** ~~The North Carolina State Building Codes~~North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other State agencies, occupational licensing boards and commissions. It shall be the responsibility of a permit holder, design professional, contractor or occupational license holder to determine whether any additional requirements exist.

#### SECTION 102 APPLICABILITY

**[A] 102.1 General.** Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

**[A] 102.2 Existing installations.** Plumbing systems lawfully in existence at the time of the adoption of this code shall be permitted to have their use and maintenance continued if the use, maintenance or repair is in accordance with the original design and hazard to life, health or property is not created by such plumbing system.

**[A] 102.2.1 Existing buildings.** Additions, alterations, renovations or repairs related to building or structural issues shall be regulated by the International Existing Building Code.

[A] **102.3 Maintenance.** Plumbing systems, materials and appurtenances, both existing and new, and parts thereof, shall be maintained in proper operating condition in accordance with the original design in a safe and sanitary condition. ~~All devices~~ Devices or safeguards required by this code shall be maintained in compliance with the edition of the code under which they were installed.

The owner or the owner's authorized agent shall be responsible for maintenance of plumbing systems. To determine compliance with this provision, the code official shall have the authority to require any plumbing system to be reinspected.

[A] **102.4 Additions, alterations or repairs.** Additions, alterations, renovations or repairs to any plumbing system shall conform to that required for a new plumbing system without requiring the existing plumbing system to comply with all of the requirements of this code. Additions, alterations or repairs shall not cause an existing system to become unsafe, ~~insanitary~~ unsanitary or overloaded.

Minor additions, alterations, renovations and repairs to existing plumbing systems shall meet the provisions for new construction, unless such work is done in the same manner and arrangement as was in the existing system, is not hazardous and is *approved*.

[A] **102.5 Change in occupancy.** It shall be unlawful to make any change in the *occupancy* of any structure that will subject the structure to any special provision of this code applicable to the new *occupancy* without approval of the code official. The code official shall certify that such structure meets the intent of the provisions of law governing building construction for the proposed new *occupancy* and that such change of *occupancy* does not result in any hazard to the public health, safety or welfare.

[A] **102.6 Historic buildings.** The provisions of this code relating to the construction, alteration, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings where such buildings or structures are judged by the code official to be safe and in the public interest of health, safety and welfare regarding any proposed construction, alteration, repair, enlargement, restoration, relocation or moving of buildings.

[A] **102.7 Moved buildings.** Except as determined by Section 102.2, plumbing systems that are a part of buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code for new installations.

[A] **102.8 Referenced codes and standards.** The codes and standards referenced in this code shall be those that are listed in Chapter 15 and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.8.1 and 102.8.2.

~~[R] **Exception:** Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and manufacturer's instructions shall apply.~~

[A] **102.8.1 Conflicts.** Where conflicts occur between provisions of this code and the referenced standards, the provisions of this code shall apply.

[A] **102.8.2 Provisions in referenced codes and standards.**

Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code shall be the minimum requirements.

[A] **102.9 Requirements not covered by code.** Any requirements necessary for the strength, stability or proper operation of an existing or proposed plumbing system, or for the public safety, health and general welfare, not specifically covered by this code shall be determined by the code official.

[A] **102.10 Other laws.** The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

[A] **102.11 Application of references.** Reference to chapter section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

## PART 2—ADMINISTRATION AND ENFORCEMENT

### SECTION 103 DEPARTMENT OF PLUMBING INSPECTION

~~Deleted. See the *North Carolina Administrative Code and Policies*. (Deleted.) See the North Carolina Administrative Code and Policies.~~

## SECTION 104 DUTIES AND POWERS OF THE CODE OFFICIAL

~~Deleted. See the North Carolina Administrative Code and Policies. (Deleted.) See the North Carolina Administrative Code and Policies.~~

## SECTION 105 APPROVAL

[A] **105.1 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's authorized agent, provided that the code official shall first find that special individual reason makes the strict letter of this code impractical and the modification conforms to the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the plumbing inspection department.

[A] **105.2 Alternative materials, design and methods of construction and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material or method of construction shall be *approved* where the code official finds that the proposed alternative material, method or equipment design is satisfactory and complies with the intent of the provisions of this code and is code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not *approved*, the code official shall respond in writing, stating the reasons why the alternative was not *approved*.

[A] **105.2.1 Research reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

[A] **105.3 Required testing.** Where there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the code official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.

[A] **105.3.1 Test methods.** Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the code official shall approve the testing procedures.

[A] **105.3.2 Testing agency.** Tests shall be performed by an *approved agency*.

[A] **105.3.3 Test reports.** Reports of tests shall be retained by the code official for the period required for retention of public records.

~~**105.4 Alternative engineered design.** The design, documentation, inspection, testing and approval of an *alternative engineered design* plumbing system shall comply with Sections 105.4.1 through 105.4.6.~~

~~**105.4.1 Design criteria.** An *alternative engineered design* shall conform to the intent of the provisions of this code and shall provide an equivalent level of quality, strength, effectiveness, fire resistance, durability and safety. Material, equipment or components shall be designed and installed in accordance with the manufacturer's installation instructions.~~

~~**105.4.2 Submittal.** The registered design professional shall indicate on the permit application that the plumbing system is an *alternative engineered design*. The permit and permanent permit records shall indicate that an *alternative engineered design* was part of the *approved* installation.~~

~~**105.4.3 Technical data.** The registered design professional shall submit sufficient technical data to substantiate the proposed *alternative engineered design* and to prove that the performance meets the intent of this code.~~

~~**105.4.4 Construction documents.** The registered design professional shall submit to the code official two complete sets of signed and sealed construction documents for the *alternative engineered design*. The construction documents shall include floor plans and a riser diagram of the work. Where appropriate, the construction documents shall indicate the direction of flow, all pipe sizes, grade of horizontal piping, loading, and location of fixtures and appliances.~~

~~**105.4.5 Design approval.** Where the code official determines that the *alternative engineered design* conforms to the intent of this code, the plumbing system shall be *approved*. If the *alternative engineered design* is not *approved*, the code official shall notify the registered design professional in writing, stating the reasons thereof.~~

~~105.4.6 Inspection and testing.~~ The *alternative engineered design* shall be tested and inspected in accordance with the requirements of the *North Carolina Administrative Code and Policies*.

~~[A] 105.5 Approved materials and equipment.~~ Materials, equipment and devices *approved* by the code official shall be constructed and installed in accordance with such approval.

~~[A] 105.5.1 Material and equipment reuse.~~ Materials, equipment and devices shall not be reused unless such elements have been reconditioned, tested, placed in good and proper working condition and *approved*.

## SECTION 106 PERMITS

~~Deleted.~~ See the *North Carolina Administrative Code and Policies*. ~~(Deleted.)~~ See the North Carolina Administrative Code and Policies.

## SECTION \*\* 107 ~~INSPECTIONS AND TESTING~~ TEMPORARY EQUIPMENT, SYSTEMS AND USES

~~[A] 110.1107.1 General.~~ The code official is authorized to issue a permit for temporary equipment, systems and uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.

~~[A] 110.2107.2 Conformance.~~ Temporary equipment, systems and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.

~~[A] 110.3107.3 Temporary utilities.~~ The code official is authorized to give permission to temporarily supply utilities before an installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the code.

~~[A] 110.4107.4 Termination of approval.~~ The code official is authorized to terminate such permit for temporary equipment, systems or uses and to order the temporary equipment, systems or uses to be discontinued. \*

## SECTION \*\* 108 ~~VIOLATIONS~~ INSPECTIONS AND TESTING

~~Deleted.~~ See the *North Carolina Administrative Code and Policies*. ~~(Deleted.)~~ See the North Carolina Administrative Code and Policies.

## SECTION \*\* 109 ~~MEANS OF APPEAL~~ FEES

~~(Deleted.)~~ See the North Carolina Administrative Code and Policies.

## SECTION 110 ~~TEMPORARY EQUIPMENT, SYSTEMS AND USES~~ CONSTRUCTION DOCUMENTS

~~(Deleted.)~~ See the North Carolina Administrative Code and Policies.

## SECTION \*\* 111 NOTICE OF APPROVAL

~~(Deleted.)~~ See the North Carolina Administrative Code and Policies.

**SECTION \*\* 112**  
**SERVICE UTILITIES**

**(Deleted.)** See the North Carolina Administrative Code and Policies.

**SECTION 113**  
**STOP WORK ORDER**

**(Deleted.)** See the North Carolina Administrative Code and Policies.

**SECTION 114**  
**MEANS OF APPEALS**

~~Deleted. See the North Carolina Administrative Code and Policies.~~ **(Deleted.)** See the North Carolina Administrative Code and Policies.

**SECTION \*\* 115**  
**VIOLATIONS**

~~Deleted. See the North Carolina Administrative Code and Policies.~~ **(Deleted.)** See the North Carolina Administrative Code and Policies.

## Burgos, Alexander N

---

**Subject:** FW: 2024 NC Administrative Code Requests for Changes

---

**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>

**Sent:** Tuesday, January 23, 2024 3:47 PM

**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>

**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Brian,

Thank you for confirming and thank you for your work on this.

Have a great day

**David B. Rittlinger, PE, LEED AP**  
**Deputy Commissioner of Engineering**  
**Engineering & Codes Division**



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**North Carolina Office of State Fire Marshal**  
1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
919.647.0008

[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)

Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

## **Burgos, Alexander N**

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**Subject:** FW: 2024 NC Administrative Code Requests for Changes

---

**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Tuesday, January 23, 2024 2:35 PM

**To:** Rittlinger, David B <david.rittlinger@ncdoj.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>

**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Awesome, thanks David.

I think that's everything on my end. I will recommend approval of the Admin Code at the January meeting.

I will forward this last version of the Code to Alex and to Dana for filing and posting online as the final version.

Best,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law N.C.G.S. Chapter 132 and may be disclosed to third parties.



## Burgos, Alexander N

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**Subject:** FW: 2024 NC Administrative Code Requests for Changes  
**Attachments:** RRC format v3 D-1 2024 NC Administrative Code and Policies Proposed.pdf; D-1 20221213 Item B-1 2024 NCACandP Rev 3. Form\_0400\_for\_Permanent\_Rule\_June\_2023.docx; D-1 20221213 Item B-1 2024 NCACandP Rev 3. Form\_0400\_for\_Permanent\_Rule\_June\_2023.pdf; RRC format v3 D-1 2024 NC Administrative Code and Policies Proposed.docx

---

**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Sent:** Tuesday, January 23, 2024 10:53 AM  
**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>  
**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Brian,  
Good morning. It was nice talk with you this morning.  
My response to your comment is in **PURPLE** text below.  
The updated documents are attached.  
Let me know if you have any further questions or concerns.  
Thank you for your work on this.

**David B. Rittlinger, PE, LEED AP**  
**Deputy Commissioner of Engineering**  
**Engineering & Codes Division**



**North Carolina Office of State Fire Marshal**  
1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
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Link to free view of 2018 NC Codes  
<https://codes.iccsafe.org/codes/north-carolina>

---

**From:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>  
**Sent:** Monday, January 22, 2024 5:17 PM  
**To:** Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>  
**Cc:** Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>; Childs, Nathan D <[nchilds@NCDOJ.GOV](mailto:nchilds@NCDOJ.GOV)>  
**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Hi David,

Thanks for making the changes. I am good with almost all of them, except one, which I have listed below. My follow up remains in blue. If it would be helpful to discuss, I'd be more than happy to talk it out, just let me know.

Also in 202.5.4, what does the sentence “Persons filing proposed petitions are hereby notified of the place and time of the scheduled hearings” mean?

*DBR response: Proposed amendment petitions are received primarily by email and occasionally by regular mail. Once the secretary acknowledges that the proposed amendment petition using Appendix C is accurate, the secretary will notify the petitioner of the place and time of the scheduled meeting. “Hearings” is changed to “meetings” for clarity.*

I’m not sure the changes address my concern. It sounds like the Code language is providing notice, when what I think you mean is that the Secretary will notify the petitioner after receipt of the petition.

*DBR Response: The second sentence is modified as follows: “Persons filing proposed amendment petitions are hereby notified by the Building Code Council Secretary of the place and time of the scheduled meetings.”*

The issue here is that the language in 202.5.4 reads like it is actually providing notice of a hearing— “Persons filing proposed amendment petitions **are hereby notified** by the BCC Secretary of the place and time of the scheduled meeting.” Obviously, the Code cannot itself give notice of a hearing. I think what you mean to say is that when the Secretary receives a petition, he or she will send it out to the members of the Council and then will send notice of the meeting at which the petition will be considered to the petitioner. That isn’t clear from the text, however.


*DBR Response: “hereby notified” is deleted in the second sentence and replaced with “contacted and notified”.*

Thanks,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law N.C.G.S. Chapter 132 and may be disclosed to third parties.

# SUBMISSION FOR PERMANENT RULE

<b>1. Rule-Making Agency: NC Building Code Council</b>	
<b>2. Rule citation &amp; name (name not required for repeal):</b> 2024 NC Administrative Code & Policies (221213 Item B-1)	
<b>3. Action:</b> <input type="checkbox"/> ADOPTION <input checked="" type="checkbox"/> AMENDMENT <input type="checkbox"/> REPEAL <input type="checkbox"/> READOPTIOIN <input type="checkbox"/> REPEAL through READOPTIOIN	
<b>4. Rule exempt from RRC review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No	<b>5. Rule automatically subject to legislative review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No
<b>6. Notice for Proposed Rule:</b> <input checked="" type="checkbox"/> Notice Required Notice of Text published on: January 31, 2023 Link to Agency notice: <a href="https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice">https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice</a> Hearing on: March 14, 2023 Adoption by Agency on: June 13, 2023 <input type="checkbox"/> Notice not required under G.S.: Adoption by Agency on:	
<b>7. Rule establishes or increases a fee? (See G.S. 12-3.1)</b> <input type="checkbox"/> Yes Agency submitted request for consultation on: Consultation not required. Cite authority: <input checked="" type="checkbox"/> No	<b>8. Fiscal impact. Check all that apply.</b> <input type="checkbox"/> This Rule was part of a combined analysis. <input type="checkbox"/> State funds affected <input type="checkbox"/> Local funds affected <input type="checkbox"/> Substantial economic impact (≥\$1,000,000) <input type="checkbox"/> Approved by OSBM <input checked="" type="checkbox"/> No fiscal note required
<b>9. REASON FOR ACTION</b>	
<b>9A. What prompted this action? Check all that apply:</b> <input checked="" type="checkbox"/> Agency <input type="checkbox"/> Court order / cite: <input type="checkbox"/> Federal statute / cite: <input type="checkbox"/> Federal regulation / cite: <input type="checkbox"/> Legislation enacted by the General Assembly Cite Session Law: <input checked="" type="checkbox"/> Petition for rule-making <input type="checkbox"/> Other:	
<b>9B. Explain:</b> <u>This amendment The 2018 NC Administrative Code and Policies is amended to create the 2024 Administrative Code and Policies and</u> is proposed to protect the public by establishing standard administrative policies and procedures.  The delayed effective date of this Rule is January 1, 2025. The Statutory authority for Rule-making is G. S. 143-136; 143-138.	
<b>10. Rulemaking Coordinator: David B. Rittlinger</b> David B. Rittlinger Phone: (919)647-0008 E-Mail: david.rittlinger@ncdoi.gov  Additional agency contact, if any: Phone: E-Mail:	<b>11. Signature of Agency Head* or Rule-making Coordinator:</b>    *If this function has been delegated (reassigned) pursuant to G.S. 143B-10(a), submit a copy of the delegation with this form.  Typed Name: David B. Rittlinger Title: Chief Code Consultant
<b>RRC AND OAH USE ONLY</b>	
<b>Action taken:</b> <input type="checkbox"/> RRC extended period of review: <input type="checkbox"/> RRC determined substantial changes: <input type="checkbox"/> Withdrawn by agency <input type="checkbox"/> Subject to Legislative Review <input type="checkbox"/> Other:	

# **SUBMISSION FOR PERMANENT RULE**

Refer to the attachment below.

DRAFT

**Notes to RRC: THIS DOCUMENT CONTAINS THE PROPOSED 2024 NORTH CAROLINA ADMINISTRATIVE CODE AND POLICIES.**

**TEXT THAT IS STRUCK THROUGH IS DELETED FROM THE 2018 EDITION TO CREATE THE 2024 EDITION.**

**TEXT THAT IS UNDERLINED IS NEW TEXT TO CREATE THE 2024 EDITION.**

DRAFT

North Carolina State Building Code: Administrative Code and Policies, ~~2018~~2024 edition

First Printing: ~~June~~January ~~2018~~2024



Notes to RRC: The NC Seal above is added to the 2024 North Carolina Administrative Code and Policies. International Code Council, Inc. copyright statements and information (not shown) will appear here once this code published and made available to the public. Page numbers and Table of Contents will be updated once this code published and made available to the public.

# PREFACE of the ~~2018~~2024 NORTH CAROLINA STATE BUILDING CODES

North Carolina has been a pioneer in the field of Statewide Building Regulations that have been enacted for the protection of the public. The Building Laws passed in 1903 and 1905 created a Building Code for materials and methods of construction in use at that time in the State.

The General Assembly of 1933 created a Building Code Council and authorized it to, in cooperation with the Commissioner of Insurance, prepare and adopt a State Building Code. The first State Building Code was adopted in 1935 and ratified by the 1941 General Assembly.

The 1957 Legislature rewrote the 1933 Act, ratified the 1953 Edition, and reorganized and expanded the membership and responsibility of the Council. The 1953 Edition of the State Building Code was revised in accordance with the 1957 Act and printed as the 1958 Edition.

The 1933 Act of the General Assembly provided that any city or county could adopt any building regulation that was more stringent than the State Building Code regulations. However, after a General Assembly Study Commission Report, the 1957 Legislature provided that any local building regulation that was different from the State regulation would have to be approved by the Building Code Council. The Council adopted a policy to only approve local amendments to the State Code that were absolutely necessary. The policy includes that when the Council sees the need for local amendments, they would be incorporated as a part of the State Building Code in lieu of approving the regulations applying to a specific city or county unless local conditions warranted such specific regulations.

The 1967 Edition of the State Building Code was prepared utilizing the framework of the Standard Building Code, with several chapters taken from the American Insurance Association's National Building Code and the egress chapter taken from the Life Safety Code of NFPA.

The 1978, 1991 and 1996 Editions were prepared by the Building Code Council with the assistance of specially appointed Advisory and Ad-Hoc Committees representing Code Enforcement Officials, Contractors, Designers and others affected by the regulations. These Editions were the latest Standard Building Code with North Carolina amendments.

The 2002, 2006, 2009, ~~2012~~2012, ~~and~~ 2018 and 2024 Editions were prepared by Ad-Hoc Committees representing Code Enforcement Officials, Contractors, Designers and others affected by the regulations. These Editions were the *International Building Code* with North Carolina amendments.

The ~~2018~~2024 North Carolina State Code is presented with the hope that its use will protect the public from dangerous and unsanitary buildings. This Code is intended to provide Code Enforcement Officials, Contractors and Designers a set of minimum standards to follow in design and construction. The Building Code Council has the authority to amend the Code when the wider use of materials and methods comply with the safety standards set forth in the laws.

## PREFACE of the ~~2018~~2024 NORTH CAROLINA ADMINISTRATIVE CODE and POLICIES

The purpose of the *North Carolina Administrative Code and Policies* is to serve as a comprehensive document to guide decisions aimed at protecting the public's health, safety and welfare in the built environment. This protection is provided through the enforcement, by state and local governments, of the technical codes incorporated by reference herein.

The *North Carolina Administrative Code* was first adopted by the Building Council in 1991. The 1996 and 2002 Editions were published in conjunction with the subsequent Code Editions. The 2006 *North Carolina Administrative Code and Policies* was a reorganization and rewrite of the 2002 *Administration and Enforcements Code*. The 2009, ~~2012~~2012, and 2018 and 2024 Edition of the *North Carolina Administrative Code and Policies* is an administrative update of the 2006 *Administration and Enforcements Code*. Chapter 1, Administrative Code, contains Rules adopted by the Building Code Council and approved by the Rules Review Commission. Chapter 2, Policies, contains generally accepted policies and procedures based on the North Carolina General Statutes. Chapter 3, Referenced Statutes, contains references to many applicable General Statutes. The appendices include representative administrative forms.

### EDITIONS of the NORTH CAROLINA STATE BUILDING CODES

Administrative	1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Building	1936, 1953, 1958, 1967, 1978, 1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Residential	1968, 1993, 1997, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Accessibility	1973, 1991, 1999 (Accessibility requirements were part of the Building Code before 9/1/1973 and after 1/1/2009.)
Electrical (NEC)	1931, 1933, 1935, 1937, 1940, 1942, 1943, 1947, 1949, 1951, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1962, 1965, 1968, 1971, 1975, 1978, 1981, 1984, 1987, 1990, 1993, 1996, 1999, 2002, 2005, 2008, 2011, 2014, 2017, <u>2020</u>
Existing Building	2015, <del>2018</del> <u>2018, 2024</u>
Fire	1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Mechanical	1971, 1980, 1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Energy Conservation	1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Plumbing	1963, 1968, 1980, 1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Fuel Gas	1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>



# NORTH CAROLINA STATE BUILDING CODE COUNCIL

DECEMBER ~~12,13, 2017~~20242022

[www.ncbuildingcodes.com](http://www.ncbuildingcodes.com)

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**NORTH CAROLINA STATE BUILDING CODE COUNCIL**  
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**[www.ncbuildingcodes.com](http://www.ncbuildingcodes.com)**

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<u>Jason Shepherd</u>	<u>Jason Shepherd</u>
<u>Victoria Watlington, PE</u>	
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DRAFT

# NORTH CAROLINA DEPARTMENT OF INSURANCE

www.ncdoi.com/osfm

919-647-0000

By Statute, the Commissioner of Insurance has general supervision of the administration and enforcement of the *North Carolina State Building Code* and the Engineering Division serves as the Staff for the Building Code Council. Officials of the Department of Insurance are:

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Senior Deputy Commissioner

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Jeff Hilton

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Gloria Shealey

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# CHAPTER 1

## ADMINISTRATIVE CODE

### SECTION 101 TITLE AND SCOPE

**101.1 Title.** This document is “The North Carolina Administrative Code and Policies,” hereinafter known as “this code.” Any references to International Codes shall refer to North Carolina State Building Codes.

**101.2 Purpose.** The purpose of this code is to provide for the administration and enforcement of the North Carolina State Building Codes as adopted by the Building Code Council and enforced by State and local code enforcement officials. This code is incorporated by reference into the North Carolina Building, **Accessibility**, Plumbing, Mechanical, Electrical, Fire Prevention, Fuel Gas, Energy Conservation, Existing Buildings, **Rehabilitation**, and Residential Codes, hereinafter referred to collectively as the “technical codes.” This code is intended to provide for the administrative aspects of each of the technical codes. In this code, the plumbing, mechanical, electrical, fire prevention and gas systems shall be referred to as “service systems.”

#### 101.3 Scope.

**101.3.1 Requirements of other state agencies, occupational licensing boards or commissions.** The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other state agencies, occupational licensing boards or commissions. It shall be the responsibility of a permit holder, design professional, contractor or occupational license holder to determine whether any additional requirements exist.

*Commentary: Many State agencies, occupational licensing boards or commissions have specific design and construction requirements that are not incorporated into the North Carolina State Building Codes and are not enforced by code enforcement officials. Permit holders, design professionals, contractors or occupational license holders should consult with any relevant boards or agencies to determine whether there are any additional construction and design requirements for their projects.*

**101.3.2 Technical Codes.** Where sections 101.3.2.1 through 101.3.2.10 conflict with the applicability and scope as provided in the technical codes the applicability and scope in the technical codes shall apply.

**101.3.2.1 North Carolina Building Code.** The provisions of the Building Code shall apply to the construction, alteration, repair, equipment, use and occupancy, location, movement to another site, removal and demolition, or any appurtenances connected or attached to every building or structure, other than one- or two-family dwellings and townhouses.

**101.3.2.2 North Carolina Accessibility Provisions.** ~~The accessibility provisions shall apply to the construction, alteration, repair, replacement, equipment, appliances, fixtures, fittings and appurtenances of all buildings or structures, other than one- and two- family dwellings and townhouses.~~

~~101.3.2.3~~ **101.3.2.2 North Carolina Plumbing Code.** The provisions of the Plumbing Code shall apply to every plumbing installation, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances.

~~101.3.2.4~~ **101.3.2.3 North Carolina Mechanical Code.** The provisions of the Mechanical Code shall apply to the installation of mechanical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

~~101.3.2.5~~ **101.3.2.4 North Carolina Electrical Code.** The provisions of the Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances.



~~101.3.2.6~~**101.3.2.5 North Carolina Fire Prevention Code.** The provisions of the Fire Prevention Code shall apply to the ~~repair, equipment, use, occupancy and maintenance of every existing building or structure, other than one or two family dwellings and townhouses.~~ The provisions of the fire prevention code shall apply to the installation of fire protection systems minimum fire safety requirements to all new and existing buildings, facilities, storage, and processes, except for one- or two-family dwellings and townhouses. The Fire Prevention Code provides a total approach of controlling hazards in all regulated buildings and sites, regardless of the hazard being indoors or outdoors.

~~101.3.2.7~~**101.3.2.6 North Carolina Fuel Gas Code.** The provisions of the Fuel Gas Code shall apply to the installation of gas piping systems extending from the point of delivery to the inlet connections of equipment served, and the installation and operation of residential and commercial gas appliances and related accessories.

~~101.3.2.8~~**101.3.2.7 North Carolina Energy Conservation Code.** The provisions of the Energy Conservation Code shall apply to the thermal envelope of the building and installation of energy systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances, ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

~~101.3.2.9~~**101.3.2.8 North Carolina Existing Buildings Code.** All work on any building that undergoes alterations, repairs, replacement, rehabilitation or change of occupancy shall comply with the Existing Buildings Code or the technical codes for the proposed work.

~~101.3.2.10~~**101.3.2.9 North Carolina Residential Code.** The provisions of the Residential Code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures.

*Commentary: Exceptions to the technical codes. Note that there are statutory exceptions to the applicability of the technical codes. These exceptions can be found in North Carolina General Statutes **(NCGS § 143-138(b))** **(NCGS § 143-138)**. The exceptions include the following as well as other exceptions:*

- (1) farm buildings located outside the jurisdiction of any municipality;*
- (2) equipment for storing, handling, transporting and utilizing liquefied petroleum gases for fuel purposes; and*
- (3) equipment or facilities, other than buildings, of a public utility, as defined in NCGS § 62-3, or of an electric or telephone membership corporation, including poles, towers and other structures supporting electric or communication lines.*

*Commentary: “Farm building” means any building that is not open to the general public and is used primarily for a bona fide farm purpose. “A bona fide farm purpose” includes the production or storage of agricultural products or commodities, including crops, fruits, vegetables, ornamental or flowering plants, dairy, timber, livestock, poultry and all other forms of agricultural products. Farm buildings do not include such buildings used for purposes of education and research.*

**101.3.3 Workmanship.** Workmanship is not within the purview of the technical codes unless specifically stated within the code.

**101.3.4 Appendices.** Provisions in the appendices shall not be enforceable unless specifically ~~incorporated~~ adopted or referenced in the technical codes.

*Commentary: Use of appendices. An appendix is part of the technical codes only when the technical code specifically references that appendix in the body of the technical code. Conversely, appendices that are not referenced in the technical codes are not part of the North Carolina Building Codes. These unenforceable appendices are provided solely for the convenience of the reader. Each appendix will indicate under its title whether it is enforceable and required as part of the technical code.*

**101.3.5 Referenced standards.** Standards referenced in the technical codes shall be considered an integral part of the codes. If specific portions of a standard are denoted by code text, only those specific portions of the standard shall be enforced. Where code provisions conflict with a standard, the code provisions shall be enforced. Permissive and advisory provisions in a standard shall not be construed as mandatory.

~~101.3.6 Existing buildings.~~ Additions, alterations, repairs, replacement, rehabilitations or changes of occupancy shall be permitted to any existing structure or service system without requiring the existing systems to comply with all the requirements of the current building codes. All new work shall conform to the requirements of the technical codes for new construction except as modified by either the existing buildings code or the rehabilitation code. For any portion of an existing building or service system that creates a hazard or unsafe condition, the code enforcement official shall determine the extent to which that portion of the existing building or service system is to be upgraded to conform to the requirements of either the Existing Buildings Code, the Rehabilitation Code or the technical codes.

## SECTION 102 RULE-MAKING TO AMEND THE TECHNICAL CODES

### 102.1 Petition for rule-making.

**102.1.1 Petition Filing.** ~~1-~~ Any person wishing to file a petition requesting the adoption, amendment or repeal of a rule by the Building Code Council shall file a written petition on a form (see Appendix C) provided by the Building Code Council, ~~and 21 copies.~~ Twenty-one hardcopies of the petition and supporting documentation shall be sent to with the Building Code Council Secretary or a single pdf and editable softcopy of the petition can be emailed to the Building Code Council Secretary.

**102.1.2 Required information.** ~~2-~~ The petition shall include the following information:

- a. ~~2-1~~ Name, address and occupation of petitioner;
- b. ~~2-2~~ A summary of the proposed action (adoption, amendment or repeal of a rule or rules);
- c. ~~2-3~~ A draft of the proposed rule or other action;
- d. ~~2-4~~ A complete statement of the reason for the proposed action with supporting documentation;
- e. ~~2-5~~ An identification of the persons or class of persons most likely to be affected by the proposed action; and
- f. ~~2-6 An economic impact analysis~~ A fiscal note performed by the petitioner and approved by the Office of State Budget Management as required by General Statute ~~§143-138(a).~~ Statutes 143- 138(a1) and 150B-21.4.
- g. A cost/benefit analysis performed by the petitioner for North Carolina Energy Code proposed amendments as required by General Statute §143-138(a1)(2).

**102.2 Presiding officer.** The presiding officer at any rule-making meeting or hearing shall have control of the proceedings, including: recognition of speakers, time allotments for presentations, the right to question speakers, direction of the discussion and management of the meeting or hearing.

**102.3 Record of proceedings.** A record of rule-making proceedings will be available for public inspection during regular office hours at the Building Code Council's office. This record will contain the original petition, if any, the notice, all written memoranda and information submitted, and a record or summary of oral presentations, if any, and, in any case where a proposal was rejected, the reason therefore.

**102.4 Effective date of rules.** Any rules that are adopted by the Building Code Council and approved by the Rules Review Commission shall be effective when the next edition of the relevant technical code is effective as provided in Rule 102.6 unless specified otherwise by the Building Code Council.

**102.5 Interim use of approved rules.** Any rules that are adopted by the Building Code Council and approved by the Rules Review Commission shall be accepted by the Code Enforcement Official as an approved alternate method of construction prior to the effective date if requested by the owner or his agent.

**102.6 Effective date of code editions.** The provisions of any code edition which have been approved/adopted by both the Building Code Council and approved by the Rules Review Commission shall become effective the first day of January of the following year unless specified otherwise by the Building Code Council.

## SECTION 103 APPEALS

**103.1 General.** The following are appeals addressed by this code:

- (a) Appeal by a permit holder to local code enforcement management regarding a code determination/interpretation

made by a local code official for a specific job site.

- (b) Appeal by a permit holder to the NC Department of Insurance, Engineering Division regarding a code determination or interpretation by local code enforcement.
- (c) Appeal by an inspection department or permit holder to the NC Building Code Council regarding an appeal decision issued by the NC Department of Insurance, Engineering Division.
- (d) Appeal by a permit holder, designer, general public, or local code enforcement to the NC Building Code Council regarding a formal code interpretation issued by NC Department of Insurance, Engineering Division.

**103.1103.2 Form of complaints and other pleadings supporting information.**

**103.2.1 Complaints.** ~~1-~~ There shall be no specific form required for complaints. To be sufficient, a complaint shall be in writing, identify the parties and shall reasonably apprise the Building Code Council of the facts that form the basis of the complaint.

**103.2.2 Other pleadings supporting information.** ~~2-~~ There shall be no specific form. Appendix E shall be required for answers, motions or other pleadings supporting information relating to appeals before the Building Code Council, ~~except they shall be in writing. To be sufficient, the document~~ The pleadings supporting information shall identify the case to which it refers and reasonably apprise the Building Code Council of the matters it alleges, answers or requests. In lieu of submission in writing, ~~motions, requests and other pleadings supporting information~~ may be made on the record during the course of the hearing before the Building Code Council.

**~~103.2~~103.3 Governing provisions.** Hearings before the Building Code Council shall be governed by the provisions of General Statutes 150B, Article 3A.

**~~103.3~~103.4 Presiding officer.** The Building Code Council may designate any of its members to preside over the hearing in a case on appeal. When no designation is made, the ~~chairman~~ Chair of the Building Code Council shall preside, or, in ~~his~~ the Chair's absence, the ~~vice chairman~~ Vice Chair shall preside. The presiding officer shall rule on motions or other requests made in an appeal case prior to the hearing in that case, except when the ruling on the motion would be dispositive of the case. When the ruling on a motion or request would be dispositive of the case, the presiding officer shall make no ruling and the motion or request shall be determined by a majority of the Building Code Council.

**~~103.4~~103.5 Continuances.** The Building Code Council's ~~Secretary~~ Chair may grant ~~the first request~~ requests for a continuance of a hearing for good cause. ~~Any subsequent requests for continuance may be granted by the chairman of the board.~~ The granting of a continuance is wholly discretionary.

**~~103.5~~103.6 Modifications.** Whenever there are practical difficulties involved in carrying out the provisions of the technical codes, the Building Code Council shall have the authority to grant modifications for individual cases, after the Building Code Council finds on appeal that (1) special individual reasons, conditions, and/or circumstances exist that make the strict letter of the technical codes impractical, (2) the modification is in compliance with the intent and purpose of the technical codes, and (3) the modification does not lessen health, accessibility, life, fire-safety or structural requirements.

**(General Statute 143-141)**

*Commentary: Limitation on what constitutes "practical difficulties." This section is not intended to permit setting aside or ignoring a code provision; rather, it is intended to provide for the acceptance of equivalent protection. Such modifications do not, however, extend to actions that are necessary to correct violations of the code. In other words, a code violation or the expense of correcting a code violation does not necessarily constitute a practical difficulty.*

**SECTION 104  
ADMINISTRATION**

**104.1 North Carolina Department of Insurance, Engineering Division.**

**104.1.1 Document approval.** Construction specifications and drawings, including Appendix B of this code, for buildings specified in Table 104.1 shall be submitted to the Engineering Division of the North Carolina Department of Insurance. The Engineering Division shall grant document approval before a permit is issued on any building listed in Table 104.1.

**TABLE 104.1  
NORTH CAROLINA DEPARTMENT OF INSURANCE, ENGINEERING DIVISION  
DOCUMENT APPROVAL FOR NEW CONSTRUCTION AND ADDITIONS**

OCCUPANCY GROUP	BUILDING PLANS TO BE APPROVED
Section 403 – High Rise <sup>1</sup>	All buildings
Section 402 – Covered Mall Buildings <sup>1</sup>	All buildings
City/county owned	All buildings 20,000 sq. ft. or greater as required by G.S. §58-31-40
Group A <sup>1, 2</sup>	Occupant load over 1,000
Group E <sup>1</sup>	Over 2 stories or over 20,000 sq. ft./story
Group H <sup>1</sup>	Occupant load over 100
Group I <sup>1</sup>	Over 3 stories or over 10,000 sq. ft./story
Group R <sup>1</sup>	Over 4 stories or over 100 units/building

For SI: 1 square foot = 0.0929 m<sup>2</sup>.

- Plans and specifications are not required to be reviewed or approved by the Engineering Division for buildings, except city/county owned, that are located in a city or county inspection jurisdiction approved to perform plans review by the NC Building Code Council, except city/county owned buildings are not exempt.
- Except temporary bleachers.

*Commentary: The square footage listed above refers to the footprint of a new building or building addition.*

*The occupant loads refer to a new building or building addition area only.*

*For the purpose of this table only, the occupant load for a church is based on the occupant load of the Occupant Group A-3 main meeting area. If the A-3 area is over 1,000 occupants, then DOI plan review is required unless exception 2 applies.*

*General Statute 58-31-40 indicates that such city/county owned buildings must be greater than 20,000 square feet (1858 m<sup>2</sup>) of new or additional building footprint to require DOI review. The 20,000 square feet (1858 m<sup>2</sup>) applies to individual structures on the site and not the sum of the structures.*

**104.1.2 Local plan review approval.** ~~1. An~~ A local inspection department may make a written request to the Building Code Council to review plans and specifications on buildings listed in Table 104.1. This authority ~~shall~~ may be granted provided that the following is met:

- The inspection department is adequately staffed by code enforcement officials with Standard Level III Certificates issued by the North Carolina Code Officials Qualification Board in all areas and attest that the for Building, Electrical, Fire, Mechanical and Plumbing.
- The jurisdiction attests it is capable of performing required inspections within 2 business days of request for inspection as required by NCGS 143-139.4.

**104.1.3 List of approved local jurisdictions.** ~~2.~~ Local inspection departments approved under this section shall be listed on the Department of Insurance web page, or a list shall be provided by the Building Code Council Secretary. [www.ncdoi.com/osfm](http://www.ncdoi.com/osfm).

## SECTION 105 ALTERNATE MATERIAL, DESIGN OR METHODS

**105.1 Approval General.** The provisions of this code the technical codes are intended to allow the use of any alternate material, design or method of construction, provided that the alternate has been approved by the code enforcement official. An alternative material, design or method of construction shall be approved where the code enforcement official finds that the proposed alternative material, design or method of construction complies with the intent and provisions of the technical codes. Section 105.2.

*Commentary: The technical codes are not intended to inhibit innovative ideas or technological advances. A comprehensive regulatory document, such as the North Carolina State Building Codes, cannot envision and then address all future innovations in the industry. As a result, a performance code must be applicable to and provide a basis for the approval of an increasing number of newly developed, innovative materials, systems and methods for which no technical code text or referenced standards yet exist. The fact that a material, product or method of construction is not addressed in the technical codes is not an indication that such material, product or method is intended to be prohibited. The code enforcement official is expected to apply sound technical judgment in accepting materials, systems or methods that, while not anticipated by the drafters of the current technical code text, can be demonstrated to offer equivalent performance. By virtue of its text, the code regulates technical codes regulate new and innovative construction practices while addressing the relative safety of building occupants. The code enforcement official is responsible for determining if a requested alternative provides the equivalent level of protection of public health, safety and welfare as required by the code technical codes.*

**105.2 Approval process.** The two paths for approval are a prescriptive method and a performance method as required in Sections 105.2.1 and 105.2.2.

**105.2.1 Prescriptive method.** The alternate method shall demonstrate equal or safer characteristics as required prescriptively by the technical codes.

**105.2.2 Performance method.** The alternate method shall demonstrate equal or safer performance as required by the technical codes.

*Commentary: "Prescriptive method" refers to sections of the technical codes that indicate a specific material or method. An example would be from the NC Residential Code the requirement that a pier footing for a 1-story house be 1'-4"x2'-0"x8". That would be the minimum footing size if the footing is designed prescriptively.*

*"Performance method" refers to sections of the technical codes that indicate minimum design value. The footing for the same pier as described above could be designed to a lesser size if the performance requirements of the NC Residential Code are met. An example could be that the dead and/or load loads of the structure supported by the pier is are less than expected by the code or the soil capacity is greater than 2,000 psf. Any of these factors could reduce the size of the footing to less than that required prescriptively in the NC Residential Code.*

**105.2.3 Tests or analysis.** Whenever there is insufficient evidence of compliance with the provisions of the technical codes, or evidence that a material, design or method does not conform to the requirements of the technical codes, or in order to substantiate claims for an alternative material, design or method, the code enforcement official shall have the authority to require tests as evidence of compliance to be made at no expense to the authority having jurisdiction. Test methods shall be as specified in the technical codes or by other recognized test standards. In the absence of recognized and accepted test methods, the code enforcement official shall ~~approve the~~ have authority to review and approve or disapprove proposed testing procedures. The following are accepted testing agencies:

- a. A certified testing lab approved by the International Accreditation Service (IAS) for the specific standard that the alternate material or method is required by the code to comply.
- b. International Code Council approved testing agencies.
- c. Other testing agencies as approved by the local inspection jurisdiction.
- d. North Carolina registered design professionals providing sealed reports or evaluation letters in their area of expertise.
- e. Mechanical and electrical 3<sup>rd</sup> party testing agencies approved by the NC Office of State Fire Marshal in accordance with N.C.G.S. § 66-25 and § 143-139.1 and listed on their website at: Third Party Testing Agencies | OSFM (ncosfm.gov).

## **105.3 Appeals.**

**105.3.1 Local government.** The local building safety agency and fire marshal shall establish documented procedures to address requests for acceptance of a proposed alternate method. The procedure shall be published and made available to the general public upon request. The procedure shall include a requirement for a written response by the local government to the requesting party for a properly submitted request for appeal. The procedure shall require an acceptance or denial response be issued by the local government in 10 business days or less from the date of receipt of the request by the local government. The response shall include the evidence and technical codes considered in the decision as well as conclusions drawn from the evidence and technical codes.

**105.3.2 Decision of local government.** Appeal a of local jurisdiction decision is directed to the NC Department of Insurance in accordance with Section 203.2.2.

**105.3.3 Decision of North Carolina Department of Insurance, Engineering Division.** Appeal of a NC Department of Insurance, Engineering Division decision is directed to the North Carolina Building Code Council in accordance with Section 202.9.

## SECTION 106 PERMITS

**106.1 Permit required.** A current permit is required for all work described in the technical codes unless specifically exempted by the North Carolina General Statutes or the technical codes.

*Commentary: Reference North Carolina General Statute 160D-1110 for exemptions.*

### 106.2 Drawings and specifications.

**106.2.1 Requirements.** Drawings and specifications, as required by the inspection department, shall be drawn to scale with sufficient clarity and detail to indicate the nature and character of the work and shall accompany the application for a permit. All information, drawings, specifications and accompanying data shall bear the name, address and signature of the person responsible for the design.

**Exception**~~Exceptions~~:

1. Projects using the Building Information Modeling-Integrated Project Delivery (BIM-IPD) process, see Section 106.2.3.1.
2. Residential buildings exempted by ~~NCCGS 160D-1110, paragraph (b).~~ **NCCGS 160D-1110(b).**

**106.2.2 Additional data.** The inspection department may require details, computations, stress diagrams or documentation sealed by a registered design professional and other data necessary to describe the construction or installation of a system.

**Exception:** Projects using the BIM-IPD process, see Section 106.2.3.1.

**106.2.3 Review and approval.** When the inspection department issues a permit, it shall approve, in writing or by stamp, all sets of drawings and specifications “Reviewed for Code Compliance.”

**Exception:** Nothing in this section shall require the review and approval of one- and two-family dwelling plans.

*Commentary: Drawings and specifications shall be kept in a manner prescribed by North Carolina General Statute 160D-1126.*

**106.2.3.1 Building Information Modeling—Integrated Project Delivery Process.** When proposed by the permit applicant and when acceptable to the authority having jurisdiction, the BIM-IPD process may be utilized, replacing the requirements of Section 106.2.3, with the following permitting and inspection steps.

1. At the project start, the owner’s project team (Architect, Engineer, contractor, et al.) shall meet with the Code Enforcement Official (CEO) to determine the prevailing **technical** code compliance strategy for the full scope of the project, to be documented in an electronic Appendix B format or an equivalent format, acceptable to the CEO.
2. The CEO may issue a single project master permit, based on the initial project description and **technical** code compliance strategy agreement.

*Commentary: The CEO should work collaboratively to review building components or details as scheduled by the owner’s project team.*

3. The CEO shall inspect built work, as described in Section 107 of this code.
  - 3.1 Concurrence on compliance with the **technical** code, with respect to both the model and built product, shall be gained before inspections are approved.
4. The owner’s project team shall submit a validation document, at project substantial completion, documenting the building as constructed and compliance with the *North Carolina State Building Code*, for

records retention by the Authority Having Jurisdiction. Validation document: may be a three dimensional model, two dimensional electronic drawings and records, or a combination of both, accurately reflecting the completed building as approved by the code official in the field, and verified with respect to same.

- Where the validation document varies from the approved virtual model regarding **buildingtechnical** code compliance, the related Architect/ Engineer must approve the change.
- Receipt of the validation document shall be a condition on issuance of Certificate of Occupancy.

#### 106.2.3.2 Definitions.

**BIM:** Model-based technology linked with a data base of project information, using three-dimensional, real time dynamic modeling software, to plan all building construction. The model encompasses building geometry, spatial relationships, geographic information, and quantities and properties of building components.

**IPD:** A project delivery method that integrates key participants (owner, Architect, Engineer, contractor, code official, et al.), systems, business structures and practices into a process that collaboratively plans and constructs facilities. The collaborative process begins in early design and continues through all phases of design, fabrication and construction.

*Commentary: This applies to any project delivery method employing three-dimensional modeling software, to virtually construct all building components, by a collaborative team based process from design start to construction completion.*

#### 106.3 Permit application.

**Note to RRC:** Below text was submitted to RRC in error on 11/20/23 as this amendment (210608 Item B-2) was not carried forward by the NCBCCC during its approval process.

**106.3.1 Information required.** A permit application shall be filed with the Inspection Department on a form (see Appendix A) furnished for that purpose. The Inspection Department shall make available a list of information which that must be submitted with the building permit application, including a complete Building Code Summary (see Appendix B) complying with 106.3.2.

**Exception:** A Building Code Summary is not required if the AHJ (Authority Having Jurisdiction) determines plan review can be performed without the Building Code Summary.

**106.3.2 Building Code Summary.** The Building Code Summary used by an AHJ shall be in the exact format as, and contain only the information in, Appendix B of the Administrative Code and Policies. An AHJ shall only modify the Building Code Summary as set forth in section 103.5 103.6 Modifications, or as necessary to reflect any changes by the Office of State Fire Marshal to Appendix B which that have been approved of by the Building Code Council.

**Note to RRC:** Above text was submitted to RRC in error on 11/20/23 as this amendment (210608 Item B-2) was not carried forward by the NCBCCC during its approval process.

**Note to RRC:** The text below was approved by the NCBCCC on 6/13/23 and was unchanged.

**106.3.1 Information required.** A permit application shall be filed with the ~~Inspection Department~~inspection department on a form furnished for that purpose. The ~~Inspection Department~~inspection department shall make available a list of information that must be submitted with the building permit application, including a complete building code summary (see Appendix A of the Administrative Code and Policies). The ~~Inspection Department's~~inspection department's building code summary shall be in the exact format as, and contain only the information in, Appendix B of the Administrative Code and Policies. The ~~Inspection Department~~inspection department shall only modify its building code summary as set forth in section\_103.5 Modifications, or as necessary to reflect any changes by the Office of State Fire Marshal to Appendix B that have been approved by the Building Code Council.

**Note to RRC:** The text above was approved by the NCBCCC on 6/13/23 and was unchanged.

**106.4 Site address signage.** It is the responsibility of the permit applicant or designee to post the 911 **emergency** site address on an active jobsite at the commencement of work regulated by the NC Building Codes. The signage shall be temporary or permanent per 106.4.1 or 106.4.3.

**106.4.1 Temporary signage.** Signage to identify a construction site location can be temporary. Acceptable temporary signage may include such items as a permit placard, an address written on job box, yard signage or other

approved temporary street name markers shall be required if permanent street signs are not in place for new developments or subdivisions.

**106.4.2 Temporary Signage Location.** Address signage shall be placed such that it is legible from the street or road that fronts the property at all times during construction.

**106.4.3 Permanent signage.** Address signage meeting the requirements of the *International Residential Code* Section R319 for One- and Two-family Dwellings, *International Building Code* Section 501.2 or *International Fire Code* Section 505.1 for commercial buildings shall be deemed as meeting the requirements of this section.

## **SECTION 107 CONSTRUCTION INSPECTIONS**

**107.1 General.** The inspection department shall perform the following inspections:

1. Footing inspection – 107.1.1;
2. Under slab inspection, as appropriate – 107.1.2;
3. Foundation inspection – 107.1.3;
4. Rough in inspection Building framing – 107.1.4;
5. Building framing inspection Rough-in – 107.1.5;
6. Insulation inspection – 107.1.6;
7. Fire protection inspection – 107.1.7; and
8. Final inspection – 107.1.8.

*Commentary: The code enforcement official makes these inspections during certain phases of construction and is not on site at all times when construction is in progress. The code official verifies technical code compliance and/or technical code defects visible and subject to discovery during the above listed inspections and spot checks numerous similar items.*

*Nothing in any of Sections 107.1.1 through 107.1.8 requirements is intended to prevent partial inspections of the inspection types listed in Section 107.1 “General” as requested by the permit holder as allowed by the local inspection department. Cumulative partial inspections approved by the code official shall satisfy the same degree of readiness for inspection for viewing as described in Sections 107.1.1 through 107.1.8.*

*Not all items, such as, but not limited to, nailing of roof or other sheathing material, are always visible at framing inspection, but remain the responsibility of the permit holder to comply with the code-technical codes.*

*Temporary electrical service poles may be inspected at any phase of construction as requested by the permit holder. Temporary utility (TU) applications deemed safe by the AHJ or as otherwise permitted by the technical code shall be allowed.*

**107.1.1 Footing inspection.** Footing inspections shall be made after the trenches are excavated, all grade stakes are installed, all reinforcing steel and supports are in place and tied, and all necessary forms are in place and braced before any concrete is placed.

**107.1.2 Under-slab inspection.** Under-slab inspections, as appropriate, shall be made after all materials and equipment to be concealed by the concrete slab are completed.

**107.1.3 Foundation inspection, crawl space.** Foundation and crawl space inspections shall be made after all foundation supports are installed.

*Commentary: Foundation inspections are conducted to verify correct installation and proper bearing support. Poured concrete and masonry walls that have reinforcement steel should be inspected prior to concrete placement. Crawl space leveling, ground clearances, positive drainage and waterproofing/dampproofing, when required, may be inspected at future inspections prior to concealment.*

**107.1.4 Building framing inspection.** Framing inspections shall be made after the roof (excluding permanent roof covering), wall ceiling, and floor framing is complete with appropriate blocking, bracing, and firestopping in place. The following items shall be in place and visible for inspection:

1. Pipes;
2. Chimneys and vents;



3. Flashing for roofs and chimneys;
4. Insulation baffles; and
5. All lintels that are required to be bolted to the framing for support shall not be covered by any exterior or interior wall or ceiling finish material before approval. Work may continue without approval for lintels supported on masonry or concrete.

**107.1.4**~~107.1.5~~ **Rough-in inspection.** Rough-in inspections shall be made when all building framing and parts of the electrical, plumbing, fire protection, or heating-ventilation or cooling system that will be hidden from view in the finished building have been placed, but before any wall, ceiling finish, or building insulation is installed.

*Commentary: Plumbing, mechanical, and electrical components installed underground should be considered as rough-in inspections and may be inspected at any point during construction prior to covering.*

**107.1.6 Insulation inspection.** Insulation inspections shall be made after an approved building framing and rough-in inspection and after the permanent roof covering is installed, with all insulation and vapor retarders in place, but before any wall or ceiling covering is applied.

*Commentary: Insulation baffles that cannot be seen at this inspection, such as vaulted ceilings with concealed rafter cavities, should have baffles installed at framing inspection for verification.*  
*It is acceptable that wall cavity insulation enclosed by an air barrier material behind tubs, showers, and fireplace units installed on exterior walls may not be observable by the code official.*

**107.1.6 Fire protection inspection.** Fire protection inspections shall be made in all buildings where any material is used for fire protection purposes. The permit holder or his agent shall notify the inspection department after all fire protection materials are in place. Fire protection materials shall not be concealed until inspected and approved by the code enforcement official.

*Commentary: Fire protection inspection is typically performed in commercial building structures and is required in addition to any special inspection as listed in Chapter 17 of the North Carolina Building Code.*

**107.1.8 Final inspection.** Final inspections shall be made for each trade after completion of the work authorized under the technical codes.

*Commentary: Each trade shall complete a final inspection giving approval to permitted work. Work required by the technical codes shall be complete before being requested. Temporary power and temporary certificate of occupancy (TCO) requests are allowed prior to final inspection.*

**107.2 Inspection requests.** It shall be the duty of the permit holder or his or her agent to notify the code enforcement official when work is ready for inspection and to provide access to and means for inspection of the work for any inspections that are required by this code.

**107.3 Approval required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code enforcement official. The code enforcement official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder that the work fails to comply with the technical codes. The code enforcement official shall identify code violations and when requested shall identify the specific sections of the technical **codes that are violated**. Any work that does not comply shall be corrected and shall not be covered or concealed until authorized by the code enforcement official.

**107.4 Independent inspections authorized by the code enforcement official.** The code enforcement official may authorize a North Carolina registered design professional to inspect the following structural elements, components and systems:

1. The excavation of soil and/or forming of footings with the associated placement of reinforcing steel prior to pouring concrete; and
2. The forming of floors, columns, beams and other structural members, including the placement of reinforcing steel prior to pouring concrete.

To utilize this procedure, the permit holder must continue to schedule all inspections normally required for this work by the inspection department. The registered design professional shall provide weekly reports bearing his seal to the inspection department indicating that the placement of the related construction elements, components and systems either complies or does not comply with the approved permit documents. Any change from the permit documents shall be approved by the code enforcement official prior to its implementation. The permit holder shall immediately inform the code enforcement official if he or she terminates his or her relationship with the registered design professional.

**107.5 Special inspections.** Special inspections required by the building code or the building inspector shall be performed by a North Carolina registered design professional or an inspector under his responsible charge.

**107.6 Inspections of component or element.** Acceptance of inspection of a component or element by a NC registered architect or engineer will require completion of the “Design Professional Inspection Form” found in Appendix G.

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## CHAPTER 2

# ADMINISTRATIVE POLICIES

### SECTION 201 SCOPE

**201.1 Scope.** Chapter 2 is provided as procedural policies. ~~Items discussed in this chapter are intended as commentary to the General Statutes.~~

### SECTION 202 BUILDING CODE COUNCIL

www.ncbuildingcodes.com

**202.1 Duties.** The Building Code Council has the following duties:

- 1 Prepare and adopt the North Carolina State Building Code;
2. Revise or amend the ~~code;~~ North Carolina State Building Code;
3. Hear appeals from decisions of state code enforcement agencies as to any matter related to the ~~code;~~ North Carolina State Building Code;
4. Make a thorough and continuing study of the manner of enforcement of the ~~code~~ technical codes and building laws;
5. Make recommendations to State agencies about any changes in administrative practices which could improve the enforcement of the ~~code~~ technical codes or building laws; and
6. Recommend to the General Assembly statutory changes to simplify and improve the building laws.  
(General Statutes 143-138, 143-140 and 143-142)

**202.2 Composition.** The Building Code Council shall consist of 17 members appointed by the governor as follows:

- ~~1 and~~ 2. Two registered architects;
- ~~3~~ 2. One licensed general contractor;
- ~~4~~ 3. One licensed general contractor specializing in residential construction;
- ~~5~~ 4. One licensed general contractor specializing in coastal residential construction;
- ~~6~~ 5. One licensed engineer practicing structural engineering;
- ~~7~~ 6. One licensed engineer practicing mechanical engineering;
- ~~8~~ 7. One licensed engineer practicing electrical engineering;
- ~~9~~ 8. One licensed plumbing and heating contractor;
- ~~10~~ 9. One municipal or county building inspector;
- ~~11~~ 10. One representative of the public who is not a member of the building construction industry;
- ~~12~~ 11. One licensed electrical contractor;
- ~~13~~ 12. One licensed engineer on the engineering staff of a State agency charged with approval of plans of State-owned buildings;
- ~~14~~ 13. One representative of the fire services;
- ~~15~~ 14. One licensed liquid petroleum gas dealer/contractor involved in the design of natural and liquified petroleum gas systems who has expertise and experience in natural and liquid petroleum gas piping, venting and appliances;
- ~~16~~ 15. One municipal elected official or city manager; and
- ~~17~~ 16. One county commissioner or county manager.

(General Statute 143-136)

**202.3 Officers and committees.** The Building Code Council shall elect a ~~chairman~~Chair and ~~vice-chairman~~Vice Chair from its appointed members. The officers shall serve for a period of two years from the date of election or until their successors are elected. The ~~Building Code Council~~NC Department of Insurance shall appoint a person from the Engineering Division to serve as ~~secretary~~Secretary to the Building Code ~~Council from the Engineering Division of the Department of Insurance-Council.~~  
(General Statute 143-137)

**202.4 Meetings.** The Building Code Council shall meet regularly at least every 6 months. Special meetings may be called by the ~~chairman~~Chair. Any seven members of the Building Code Council shall constitute a quorum. Information concerning the exact time and place of all regular meetings and regular public hearings shall be made available to the public by the Engineering Division of the Department of Insurance 60 calendar days prior to each such meeting or public hearing. Information concerning the exact time and place of ~~eachall~~ meetingsspecial meetings with public hearings required to be noticed in the NC Register shall be made available ~~from~~to the public by the Engineering Division of the Department of Insurance 15 calendar days prior to each such meeting. Information concerning the exact time and place of all special meetings that do not have public hearings required to be noticed in the NC Register shall be made available to the public by the Engineering Division of the Department of Insurance 7 calendar days prior to each such meeting. Agenda items, other than proposed amendments, must be submitted to the Building Code Council Secretary 21 calendar days prior to the scheduled meeting.  
(General ~~Statute 143-137~~Statutes143-137 and 143-138)

**202.5 Proposed amendments.** The Building Code Council may revise or amend the code, technical codes, either on its own motion or upon application from any person, state agency or political subdivision of the state. Each request to amend the code, technical codes shall comply with the following policies of the Building Code Council: policies:

**202.5.1 Filings.** Twenty-one ~~copies~~hardcopies or a single pdf with an editable softcopy of the proposed amendment with supporting documentation shall be filed with the Building Code Council Secretary.

**202.5.1.1 Improper filings.** When a request proposed amendment is improperly filed or not in accordance with ~~all the rules listed above~~Sections 202.5.1 through 202.5.3, the Building Code Council Secretary shall reject the submittal and notify the applicant of the proper procedure to follow.

**202.5.2 Submission date.** The proper filing shall be received by the first day of the month prior to the ~~quarterly~~next scheduled ~~council~~Council regular meeting date.

**202.5.3 Filing format and required information.** Each request proposed amendment shall be legibly printed, typed or copied on a form (see Appendix C) available from the North Carolina Department of Insurance, Building Code Council section and shall at a minimum contain the following:

1. The proposed amendment must be set forth in full and contain an explicit reference to the affected section or sections of the technical code;
2. The request shall state the reasons for the proposed amendment with supporting documentation;
3. The proposed amendment shall comply with the standards set forth in General Statute 143-138(c) and reference to the particular standards shall be set forth in the request for the amendment; and
4. The proposed amendment shall contain ~~an economic impact analysis~~ a fiscal note performed by the petitioner and approved by the Office of State Budget Management as required by General ~~Statute 143-138(a1)~~Statutes 143-138(a1)(1) and 150B-21.4.
5. A cost/benefit analysis performed by the petitioner for North Carolina Energy Code proposed amendments as required by General Statute 143-138(a1)(2).

**202.5.4 Secretary duties.** Upon the proper filing of a request proposed amendment, the Building Code Council Secretary shall forward one copy of said request proposed amendment to each ~~council~~Council member prior to the scheduled meeting date. Persons filing proposed amendment petitions are ~~hereby notified~~contacted and notified by the Building Code Council Secretary of the place and time of the scheduled ~~hearings~~meetings. The Building Code Council Secretary shall cause agendas to be published for all meetings and public hearings. The Building Code Council Secretary shall cause to be published the notice of public hearing as specified in North Carolina General Statutes 143-138(a).

**202.5.5 Actions taken.** This section addresses actions taken by the North Carolina Building Code Council for properly filed petitions for rulemaking (code amendments).

**202.5.5.1 New petitions for ~~rulemaking~~rulemaking (B-items).** Prior to the next scheduled ~~council~~Council meeting:

**202.5.5.1.1 Council ~~chair~~Chair.** The ~~council chair~~Council Chair shall assign each proposed amendment to the appropriate standing committee chair(s).

**202.5.5.1.2. Standing committee.** The standing committee(s) shall review the proposed amendment and the

ADMINISTRATIVE POLICIES

chair(s) of the committee(s) shall then, based on the committee review, recommend to the ~~council~~:Council:

- a. denial;
- b. acceptance;
- c. acceptance with committee modifications; or,
- d. tabling the proposed amendment to the next scheduled ~~council~~Council meeting pending further review by the committee(s) or an ad-hoc committee appointed by the ~~council chair~~Council Chair.

**202.5.5.1.3 Council.** The ~~council~~Council will determine whether the proposed amendment or committee modified proposed amendment will be accepted, denied or tabled for further review by the standing committee or an ad-hoc committee. For proposed amendments that are sent to a committee or ad-hoc committee for review, the ~~council~~Council shall set a date for the committee to issue its findings to the ~~council~~:Council.

The ~~council~~Council will take no further action on ~~items~~proposed amendments that are denied. Granted ~~items~~proposed amendments may be referred to committee for review (General Statute 150B-20(d)). The Secretary to the ~~council~~Council shall inform the proponent of the proposed amendment in writing of the reason for the denial (General Statute 150B-20(c)).

**202.5.5.2 Notice of rulemaking proceedings and public hearing-hearing (C-items).** ~~Amendments~~Proposed amendments that are approved by the ~~council~~Council in Section 202.5.5.1.3 shall be:

- a. included in the agenda for the following ~~council~~Council meeting;public hearing;
- b. advertised by the North Carolina Office of Administrative Hearings for public hearing as required by General Statute 150B-21.2; and,
- c. advertised on the North Carolina Department of Insurance website a minimum of 15 calendar days prior to the public hearing date.

**202.5.5.3 Final adoption-adoption (D-items).** The Building Code Council shall either grant or deny properly submitted proposed ~~petitions for rulemaking~~amendments at the meeting following the public hearing required by Section 202.5.5.2. Granted proposed amendments shall be published on the North Carolina Department of Insurance website within 30 days after the adopted amendment is reviewed and approved by the North Carolina Rules Review Commission and in accordance with Section 202.6.1.

The ~~council~~Council will take no further action on ~~items~~proposed amendments that are denied. ~~Amendments~~Proposed amendments that are ~~substantially similar~~identical to a denied proposed amendment cannot be resubmitted for consideration by the ~~council~~Council for a minimum of 12 months from the date of the denial.

**202.5.5.4 North Carolina Rules Review Commission.** A proposed amendment that is granted by the ~~council~~Council is ~~not~~ adopted ~~or but is not~~ published as adopted until it has been approved by the Rules Review Commission. If the commission sends an adopted amendment back to the ~~council~~Council for further work,with a request for changes, the ~~revised proposed~~adopted amendment shall be ~~corrected~~readoptedis not considered adopted and will not be published as ~~adopted~~readopted until it is resubmitted to the commission and the commission approves the corrected adopted amendment. ~~Amendments are not approved for use based on the effective date under which the amendment was adopted by the Council until approved by the commission.~~

**202.5.6** The Building Code Council shall either grant or deny the proposed petition for rule making at the meeting following receipt of the proposed rule change. The council will take no further action on items that are denied. Granted items may be referred to committee for review.

**202.5.7** The Building Code Council may hold a public hearing on granted items at the next quarterly scheduled meeting. The council may take final action on granted items at the next quarterly scheduled meeting after the public hearing.

**Table 202.5.5  
Typical Timeline Example for Adopted Rules**

<u>Rule Petition Received:</u>	February 1
<u>Standing Committee First Review:</u>	February – March
<u>Rule Petition Granted for Public Hearing:</u>	March BCC meeting
<u>Notice of Hearing Published:</u>	April NC Register
<u>Committee Review:</u>	April – May
<u>Hearing Held:</u>	June BCC <del>meeting</del> public hearing

<u>Standing Committee Final Review:</u>	June – September
Final <u>Rule Adoption:</u>	September BCC meeting
Rules Review Meeting:	November RRC meeting
<u>Approved-Effective:</u>	<u>December – First day of the month following the month the adopted rule is approved by RRC or a delayed effective date approved by the BCC.</u>

**202.6 Publications.**

**202.6.1 Amendments.** The Building Code Council shall print all amendments to the codes, and the amendments shall be available for distribution in accordance with General Statute 143-138(g). Publication of adopted amendments on the Building Code Council website is deemed to meet the publication requirement of General Statute 143-138(g). Amendments, Notices meeting and public hearing notices and minutes are available either at no charge on the Council web page or for a fee as prescribed by Agency Rules.page.

**202.6.2 Council webpage.** The minutes and agenda of the Building Code Council may be found on the Council web page located at <http://www.ncbuildingcodes.com> <https://www.ncosfm.gov/codes/building-code-council-bcc/meeting-dates>. Click on the desired information topic.

**202.6.3 Engineering newsletter.** Newsletters will be sent to online subscribers. Archive copies may be found on the Engineering web page located at <http://www.ncdoi.com/osfm>. Click on Building Codes to subscribe.

**202.7 Approval of local ordinances.** The Building Code Council may approve local regulations governing the Fire Prevention Code. All regulations shall be approved by the Building Code Council in order to be legally effective. Regulations approved by the local governing body, which are found to be more stringent than the fire prevention code and, which are found to regulate activities and conditions in buildings, structures, and premises that pose dangers of fire, explosion or related hazards, and are not in conflict with the North Carolina State Building Code, shall be approved once reviewed and filed by the Building Code Council. The rules listed in Section 202.5 shall apply for filing a proposed local deviation to the Fire Prevention Code along with the following:

1. Twenty-one ~~copies~~ hardcopies or a single pdf and editable soft copy of the resolution adopted by the governing body requesting the proposed deviation to the fire prevention code.
2. After approval by the Building Code Council, the Building Code Council Secretary shall advise the local governing body and shall retain a copy in the Building Code Council’s file as a permanent record.

[General Statute 143-138(e)]

**202.8 Committees.**

**202.8.1 Super committees.** There are two supercommittees designated by N.C.G.S. 143-136, commercial committee and residential committee. The duties of those committees are to, in their respective areas of authority, approve or deny proposed code amendments prior to the amendment being addressed by the full council.Council and make recommendations to the full council.Council regarding appeals before the council.Council.

**202.8.1202.8.2 Standing committees.** The standing committees shall consist of members of the Building Code Council. The ChairmanChair of the Building Code Council shall appoint the chairmenchair and members of each committee.

**202.8.2202.8.3 Ad hoc committees.** For each code edition, the ChairmanChair shall establish and appoint ad hoc code revision committees and appoint the chairmen.chair of each committee. The ad hoc committees shall consider and prepare revisions and amendments to the technical code volumes. Each ad hoc committee shall consist of members of the Building Code Council, Department of Insurance staff, licensed contractors, and design professionals most affected by the technical code volume for which the ad hoc committee is responsible and members of the public.

*Guidelines for Ad Hoc Committees:*

1. ~~Ad Hoc committee is asked to approach its~~Approach code review with the idea of producing a newly amended technical code with as few changes from the ~~2009 ICC model~~ technical codes as the committee deems practicable.
2. Current Code shall be considered ~~base line~~baseline for technical code comparison.
3. ~~Ad Hoc committee is asked to provide~~Provide a list of major changes to the Standing Committee and Council for review.
4. ~~If code changes are thought to be controversial, it is suggested that the Ad Hoc committee consider~~Consider handling ~~such~~complex technical code change -items as separate standalone technical code ~~changes~~changes to avoid adoption delays of the technical code volumes.
5. Ad Hoc committees shall submit its report to the appropriate Standing Committee for review.
6. After its review, the Standing Committee is asked to make a recommendation to the Building Code Council for adoption.

**202.8.4 Hearing committee.** The ~~chairman~~Chair may appoint a hearing committee to hear an appeal.

**202.9 Appeals.** [General Statute 143-141(d)]

**202.9.1 Engineering division.** A written technical interpretation shall be provided as specified in Section 203.2.1.2. Any person may appeal in writing an order, decision or ~~determination~~interpretation pertaining to the ~~code~~technical codes or any state building law by filing written notice with the Commissioner of Insurance or his designee within 10 calendar days after the order, decision or ~~determination~~interpretation. A copy of the appeal shall be furnished to each party.

(General Statutes 143-140 and 160D-1127)

**202.9.2 Building Code Council.** The Building Code Council shall hear appeals from the decisions of state enforcement agencies relating to any matter related to the ~~code~~technical codes. Any person wishing to appeal a decision of a state enforcement agency to the Building Code Council shall give written notice of appeal as follows:

**202.9.2.1 Filing.** Twenty-one ~~copies~~hardcopies including an original of the Notice of Appeal ~~or a single pdf and~~ editable softcopy shall be filed with the Building Code Council c/o North Carolina Department of Insurance, Engineering Division, 325 North Salisbury Street, Room ~~5-44542~~, Raleigh, North Carolina 27603, and one copy shall be filed with the state enforcement agency from which the appeal is taken.

**202.9.2.2 Submission date.** The Notice of Appeal shall be received no later than 30 calendar days from the date of the decision of the State enforcement agency. (General Statute 143-141).

**202.9.2.3 Filing format and required information.** The Notice of Appeal shall be legibly printed, typewritten or copied and shall contain the following (See Appendix E):

1. Name, address of the party or parties requesting the appeal.
2. The name of the state enforcement ~~agency~~and the date of the decision from which the appeal is ~~taken, and a copy of the written decision received from the enforcement agency taken.~~
3. The decision from which the appeal is taken shall be set forth in full in the Notice of Appeal or a copy of the decision shall be attached to all copies of the Notice of Appeal.
4. The contentions and allegations of fact must be set forth in full in a clear and concise manner with reference to the sections of the code in controversy.
5. The original Notice of Appeal shall be signed by the party or parties filing appeal.
6. The Notice of Appeal shall be received by the first day of the month prior to the Building Code Council's quarterly scheduled meeting in order to be placed on the agenda for that meeting. The ~~Chairman~~Chair may schedule a special meeting to hear an appeal.

**202.9.2.4 Secretary duties.** Upon the proper filing of the Notice of Appeal, the Building Code Council Secretary shall forward one copy of the Notice of Appeal to ~~each member of the attorney for the Building Code Council and the~~ council'sCouncil's attorney shall distribute the appeal ~~as necessary~~ to each ~~council~~Council member.

**202.9.2.5 Hearing Committee.** The ~~chairman~~Chair may appoint a Hearing Committee to hear appeals. The Secretary shall send notice in writing to the party or parties requesting an appeal and to the Building Code Council Hearing Committee members at least 15 calendar days prior to the Hearing Committee meeting. A written decision of the Hearing Committee meeting shall be provided to all Building Code Council Members. The actions of the Hearing Committee shall be final, unless appealed to the full Building Code Council in writing within 30 calendar days of the Hearing Committee's action. If a Hearing Committee consists of at least seven ~~council~~Council members, it will constitute a quorum of the full ~~council~~Council. Further appeals shall be as

specified in Section 202.9.3.

**202.9.2.6 Dismissal.** The Building Code Council shall, upon a motion of the State enforcement agency or on its own motion, dismiss appeals for the following reasons:

1. Not pursued by the appellant or withdrawn;
2. Appeal not filed in accordance with these rules; or
3. Lack of jurisdiction by the Building Code Council.

**202.9.2.7 Findings.** When the Building Code Council finds that a State enforcement agency was in error in its interpretation of the ~~code,~~ **technical codes,** the Building Code Council shall remand the case to the agency with instructions to take such actions as the Building Code Council directs. When the Building Code Council finds on appeal that materials or methods of construction proposed are equivalent to those required by the ~~code,~~ **technical codes,** the Building Code Council shall remand the case to the state enforcement agency with instructions to permit the use of such materials or methods of construction. The Building Code Council shall immediately initiate procedures for amending the ~~code,~~ **technical codes** to permit the use of such materials or methods of construction.

**202.9.2.8 Decision.** The Building Code Council shall provide a written decision setting forth the findings of fact and the Building Code Council’s conclusions to each party or parties filing the appeal and to the State enforcement agency from which the appeal was taken.

**202.9.3 Superior court.** Whenever any person desires to appeal a decision of the Building Code Council or a decision of a State or local enforcement agency, ~~he~~ **that person** may appeal either to the Wake County Superior Court or the superior court of the county in which the proposed building is to be situated in accordance with the provisions of Chapter 150B of the General Statutes.

~~{General Statute 143-141(d)}~~

**SECTION 203  
NORTH CAROLINA DEPARTMENT OF INSURANCE**

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**203.1 Administration.**

**203.1.1 Commissioner of Insurance.** The Commissioner of Insurance through the Engineering Division shall have general supervision of the administration and enforcement of the North Carolina State Building Code. This includes all sections of the code pertaining to:

1. General building restrictions and regulations;
2. Plumbing;
3. Heating and air conditioning;
4. Electrical systems;
5. Fire protection; and
6. Natural or liquified petroleum gas ~~systems.~~ **systems. [General Statute 143-139(b)] systems included in the technical codes.**

~~(General Statute 143-139(b))~~

**203.1.1.1 Investigation of fires.** Whenever the Commissioner of Insurance has reason to believe that investigators of fire or fire prevention inspectors are not fulfilling their responsibilities, ~~he or his designee~~ **the Commissioner or deputy assigned by the Commissioner** shall take proper steps to have all provisions of the law enforced.

(General Statute 58-2-95)

**203.1.1.2 Investigation of premises for dangerous materials.** The Commissioner of Insurance or ~~his or her~~ **designee assigned by the Commissioner** shall hear appeals from orders issued by the code enforcement official to remove or remedy combustible materials or inflammable conditions dangerous to any building or premises. The appeal shall be made within 24 hours of issue, not counting weekends or holidays. The commissioner shall cause the complaint to be investigated immediately. The Commissioner or ~~his or her~~ **designee assigned by the Commissioner** may make inspections of the complaint alone or in the company of the code enforcement official. Unless the Commissioner by ~~his or her~~ **authority** revokes the order of the code enforcement official, the order remains in force and must be complied with by the owner or occupant.



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(General Statute 58-79-20)

**203.1.1.3 Buildings within primary fire limits.** The Commissioner of Insurance or ~~his or her~~ designee ~~assigned by the Commissioner~~ shall review all permits to erect, alter, repair or move any wood-frame building or structure within the primary fire district of a municipality. Such permits shall be received and approved by the ~~Inspection Department~~ ~~inspection department~~ and approved by the ~~Municipal Council governing board~~ prior to the Commissioner or ~~his or her~~ ~~Commissioner~~ designee's approval.  
(General Statute 160D-1128)

**203.2 Engineering Division.** The Engineering Division of the Department of Insurance shall serve as staff for the Building Code Council and the Code Official's Qualification Board. The Engineering Division shall work in cooperation with code enforcement officials and provide general supervision in the administration and interpretation of the ~~code~~ ~~technical codes~~. The staff shall handle correspondence and maintain an accurate and complete record of:

1. All meetings or hearings,
2. Laboratory studies, and
3. Technical work performed by or for the Building Code Council.

All records shall be available for public inspection during regular office hours. All funds for the operation of the Building Code Council shall be appropriated to the Department of Insurance. The Department of Insurance may hire additional staff as may be necessary to handle the work of the Building Code Council with the approval of the ~~council~~ ~~Council~~.  
[General Statute 143-137(c)]

### 203.2.1 Interpretations.

**203.2.1.1 Informal interpretations.** The Engineering Division shall provide informal interpretations on ~~code~~ ~~technical~~ code-related matters either by e-mail, letter or telephone. These informal interpretations may be accepted by the local code enforcement official or party requesting the interpretation. Either party may request a formal interpretation of the ~~code~~ ~~technical codes~~.

**203.2.1.2 Formal interpretations.** Any person may request in writing a formal interpretation of the ~~code~~ ~~technical codes~~. The request shall be addressed to the Chief Code Consultant for the Department of Insurance. The request shall be specific and shall reference the ~~code~~ ~~technical~~ code sections in question. All formal interpretations shall be in writing and include Appendix E as a cover document. A formal interpretation shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. Formal interpretations determined to be of a general nature may be posted on the department web site.

(General Statute 143-140)

**203.2.2 Appeals.** Any person may appeal in writing an order, decision or determination of a code enforcement official pertaining to the ~~code~~ ~~technical codes~~ or any state building law. The appeal shall be addressed to the Chief Engineer for the Department of Insurance by filing written notice within 10 ~~code~~ ~~calendar~~ days after the order, decision or determination. The appeal shall contain the type and size of the building in question, the location of the building and shall reference the ~~code~~ ~~technical~~ code sections in question. The decision shall be in writing and shall set forth the facts found. The decision rendered shall be based on the technical provisions of the code, public health and safety and shall be construed liberally to those ends. A decision shall be binding on all parties unless an appeal is submitted to the Building Code Council as specified in Section 202.9.2. A copy of the appeal and written decision shall be furnished to each party. A decision regarding an appeal of alternate material, design, or methods as allowed by Section 105.3 shall be provided in 10 business days or less as required by General Statute 143.140.1.  
(General Statute 160D-1127)

**203.2.3 Code Errata.** It shall be the responsibility of the Chief Code Consultant for the Department of Insurance to issue errata to the ~~code~~ ~~NC~~ ~~North Carolina~~ State Building Codes. Before publishing an ~~errata~~ ~~errata~~, the errata shall be reviewed by the Chair of the ~~code~~ ~~NC~~ Building Code Council standing committee for the related ~~code~~ ~~technical~~ code. The errata shall be published on the Department of Insurance website with the ~~code~~ ~~technical~~ code amendments.

**203.2.3 Engineering newsletter.** Newsletters will be sent to online subscribers. Archive copies may be found on the Engineering web page located at <https://www.ncosfm.gov/Newsletters>. To subscribe to engineering newsletters go to [https://lists.ncmail.net/mailman/listinfo/ncdoi\\_engineering](https://lists.ncmail.net/mailman/listinfo/ncdoi_engineering).

**SECTION 204  
CITY AND COUNTY GOVERNMENT**

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(Click on “For Government, Local Government”)

**204.1 General.** The powers, duties and responsibilities of the code enforcement official are generally described in General Statute 160D, Article 11. This section does not apply to properties owned by state and federal government entities unless specifically requested by those entities.

**204.2 Inspection department.**

**204.2.1 General.** The responsibility for administration and enforcement of the ~~code~~ technical codes has been allocated to local code enforcement officials under the supervision of State officials as designated within Section 203.

[General Statute 143-139(b)]

**204.2.2 Jurisdiction.** A municipal inspection department shall have jurisdiction over all areas within the city limits, all extraterritorial areas that the city has jurisdiction pursuant to state laws, and over any areas in which the municipal limits have contracted with another unit of government to perform code enforcement. A county inspection department shall have jurisdiction over all unincorporated areas outside any municipal jurisdiction located within the county, all areas in which a municipality has requested the county to enforce the ~~code~~ technical codes, and within the jurisdiction of another unit of government in which the county has contracted to perform code enforcement. A joint inspection department created by two or more units of government shall have the authority to enforce the ~~code~~ technical codes in all areas of legal jurisdiction of all units of government supporting the joint department.

(General Statutes 160D-1104 and 160D-1107)

**204.2.3 Duties.** Inspection departments shall:

1. Receive applications and supporting data for permits;
2. Issue or deny permits;
3. Make all necessary inspections to ensure technical code compliance;
4. Identify technical provisions found to be inconsistent with the inspection;
5. Issue or deny certificates of compliance and certificates of occupancy;
6. Issue stop work orders or orders to correct violations;
7. Maintain adequate records of permits issued or denied, inspections made, corrections ordered and certifications issued; and
8. Take other actions that may be required to adequately enforce the ~~code~~ technical codes.

(General Statute 160D-1104)

**204.2.4 Code enforcement officials qualifications.** No state or local government employee shall enforce any provision of the North Carolina State Building Codes who does not possess an appropriate valid certificate issued by the North Carolina Code Officials Qualification Board as specified in General Statutes 143-151.13 and 160D-1103.

**204.2.5 Conflict of interest.** Information about conflict of interest for code enforcement officials can be found in General Statute 160D-1108.

**204.2.6 Right of entry.** The code enforcement official shall have the right to enter buildings or premises as described in General Statutes 160D-1113 and 160D-1117.

**204.2.7 Stop work orders.** General Statute 160D-404 authorizes a code enforcement official to issue stop work orders. The statute describes when a stop work order can be issued, and how the stop work order is to be issued. See Section 204.10 for appeal of stop work orders.

**204.2.8 Unsafe building or systems.** A code enforcement official’s authority to condemn an unsafe building is found in General Statute 160D-1119.

**204.3 Fire prevention ~~department~~ code enforcement.**

**204.3.1 General.** The responsibility for administration and enforcement of the North Carolina Fire Prevention Code has also been allocated to county fire marshals and city and town fire chiefs under the supervision of State officials as designated within Section 203.

(General Statutes ~~160A-292~~, 160A-291, and 160A-292)

**204.3.2 Jurisdiction.** A ~~municipal~~ city or town fire ~~department~~ chief shall have jurisdiction over all areas within the ~~city~~ or town limits, all extraterritorial areas that the ~~city~~ or town has jurisdiction pursuant to state laws, and over any areas in which the ~~municipal~~ city or town limits have contracted with another unit of government to perform ~~code~~

## ADMINISTRATIVE POLICIES

~~enforcement-enforcement of the North Carolina Fire Prevention Code.~~ The county fire marshal and ~~his or her~~ appointed assistants appointed by the county fire marshal shall have jurisdiction over all unincorporated areas outside any ~~municipality or town~~ jurisdiction located within the county, all areas in which a ~~municipality city or town~~ has requested the county to enforce the ~~code.~~North Carolina Fire Prevention Code, and within the jurisdiction of another unit of government in which the county has contracted to perform ~~code enforcement-enforcement of the North Carolina Fire Prevention Code.~~ A joint inspection department created by twoTwo or more units of government shall have the authority to jointly enforce the ~~code~~North Carolina Fire Prevention Code in all areas of legal jurisdiction of all units of government supporting the joint ~~department.~~agreement to enforce the North Carolina Fire Prevention Code.

(General Statutes 153A-234, 160A-292, 160D-1104 and 160D-1107)

### **204.3.3 Duties.** ~~Fire prevention departments shall:~~

1. Receive applications and supporting data for permits;
2. Issue or deny permits;
3. Make all necessary inspections to ensure ~~code compliance;~~compliance with the North Carolina Fire Prevention Code;
4. Identify technical provisions found to be inconsistent with the inspection;
5. Issue or deny certificates of compliance and certificates of occupancy;
6. Issue stop work orders or orders to correct violations;
7. Maintain adequate records of permits issued or denied, inspections made, corrections ordered and certifications issued;
8. Take ~~other~~actions that may be required to adequately enforce the code;~~Code enforcement actions;~~to enforce the North Carolina Fire Prevention Code;
9. Investigate the cause, origin, and circumstances of every fire in which property has been destroyed or damaged;
10. Inspect public school buildings a minimum of two times during a calendar year for removal of hazards, provided that the periodic inspections shall be at least 120 calendar days apart; and
11. Inspect new and existing lodging establishments, including hotels, motels, and tourist homes that provide accommodations for seven or more continuous days (extended-stay establishments), bed and breakfast inns, and bed and breakfast homes for the installation and maintenance of carbon monoxide alarms and detectors annually.

(General Statutes 160D-1104, 58-79-1, 115C-525(b), 130A-247, and 143-138(b)(2))

**204.3.4 Fire code enforcement official's qualifications.** No county fire marshal or ~~municipal city or town~~ fire chief or their appointed assistants shall enforce any provision of the North Carolina State Building Codes who does not possess an appropriate valid certificate issued by the North Carolina Code Official's Qualification Board as specified in General Statutes 143-151.13 and 160D-1103.

**204.3.5 Conflict of interest.** Information about conflict of interest for code enforcement officials can be found in General Statute 160D-1108.

**204.3.6 Right of entry.** The fire code enforcement official shall have the right to enter buildings or premises where it is necessary to make a fire prevention inspection to enforce the provisions of the North Carolina Fire Prevention Code or where otherwise authorized as described in General Statutes 153A-234, 160A-292, 160D-1113 and 160D-1117.

**204.3.7 Administrative Inspection Warrants.** Where the fire code enforcement official has first obtained a proper inspection warrant to secure entry to conduct an inspection, an owner, the owner's authorized agent, or occupant or person having charge, care or control of the building or premises shall not fail or neglect, to permit entry therein by the fire code enforcement official for the purpose of inspection and examination.

(General Statute 15-27.2)

**204.3.8 Identification.** The fire code enforcement official shall carry ~~proper identification~~official credentials such as a badge or certificate that demonstrates the official's authority when inspecting structures or premises in the performance of duties, and shall present ~~proper~~official credentials when making inspections.

(General Statute 160D-1117)

**204.3.9 Stop work orders.** General Statute 160D-404 authorizes a fire code enforcement official to issue stop work orders. The statute describes when a stop work order can be issued, and how the stop work order is to be issued. See Section 204.10 for appeal of stop work orders.

**204.3.10 Unsafe building or systems.** A fire code enforcement official's authority to condemn an unsafe building

is found in General Statute 160D-1119.

#### **204.3.204.4 Permits.**

**204.3.1204.4.1 General.** No person may commence or proceed with:

1. The construction, reconstruction, alteration, repair, movement to another site, removal or demolition of any building;
2. The installation, extension or general repair of any plumbing system;
3. The installation, extension, alteration or general repair of any heating or cooling equipment system; or
4. The installation, extension, alteration or general repair of any electrical wiring, devices, appliances or equipment without first securing from the Inspection Department inspection department with jurisdiction over the site of the work each permit required by the North Carolina State Building Codes and other State or local law or local ordinance or regulation applicable to the work.

(General Statute 160D-1110)

**204.3.2204.4.2 Validity/Expiration.** In accordance with General Statute 160D-1111, a permit expires 6 months, or any lesser time fixed by local ordinances, after the date of issuance if the work authorized by the permit has not been commenced. If, after commencement, the work is discontinued for a period of 12 months, the permit immediately expires. No work authorized by a permit that has expired may be performed until a new permit has been issued.

**204.3.3204.4.3 Changes in work.** Work shall not deviate substantially from that described on the permit documents. After a building permit has been issued, no changes or deviations from the terms of the application, plans and specifications, or the permit, except where changes or deviations are clearly permissible under the North Carolina State Building Code, shall be made until specific written approval of proposed changes or deviations has been obtained from the inspection department.

**204.3.4204.4.4 Information required.** A permit application shall be filed with the Inspection Department inspection department on a form furnished for that purpose. The Inspection Department inspection department shall make available a list of information which must be submitted with the building permit application, including a complete building code summary (see Appendix B) and a permit application information sheet (see Appendix A).

**204.3.5204.4.5 Design professional seal required.** Where the General Statutes, North Carolina Board of Architecture and Registered Interior Designers, or the North Carolina Board of Examiners for Engineers and Land Surveyors require, no permit shall be issued unless the construction documents (drawings and specifications) bear the North Carolina seal of a *registered design professional*. *Construction documents* shall include the name and address of the business entity (individual, corporation or partnership) with whom the registered design professional is affiliated. Questions concerning this section should be directed to the North Carolina Board of Architecture and Registered Interior Designers, the North Carolina Board of Examiners for Engineers and Land Surveyors, or the National Institute for Certification Engineering Technologies (NICET) Board of Governors.

(General Statute 83A-10 and 83A-13)

**204.3.5.1204.4.5.1 Registered design professional.** The registered design professional shall be a registered architect, registered interior designer, licensed professional engineer or NICET Level III sprinkler or fire alarm designer legally registered or licensed under the laws of this state.

**204.3.6204.4.6 Contractor license required.** When the General Statutes require that general construction, plumbing, mechanical, electrical, fire protection or gas work be performed by an appropriately licensed individual, no permit for such type work shall be issued to an unlicensed person or firm. Additional requirements may be found in General Statutes 87-14, 87-21(e), 87-43.1, 87-58, 153A-134, 160A-194 and 160D-1110.

**204.3.7204.4.7 Contractor responsibilities.** It shall be the duty of every person who contracts for the installation or repair of a building or service system to comply with State or local rules and regulations concerning licensing. It shall be the contractor's responsibility to conform to the technical codes for all installations or repairs of a building or service system.

#### **204.4204.5 Issuing permits.**

**204.4.1204.5.1 Action on permits.** In accordance with General Statute 160D-1110, the Inspection Department inspection department shall examine each application for a permit to determine if it is in compliance with the requirements of the technical codes and other pertinent laws and ordinances. If the inspection department is satisfied that the work described in the application conforms to the requirements of the technical codes and other pertinent laws and ordinances, it shall issue a permit to the applicant. If the application does not conform to the requirements of the technical codes and other pertinent laws and ordinances, the application shall be returned to the applicant with the reasons for refusal stated.

(General Statute 160D-1104 and 160D-1110)

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~~204.4.2~~**204.5.2 Permits for modular construction.** Permits shall be required for the installation, connection of units, foundations, utility connections or alterations of buildings or components manufactured off the site and labeled by a third-party agency accredited and listed by the Building Code Council.

~~204.4.2.1~~**204.5.2.1 Third-party certification agencies.** Third-party certification agencies shall be accredited and listed by the Building Code Council. Inspection and certification of buildings or components manufactured off the site and labeled by a third-party agency shall be accepted by the inspection department without further inspection. Permits and fees may be required for any installation, connection of units, foundations, utility connections or alterations of such work.

### ~~204.5.1~~**204.6 Conditions of the permit.**

~~204.5.1~~**204.6.1 Contractor responsibilities.** It shall be the duty of every person who contracts for the installation or repair of a building or services system to comply with state or local rules and regulations concerning licensing. It shall be the contractor's responsibility to conform to this code and the technical codes for all installations or repairs of a building or service system. Violations and penalties of these provisions are listed in Sections 204.12 through 204.14 of this code. Additional requirements can be found in General Statutes 87-1 through 87-14.

~~204.5.2~~**204.6.2 Permit intent.** A permit issued shall be construed as permission to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes. Issuance of a permit shall not prevent the inspection department from requiring correction of errors in plans, construction or violations of this code.

(General Statute 160D-1110)

### ~~204.5.3~~**204.6.3 Revocation of permits.**

~~204.5.3.1~~**204.6.3.1 Misrepresentation of application.** The code enforcement official shall ~~revoke, revoke~~ in ~~writing, writing~~, a permit or approval issued under the provisions of this or the technical codes for:

1. Any ~~substantial departure from the approved application, drawings or specifications; changes or deviations from the terms of the application, plans and specifications, or the permit, including a change of contractor or subcontractor.~~

*~~Comment: Change of contractor or subcontractor is considered a substantial departure from the approved application.~~*

2. Refusal or failure to comply with the requirements of any applicable State or local laws; or,
3. Any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.
4. See the North Carolina Fire Prevention Code for other permit revocation requirements.

~~204.5.3.2~~**204.6.3.2 Violation of code provisions.** The code enforcement official may revoke a permit upon determination that the work for which the permit was issued is in violation of, or not in conformity with, the provisions of this or the technical codes.

(General Statute 160D-1115)

### ~~204.6.2~~**204.7 Fees.**

~~204.6.1~~**204.7.1 Fees.** A permit shall not be issued until the fees prescribed by the local governing authority have been paid. No amendment to a permit shall be released until the additional fee, if any, has been paid.

(General Statute 160D-402)

~~204.6.2~~**204.7.2 Work commencing before permit issuance.** If any person commences any work on a building or service systems before obtaining the necessary permit, he or she shall be subject to a penalty as established by the local governing body.

(General Statutes 160D-402)

~~204.7.2~~**204.8 Inspections.** In addition to the inspections required by Section 107, the code enforcement official shall provide inspections as required by Sections 204.8.1 and 204.8.2.

~~204.7.1~~**204.8.1 Periodic inspections for hazardous or unlawful conditions.** The inspection department shall make periodic inspections as specified in General Statute 160D-1117.

~~204.7.2~~**204.8.2 Required public school inspections.** Inspections of schools for fire hazards shall be in accordance with General Statute 115C-525(b).

### ~~204.8.2~~**204.9 Certificate of compliance.**

~~204.8.1~~**204.9.1 Building occupancy.** A new building shall not be occupied or a change made in the occupancy, nature or use of a building or part of a building until after the inspection department has issued a certificate of

compliance. The certificate of compliance shall not be issued until all required service systems have been inspected for compliance with the technical codes and other applicable laws and ordinances and released by the inspection department.

(General Statute 160D-1116)

**204.8.2204.9.2 Certificate of compliance.** Upon satisfactory completion of a building, plumbing, mechanical, electrical, fire protection or gas system, or portion thereof, a certificate of compliance shall be issued. The certificate of compliance represents that a structure or system is complete and for certain types of permits is permission granted for connection to a utility system. The certificate of compliance shall not be construed to grant authority to occupy a building.

(General Statute 160D-1116)

**204.8.3204.9.3 Temporary/partial occupancy compliance.** A temporary/partial certificate of compliance may be issued permitting occupancy for a stated period for specific portions of a building or service system that the inspector finds safe for occupancy prior to final completion of the entire building or system.

(General Statute 160D-1116)

**204.10 Certificate of occupancy.**

**204.8.4 Issuing certificate of occupancy. 204.10.1 Building occupancy.** A new building shall not be occupied until after the inspection department has issued a certificate of occupancy. Upon satisfactory completion of a building and after the an approved final inspection, the inspection department may shall issue a certificate of occupancy stating the occupancy that may be safely occupied. The certificate of occupancy shall state the occupancy may be safely occupied. See section 204.8.4.1 for application of upfits and shell buildings.

**204.8.4.1204.10.1.1 Existing buildings.** A certificate of occupancy for any existing building, including upfits and shell buildings, may be obtained by applying to the inspection department and supplying the building and technical information and data necessary requested by the inspection department to determine compliance with the technical codes for the occupancy intended. Where necessary, the code enforcement official may require detailed drawings drawings, specifications, product manufacturer’s installation instructions, product listing and labeling information and inspections to determine compliance with the applicable technical codes. When, upon examination and inspection, it is found that the building conforms to the provisions of the technical codes and other applicable laws and ordinances for such occupancy, a certificate of occupancy shall be issued. The certificate shall state the approved occupancy type. This section also applies to a change of occupancy within an existing building.

**204.10.1.2 Temporary/partial occupancy.** A temporary/partial certificate of occupancy may be issued permitting occupancy for a stated period for specific portions of a building that the inspector finds safe for occupancy prior to final completion of the entire building.

**204.9204.11 Service utilities.**

**204.9.1204.11.1 Connection of service utilities.** No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by the technical codes until approved by the inspection department and a certificate of compliance is issued.

(General Statute 143-143.2)

**204.9.2204.11.2 Temporary connection.** The inspection department may authorize the temporary connection of the building or system to the utility source of energy, fuel or power for the purpose of testing building service systems.

(General Statute 160D-1116)

**204.10204.12 Appeal of stop work orders.** Whenever a stop order has been issued by an inspection department involving alleged violations of the North Carolina State Building Codes, the owner or builder may appeal in writing to the Commissioner of Insurance, or his or her designee, designee assigned by the Commissioner, within 5 calendar days after the date the order is issued, with a copy of the appeal to the inspection department. No further work may take place in violation of a stop order. The Commissioner, or his or her designee, designee assigned by the Commissioner, shall promptly conduct an investigation. The inspection department and the owner or builder shall be permitted to submit relevant evidence for the investigation. The Commissioner of Insurance, or his or her designee, designee assigned by the Commissioner, shall provide a written statement of the decision setting forth the facts found, the decision reached and the reasons for the decision. In the event of dissatisfaction with the decision, the person affected owner or builder shall have the option of appealing as set forth in Section 203.1.2.

(General Statutes 160D-1114)

**204.11204.13 Floor loads and occupant loads.**

**204.11.1204.13.1 Occupancy.** No building shall be occupied for any purpose that will cause the floors to be loaded beyond their safe capacity. It shall be the responsibility of the owner or occupant of any building, where excessive floor loading is likely to occur, to employ a design professional in computing the safe load capacity. The computations shall be filed as a permanent record of the inspection department. The inspection department may

## ADMINISTRATIVE POLICIES

permit occupancy of a building when the department is satisfied that the capacity will not be exceeded.

**~~204.11.2~~204.13.2 Occupant load posted.** When required by the code enforcement official and in all Group A-2 occupancies with a North Carolina alcohol license, signs stating the occupant load determined in accordance with occupant load specified in the technical codes shall be posted by the owner of the building in each assembly room, auditorium or room used for a similar purpose where fixed seats are not installed. The seating capacity shall be determined in accordance with the technical codes and signs posted at locations approved by the code enforcement official. It shall be unlawful to remove or deface such notice or to permit more than this legal number of people within such space. The signs shall read as follows:

“Occupancy by more than \_\_\_\_\_ persons is  
dangerous and unlawful  
  
\_\_\_\_\_, CEO”

**~~204.12~~204.14 Violations.** Any person, firm, corporation or agent who violates a provision of this code or the technical codes shall be guilty of a Class 3 misdemeanor. Each person shall be considered guilty of a separate offense for each and every portion thereof during which any violation is committed or continued, for a period of 30 days. Upon conviction of any such violation the person shall be liable to a fine not to exceed \$50.00 for each offense. Any violation incurred more than 1 year after another conviction for violation of the occupancy limits shall be treated as a first offense for the purposes of establishing and imposing penalties.

[General Statute 143-138(h)]

### **~~204.13~~204.15 Remedies.**

**~~204.13.1~~204.15.1 General.** In case any building or structure is constructed or its purpose altered so that it ~~becomes in violation~~ violates the requirements of the technical codes, or if the occupancy limits established are exceeded, the code enforcement official may institute any appropriate action or proceedings, including civil remedies, to:

1. Prevent the unlawful erection, construction or reconstruction or alteration of purpose, or overcrowding;
2. Restrain, correct or abate the violation; or
3. Prevent the occupancy or use of the building, structure or land until the violation is corrected.

**~~204.13.2~~204.15.2 Fire prevention.** Refer to the *North Carolina Fire Code* for summary abatement requirements for fire prevention code violations and penalties.

**~~204.14~~204.16 Code enforcement official not fulfilling responsibilities.** When the code enforcement official does not fulfill his responsibilities as specified in Section 204.13, the Commissioner of Insurance or his or her designee designee assigned by the Commissioner may institute any appropriate actions or proceedings available. (General Statutes 14-230, 14-231, 14-232, 160D-1109)

## SECTION 205 OTHER AGENCIES

[www.ncgov.com](http://www.ncgov.com) (Click on NC Agencies)

### **205.1 Administration by the North Carolina Department of Labor.**

**205.1.1 Commissioner of Labor.** The Commissioner of Labor shall have general supervision over the Elevator and Amusement Device Division and the Boiler Pressure Vessel Division.

[General Statute ~~143-139(e)~~143-139(c) and 143-139(d)]

**205.1.2 Elevator and amusement device division.** The Elevator and Amusement Device Division shall enforce the provisions of the North Carolina State Building Code that pertain to the operation of:

1. Elevators;
2. Dumbwaiters;
3. Escalators;
4. Moving walks;
5. Personnel hoists;
6. Chair and wheelchair lifts;
7. Manlifts;

8. Special equipment; and
9. Amusement devices.

**Exceptions:**

1. Devices and equipment located and operated within a single-family residence.
2. Equipment constructed, installed and used exclusively for the movement of materials.
3. Mining equipment covered by either the Federal Mine Safety and Health Act or the Mine Safety and Health Act of North Carolina.
4. Zip lines.

[General Statute 143-139(d)]

**205.1.3 Boiler and pressure vessel division.** The Boiler and Pressure Vessel Division shall enforce the provisions of Chapter 95 of the General Statutes which pertain to boilers and pressure vessels.

**Exception:** The Boiler and Pressure Vessel Division shall not regulate hot water supply boilers equipped with ASME Code and National Board certified safety relief valves, which are fired with oil, gas, or electricity or hot water supply tanks heated by any indirect means which do not exceed any of the following limitations:

1. Heat input of 200,000 Btu/hr;
2. Water temperature of 200°F (93°C);
3. Nominal water capacity of 120 gallons (454 L).

[General Statutes 95-69.10(c), 143-139(c)]



## CHAPTER 3

# **REPRINT OF THE NORTH CAROLINA GENERAL STATUTES PERTAINING TO THE ENFORCEMENT ADMINISTRATION OF THE NORTH CAROLINA STATE BUILDING CODES**

The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other State agencies, occupational licensing boards and commissions. It shall be the responsibility of a permit holder, design professional, contractor or occupational license holder to determine whether any additional requirements exist.

The current language of the General Statutes may be viewed online at [www.ncleg.gov](http://www.ncleg.gov) or by clicking on the referenced statute number below.

The following list, while extensive, may not include all applicable North Carolina General Statutes.

### **Property Owners**

1-539.2	Dismantling portion of building
14-68	Failure of owner of property to comply with orders of public authorities
106-581.1	Agriculture Defined
160D-903	Agricultural Uses (qualifications for bona fide farm status)

### **Misconduct in Public Office** *(NCGS Chapter 14, Article 31)*

<del>14-228-232</del>	<del>Misconduct in public office</del>
<del>14-414</del>	<del>Pyrotechnics defined; exceptions</del>
<del>14-228</del>	<del>Buying and selling offices</del>
<del>14-229</del>	<del>Acting as officer before qualifying as such</del>
<del>14-230</del>	<del>Willfully failing to discharge duties</del>
<del>14-231</del>	<del>Failing to make reports and discharge other duties</del>
<del>14-232</del>	<del>Swearing falsely to official reports</del>

### **Administrative Search and Inspection Warrants**

15-27.2	Warrants to conduct inspections authorized by law
58-2-95	Commissioner to supervise local inspectors
58-31-40	Commissioner to inspect state property; plans submitted
58-79-20	Inspection of premises; dangerous material removed

### **Electrical Materials, Devices, Appliances and Equipment** *(NCGS Chapter 66, Article 4)*

<del>66-23-27</del>	<del>Electrical materials, devices, appliances and equipment</del>
<del>66-23</del>	<del>Sale of electrical goods regulated</del>
<del>66-24</del>	<del>Identification marks required</del>
<del>66-25</del>	<del>Acceptable listings as to safety of goods</del>
<del>66-26</del>	<del>Legal responsibility of proper installations unaffected</del>
<del>66-27</del>	<del>Violation made misdemeanor</del>
<del>66-27.01</del>	<del>Enforcement</del>

## **Safety Features of Hot Water Heaters**

*(NCGS Chapter 66, Article 4A)*

<u>66-27.1</u>	<u>Certain automatic hot water tanks or heaters to have approved relief valves; installation or sale of unapproved relief valves forbidden</u>
<u>66-27.2</u>	<u>Certain hot water supply storage tank or heater baffles, heat traps, etc., to be tested before installation or sale</u>
<u>66-27.3</u>	<u>Violation of Article made misdemeanor</u>
<u>66-27.4</u>	<u>Local regulation of hot water heater safety features</u>

## **Architects**

<u>83A-1-13</u>	<u>Architects</u>
<u>83A-1</u>	<u>Definitions</u>
<u>83A-12</u>	<u>Prohibited practice</u>
<u>83A-13</u>	<u>Exemptions</u>

## **General Contractors**

*(NCGS Chapter 87, Article 1)*

<u>87-1-15</u>	<u>General contractors</u>
<u>87-1</u>	<u>"General contractor" defined; exceptions</u>
<u>87-1.1</u>	<u>Exception for licenses under Article 2 or 4</u>
<u>87-1.2</u>	<u>Exception for specified Department of Transportation contractors</u>
<u>87-14</u>	<u>Regulations as to issue of building permits</u>
<u>87-15.6</u>	<u>Homeowners Recovery Fund</u>

## **Plumbing, Heating, and Fire Sprinkler Contractor**

<u>87-21</u>	<u>Plumbing, heating and fire sprinkler contractor</u>
<u>87-21</u>	<u>Definitions; contractors licensed by Board; examination; posting license, etc.</u>

## **Electrical Contractors**

*(NCGS Chapter 87, Article 4)*

<u>87-43</u>	<u>Electrical contractors</u>
<u>87-43</u>	<u>Electrical contracting defined; licenses</u>
<u>87-43.1</u>	<u>Exceptions</u>
<u>87-43.2</u>	<u>Issuance of license</u>
<u>87-43.3</u>	<u>Classification of licenses</u>

## **Refrigeration Contractors**

<u>87-57-58</u>	<u>Refrigeration contractors</u>
<u>87-57</u>	<u>License required of persons, firms or corporations engaged in the refrigeration trade</u>
<u>87-58</u>	<u>Definitions; contractors licensed by Board; examinations</u>

## **Engineers**

<u>89C-3-23</u>	<u>Engineers</u>
<u>89C-3</u>	<u>Definitions</u>
<u>89C-23</u>	<u>Unlawful to practice engineering or land surveying without licensure; unlawful use of title or terms; penalties; Attorney General to be legal adviser</u>

## **Uniform Boiler and Pressure Vessel Act**

*(NCGS Chapter 95, Article 7A)*

<u>95-69</u>	<u>Uniform boiler and pressure vessel act</u>
<u>95-69.8</u>	<u>Short title</u>
<u>95-69.9</u>	<u>Definitions</u>
<u>95-69.10</u>	<u>Application of Article; exemptions</u>
<u>95-69.11</u>	<u>Powers and duties of commissioner</u>
<u>95-69.16</u>	<u>Inspection certificate required</u>

**Public Schools**

<u>105-130-151</u>	<u>Accessibility tax credit</u>
<u>115C-525</u>	<u>Public schools</u>
<u>115C-525</u>	<u>Fire prevention</u>

**Gasoline and Oil Inspection and Regulation**

*(NCGS Chapter 119, Article 5)*

*(Liquefied petroleum gases)*

<u>119 Article 5</u>	<u>Liquefied petroleum gases</u>
<u>119-54</u>	<u>Purpose: definitions: scope of Article</u>

**Wastewater Systems**

*(NCGS Chapter 130A, Article 10)*

<u>130A-336-339</u>	<u>Wastewater system construction</u>
<u>130A-336</u>	<u>Improvement permit and authorization for wastewater system construction required</u>
<u>130A-337</u>	<u>Inspection; operation permit required</u>
<u>130A-338</u>	<u>Authorization for wastewater system construction required before other permits to be issued</u>
<u>130A-339</u>	<u>Limitation on electrical service</u>

**Public Works**

*(NCGS Chapter 133, Article 1)*

<u>133-1-4</u>	<u>Public works</u>
<u>133-1</u>	<u>Employment of architects, etc., on public works when interested in use of materials prohibited</u>
<u>133-1.1</u>	<u>Certain buildings involving public funds to be designed, etc., by architect or engineer</u>
<u>133-2</u>	<u>Drawing of plans by material furnisher prohibited</u>
<u>133-3</u>	<u>Specifications to carry competitive items; substitution of materials</u>
<u>133-4</u>	<u>Violation of Chapter made misdemeanor</u>

**Inspection of State-Owned Buildings**

<u>143-135.1</u>	<u>Inspection of state-owned buildings</u>
<u>143-135.1</u>	<u>State buildings exempt from county and municipal building requirements; consideration of recommendations by counties and municipalities</u>

**Building Code Council and Building Code**

*(NCGS Chapter 130A, Article 9)*

<u>143-136-143</u>	<u>Building Code Council and Building Code</u>
<u>143-136</u>	<u>Building Code Council created; membership</u>

<u>143-137</u>	<u>Organization of Council; rules; meetings; staff; fiscal affairs</u>
<u>143-138</u>	<u>North Carolina State Building Code</u>
<u>143-138.1</u>	<u>Introduction and instruction of the North Carolina Building Code; posting of written commentaries and interpretations on Department of Insurance Web site</u>
<u>143-139</u>	<u>Enforcement of Building Code</u>
<u>143-139.1</u>	<u>Certification of manufactured buildings, structures or components by recognized independent testing laboratory; minimum standards for modular homes</u>
<u>143-139.2</u>	<u>Enforcement of insulation requirements; certificate for occupancy; no electric service without compliance</u>
<u>143-139.3</u>	<u>Inspection of liquified petroleum gas piping systems for residential structures</u>
<u>143-140</u>	<u>Hearings before enforcement agencies as to questions under Building Code</u>
<u>143-141</u>	<u>Appeals to Building Code Council</u>
<u>143-142</u>	<u>Further duties of the Building Code Council</u>
<u>143-143</u>	<u>Effect on certain existing laws</u>
<u>143-143.2</u>	<u>Electric wiring of houses, buildings, and structures</u>
<u>143-143.3</u>	<u>Temporary toilet facilities at construction sites</u>
<u>143-143.4</u>	<u>Door lock exemption for certain businesses</u>
<u>143-143.5</u>	<u>Access to toilets in shopping malls</u>

**Code Officials Qualification Board**  
*(NCGS Chapter 130A, Article 9C)*

<u>143-151.8-21</u>	<u>Code officials qualification board</u>
<u>143-151.8</u>	<u>Definitions</u>
<u>143-151.9</u>	<u>North Carolina Code Officials Qualification Board established; members; terms; vacancies</u>
<u>143-151.10</u>	<u>Compensation</u>
<u>143-151.11</u>	<u>Chairman; vice-chairman; other officers; meetings; reports</u>
<u>143-151.12</u>	<u>Powers</u>
<u>143-151.13</u>	<u>Required standards and certificates for Code-enforcement officials</u>
<u>143-151.13A</u>	<u>Professional development program for officials</u>
<u>143-151.14</u>	<u>Comity</u>
<u>143-151.15</u>	<u>Return of certificate to Board; reissuance by Board</u>
<u>143-151.16</u>	<u>Certification fees; renewal of certificates; examination fees</u>
<u>143-151.17</u>	<u>Grounds for disciplinary actions; investigation; administrative procedures</u>
<u>143-151.18</u>	<u>Violations; penalty; injunction</u>
<u>143-151.19</u>	<u>Administration</u>
<u>143-151.20</u>	<u>Donations and appropriations</u>
<u>143-151.21</u>	<u>Disposition of fees</u>

**Master Electrical and Natural Gas Meters Prohibited**  
*(NCGS Chapter 143, Article 9E)*

<u>143-151.42</u>	<u>Prohibition of master meters for electric and natural gas service</u>
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**North Carolina Home Inspector Licensure Board**  
*(NCGS Chapter 143, Article 9F)*

<u>143-151.43-64</u>	<u>North Carolina home inspector board</u>
<u>143-151.43</u>	<u>Short title</u>

<u>143-151.44</u>	<u>Purpose</u>
<u>143-151.45</u>	<u>Definitions</u>
<u>143-151.46</u>	<u>North Carolina Home Inspector Licensure Board established; members; terms; vacancies</u>
<u>143-151.47</u>	<u>Compensation of Board members</u>
<u>143-151.48</u>	<u>Election of officers; meetings of Board</u>
<u>143-151.49</u>	<u>Powers and responsibilities of Board</u>
<u>143-151.50</u>	<u>License required to perform home inspections for compensation or to claim to be a "licensed home inspector"</u>
<u>143-151.51</u>	<u>Requirements to be licensed as a home inspector</u>
<u>143-151.53</u>	<u>Notification to applicant following evaluation of application</u>
<u>143-151.54</u>	<u>Miscellaneous license provisions</u>
<u>143-151.55</u>	<u>Renewal of license; inactive licenses; lapsed licenses</u>
<u>143-151.56</u>	<u>Suspension, revocation, and refusal to renew license</u>
<u>143-151.57</u>	<u>Fees</u>
<u>143-151.58</u>	<u>Duties of licensed home inspector</u>
<u>143-151.59</u>	<u>Violation is a misdemeanor</u>
<u>143-151.60</u>	<u>Injunctions</u>
<u>143-151.62</u>	<u>Persons and practices not affected</u>
<u>143-151.63</u>	<u>Administration</u>
<u>143-151.64</u>	<u>Continuing education requirements</u>

**Administrative Procedures Act**  
**(NCGS Chapter 150B, Article 2A)**

<u>150B-18-21</u>	<u>Administrative Procedures Act</u>
<u>150B-18</u>	<u>Scope and effect</u>
<u>150B-19</u>	<u>Restrictions on what can be adopted as a rule</u>
<u>150B-19.1</u>	<u>Requirements of agencies in the rule-making process</u>
<u>150B-19.3</u>	<u>Limitations on certain environmental rules</u>
<u>150B-20</u>	<u>Petitioning an agency to adopt a rule</u>
<u>150B-21</u>	<u>Agency must designate rule-making coordinator; duties of coordinator</u>
<u>150B-21.1</u>	<u>Procedure for adopting a temporary rule</u>
<u>150B-21.1A</u>	<u>Adopting an emergency rule</u>
<u>150B-21.2</u>	<u>Procedure for adopting a permanent rule</u>
<u>150B-21.3</u>	<u>Effective date of rules</u>
<u>150B-21.3A</u>	<u>Periodic review and expiration of existing rules</u>
<u>150B-21.4</u>	<u>Fiscal and regulatory impact analysis on rules</u>
<u>150B-21.5</u>	<u>Circumstances when notice and rule-making hearing not required; circumstances when submission to the Commission not required</u>
<u>150B-21.6</u>	<u>Incorporating material in a rule by reference</u>
<u>150B-21.7</u>	<u>Effect of transfer of duties or termination of agency on rules</u>
<u>150B-21.8</u>	<u>Review of rule by Commission</u>
<u>150B-21.9</u>	<u>Standards and timetable for review by Commission</u>
<u>150B-21.10</u>	<u>Commission action on permanent rule</u>
<u>150B-21.11</u>	<u>Procedure when Commission approves permanent rule</u>
<u>150B-21.12</u>	<u>Procedure when Commission objects to a permanent rule</u>

**Cities and Counties**  
*(NCGS Chapter 160D, Article 4)*

<u>160D Article 11</u>	<u>Building Code Enforcement</u>
<u>160D-401</u>	<u>Application</u>
<u>160D-402</u>	<u>Administrative staff</u>
<u>160D-404</u>	<u>Enforcement</u>
<u>160D-405</u>	<u>Appeals of administrative decisions</u>
<u>160D-406</u>	<u>Quasi-judicial procedure</u>
<u>160D-1101</u>	<u>Definitions</u>
<u>160D-1102</u>	<u>Building code administration</u>
<u>160D-1103</u>	<u>Qualification of inspectors</u>
<u>160D-1104</u>	<u>Duties and responsibilities</u>
<u>160D-1104.1</u>	<u>Remote inspection alternative</u>
<u>160D-1105</u>	<u>Other arrangements for inspection</u>
<u>160D-1106</u>	<u>Alternative inspection method for components or element</u>
<u>160D-1107</u>	<u>Mutual aid contracts</u>
<u>160D-1108</u>	<u>Conflicts of interest</u>
<u>160D-1109</u>	<u>Failure to perform duties</u>
<u>160D-1110</u>	<u>Building permits</u>
<u>160D-1111</u>	<u>Expiration of building permits</u>
<u>160D-1112</u>	<u>Changes in work</u>
<u>160D-1113</u>	<u>Inspections of work in progress</u>
<u>160D-1114</u>	<u>Appeals of stop orders</u>
<u>160D-1115</u>	<u>Revocation of building permits</u>
<u>160D-1116</u>	<u>Certificates of compliance; temporary certificates of occupancy</u>
<u>160D-1117</u>	<u>Periodic inspections</u>
<u>160D-1118</u>	<u>Defects in buildings to be corrected</u>
<u>160D-1119</u>	<u>Unsafe buildings condemned</u>
<u>160D-1120</u>	<u>Removing notice from condemned building</u>
<u>160D-1121</u>	<u>Action in event of failure to take corrective action</u>
<u>160D-1122</u>	<u>Orders to take corrective action</u>
<u>160D-1123</u>	<u>Appeal; finality of order if not appealed</u>
<u>160D-1124</u>	<u>Failure to comply with order</u>
<u>160D-1125</u>	<u>Enforcement</u>
<u>160D-1126</u>	<u>Records and reports</u>
<u>160D-1127</u>	<u>Appeals</u>
<u>160D-1128</u>	<u>Fire limits</u>
<u>160D-1129</u>	<u>Regulation authorized as to repair, closing, and demolition of nonresidential buildings or structures; order of public officer</u>
<u>160D-1130</u>	<u>Vacant building receivership*</u>

## APPENDIX A

# PERMIT APPLICATION INFORMATION SHEET

The following information is required on all permit applications. Additional information may be included to ensure that all state and local laws are complied with. This information may be arranged in any order and the following outline is only the minimum information required.

City/County Name \_\_\_\_\_

Inspection Department \_\_\_\_\_

Permit Application \_\_\_\_\_

Applicant Name \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Project Address \_\_\_\_\_

Total Project Cost \_\_\_\_\_ Electrical Cost \_\_\_\_\_

Subdivision \_\_\_\_\_ Block # \_\_\_\_\_ Lot # \_\_\_\_\_

Developer \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Property Owner \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Project Contact \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Description of Proposed Work \_\_\_\_\_

Type of Building:  New  Existing  Addition  N/A

Type of Construction:  IA  IB  IIA  IIB  IIIA  IIIB  
 ~~IV-A~~  IV-B  IV-C  IV-HT  VA  VB

Occupancy:  A-1  A-2  A-3  A-4  A-5  B  E  F-1  F-2  
 H-1  H-2  H-3  H-4  H-5  I-1  I-2  I-3  I-4  
 M  R-1  R-2  R-3  R-4  S-1  S-2  U

Equipment:  New  Existing  Addition  N/A

Property Use:  Detached Single Family  Detached Two Family  Townhouse  
 Apartment  Condominium  
 Other (Library, Office, Etc.)

Building Area: Total Area (sf) \_\_\_\_\_ Area per floor (sf) \_\_\_\_\_

Building Height: Feet \_\_\_\_\_ # of Stories \_\_\_\_\_

**State Agency Approvals:**

NC Department of Insurance  Yes  No  N/A

Plan Approval  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Specifications  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

NC Department of Labor  Yes  No  N/A

Elevators \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_ Boilers \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

Plan Approval  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

Specifications  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

**Utilities Approvals:**

Water:  Public  Private  Private Health Dept. Permit # \_\_\_\_\_

Sewer:  Public  Private  Private Health Dept. Permit # \_\_\_\_\_

~~Place X~~ Check each applicable box and complete additional information for each permit type needed.

**General Construction Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Electrical Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Mechanical Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_



**Plumbing Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

Place ~~X~~ Check each applicable box and complete additional information for each permit type needed.

**Sprinkler Protection Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other                NICET Level \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Fire Alarm System Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Sign Permit**

Location of Sign \_\_\_\_\_ Address \_\_\_\_\_  
 Off Premises Sign     Wall Sign             Ground Sign             Awning Sign  
 Projection Sign       Special Event Sign     Other  
 Sign/Business Owner \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Accessory Structures Permit**

Accessory Building \_\_\_\_\_ Size \_\_\_\_\_ Sq.Ft.

Solid Fence       Dish Antenna       Swimming Pool       Other (Describe) \_\_\_\_\_

I hereby certify that all information in this application is correct and all work will comply with the State Building Code and all other applicable State and local laws and ordinances and regulations. The Inspection Department will be notified of any changes in the approved plans and specifications for the project permitted herein.

Owner/Agent Signature \_\_\_\_\_

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APPENDIX B

**20182024 BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

(EXCEPT ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: \_\_\_\_\_

Address: \_\_\_\_\_ Zip Code \_\_\_\_\_

Owner/Authorized Agent \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Owned By:  City/County  Private  State

Code Enforcement Jurisdiction:  City  County  State

**CONTACT:** \_\_\_\_\_

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	_____	_____	_____	(____)_____	_____
Civil	_____	_____	_____	(____)_____	_____
Electrical	_____	_____	_____	(____)_____	_____
Fire Alarm	_____	_____	_____	(____)_____	_____
Plumbing	_____	_____	_____	(____)_____	_____
Mechanical	_____	_____	_____	(____)_____	_____
Sprinkler- Standpipe	_____	_____	_____	(____)_____	_____
Structural	_____	_____	_____	(____)_____	_____
Retaining Walls > 5 feet High	_____	_____	_____	(____)_____	_____
Other	_____	_____	_____	(____)_____	_____

("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

**20182024 NC BUILDING CODE:**

Interior Completions

New Building  Shell/Core  1<sup>st</sup> Time

Addition  Phased Construction—Shell Core

**20182024 NC EXISTING BUILDING CODE:** (check all that apply)

Prescriptive  Alteration Level I  Alteration Level II  Alteration Level III  
 Change of Use  Historic Property  Repair  Chapter 14

**CONSTRUCTED:** (date) \_\_\_\_\_ **CURRENT USE(S)** (Ch. 3): \_\_\_\_\_

**RENOVATED:** (date) \_\_\_\_\_ **PROPOSED USE(S)** (Ch. 3): \_\_\_\_\_

**OCCUPANCY CATEGORY** (Table 1604.5): Current: \_\_\_\_\_ Proposed: \_\_\_\_\_

---

**BASIC BUILDING DATA**

**Construction Type:**  I-A       II-A       III-A       V-A  
(check all that apply)  ~~IV~~IV-A       ~~I-B~~IV-B       ~~H-B~~IV-C       ~~III-B~~IV-HT  
 ~~V-B~~

**Sprinklers:**     No     Partial     NFPA 13     NFPA13R     NFPA13D

**Standpipes:**     No                      Class:     I     II     III                       Wet     Dry

**Primary Fire District:**     No     Yes

**Flood Hazard Area:**             No     Yes

**Special Inspections Required:**  No     Yes

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**GROSS BUILDING AREA TABLE**

(add or delete lines as necessary)

Floor	Existing (sq ft)	New (sq ft)	Subtotal
3rd Floor	0	0	0
2nd Floor	0	0	0
Mezzanine	0	0	0
1st Floor	0	0	0
Basement	0	0	0
<b>TOTAL</b>			<b>0</b>

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Note to RRC: Page break

**ALLOWABLE AREA**

**Primary Occupancy Classification(s):**

- Assembly  A-1  A-2  A-3  A-4  A-5
- Business
- Educational
- Factory  F-1 (Moderate)  F-2 (Low)
- Hazardous  H-1 (Detonate)  H-2 (Deflagrate)  
 H-3 (Combust)  H-4 (Health)  H-5 (HPM)
- Institutional  I-1  I-2  I-3  I-4  
~~I-1 Condition  1  2~~  
~~I-2 Condition  1  2~~  
~~I-3 Condition  1  2  3  4  5~~  
~~Condition  1  2  3  4~~
- Mercantile
- Residential  R-1  R-2  R-3  R-4
- Storage  S-1 Moderate  S-2 Low  High-piled  
 Parking Garage  Open  Enclosed  Repair Garage
- Utility and Miscellaneous

**Accessory Occupancy Classification(s):** \_\_\_\_\_

**Incidental Uses (Table 509.1):** \_\_\_\_\_

This separation is not exempt as a Nonseparated Use (see exceptions).

**Special Uses (Chapter 4 – List Code Sections):** \_\_\_\_\_

**Special Provisions: (Chapter 5 – List Code Sections):** \_\_\_\_\_

**Mixed Occupancy:**  No  Yes Separation: \_\_\_\_Hr. Exception: \_\_\_\_\_

(Select one of the following)

Non-separated Use (508.3)

Separated Use (508.4)—See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Select one

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

\_\_\_\_\_ + \_\_\_\_\_ + ..... = \_\_\_\_\_ ≤ 1.00

(add to or delete rows from the following table as necessary to capture all relevant information)

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 <sup>4</sup> AREA	(C) AREA FOR FRONTAGE INCREASE <sup>1, 5</sup>	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>2, 3</sup>

1. Frontage area increases from Section 506.2506.3 are computed thus:

- a. Perimeter which fronts a public way or open space having 20 feet minimum width = \_\_\_\_\_(F)
- b. Total Building Perimeter = \_\_\_\_\_(P)
- c. Ratio (F/P) = \_\_\_\_\_ (F/P)
- d. W = Minimum width of public way = \_\_\_\_\_(W)

2. Unlimited area applicable under conditions of Section 507.
  3. Maximum Building Area = total number of stories in the building  $\times D$  (maximum 3 stories) (506.2).
  4. The maximum area of open parking garages shall comply with Table 406.5.4. ~~The maximum area of traffic control towers must comply with Table 412.3.1.~~
  5. Frontage increase is based on the unsprinklered area value in Table 506.2.
- 

Note to RRC: Page break

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**ALLOWABLE HEIGHT**

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)			
Building Height in Stories (Table 504.4)			

1. Provide code reference if the “Shown on Plans” quantity is not based on Table 504.3 or 504.4.

**FIRE PROTECTION REQUIREMENTS**

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQ'D	PROVIDED (W/ REDUCTION) *				
Structural Frame Including columns, girders, and trusses							
Bearing Walls							
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing walls and partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction Including supporting beams and joists							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures—Exit							
Shaft Enclosures—Other							
Corridor Separation							
Occupancy/Fire Barrier Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

\* Indicate section number permitting reduction

**PERCENTAGE OF WALL OPENING CALCULATIONS**

FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

**LIFE SAFETY SYSTEM REQUIREMENTS**

- Emergency Lighting:  Yes  No
- Exit Signs:  Yes  No
- Fire Alarm:  Yes  No
- Smoke Detection Systems:  Yes  No
- Carbon Monoxide Detection:  Yes  No

**LIFE SAFETY PLAN REQUIREMENTS**

Life Safety Plan Sheet #: \_\_\_\_\_

- Fire and/or smoke rated wall locations (Chapter 7)
- Assumed and real property line locations (if not on the site plan)
- Exterior wall opening area with respect to distance to assumed property lines (705.8)
- Occupancy Use for each area as it relates to occupant load calculation (~~Table 1004.1.2~~)(Table 1004.5)
- Occupant loads for each area
- Exit access travel distances (1017)
- Common path of travel distances [~~Tables 1006.2.1 & 1006.3.2(1)~~](Tables 1006.3.4(1) & 1006.3.4(2))
- Dead end lengths (~~1020.4~~)(1020.5)
- Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (~~1005.3~~)(1005.3.2)
- Actual occupant load for each exit door
- A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- Location of doors with panic hardware (~~1010.1.10~~)(1010.2.9)
- Location of doors with delayed egress locks and the amount of delay (~~1010.1.9.7~~)(1010.2.13)
- Location of doors with electromagnetic egress locks (~~1010.1.9.9~~)(1010.2.11)
- Location of doors equipped with hold-open devices (716.2.6.1)
- Location of emergency escape windows (~~1030~~)(1031)
- The square footage of each fire area (202)
- The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- Note any code exceptions or table notes that may have been utilized regarding the items above





**ACCESSIBLE DWELLING UNITS**  
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

**ACCESSIBLE PARKING**  
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH		
				132" ACCESS AISLE	8' ACCESS AISLE	
TOTAL						

**PLUMBING FIXTURE REQUIREMENTS**  
(TABLE 2902.1)

USE	WATERCLOSETS			URINALS	LAVATORIES			SHOWERS/TUBS	DRINKING FOUNTAINS	
	Male	Female	Unisex		Male	Female	Unisex		Regular	Accessible
SPACE										
EXIST'G										
NEW										
REQ'D										

**SPECIAL APPROVALS**

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

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## ENERGY SUMMARY

### ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design versus the annual energy cost for the proposed design.

**Existing building envelope complies with code:**  (If checked, the remainder of this section is not applicable.)

**Exempt Building:**  (Provide code and applicable code section or statutory reference)

**Climate Zone:**     3A             4A             5A

#### Method of Compliance:

Energy Code:     Performance             Prescriptive

ASHSAE 90.1:     Performance             Prescriptive

Other:             Performance (specify source) \_\_\_\_\_

### THERMAL ENVELOPE: (Prescriptive method only)

#### Roof/ceiling Assembly (each assembly)

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

Skylights in each assembly: \_\_\_\_\_

*U*-Value of skylight: \_\_\_\_\_

total square footage of skylights in each assembly: \_\_\_\_\_

#### Exterior Walls (each assembly)

Description of assembly \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

Openings (windows or doors with glazing)

*U*-Value of assembly: \_\_\_\_\_

    Solar heat gain coefficient: \_\_\_\_\_

    projection factor: \_\_\_\_\_

    Door *R*-Values: \_\_\_\_\_

#### Walls below grade (each assembly)

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

#### Floors over unconditioned space (each assembly)

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

#### Floors slab on grade

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

Horizontal/vertical requirement: \_\_\_\_\_

slab heated: \_\_\_\_\_

**APPENDIX B**  
**20182024 BUILDING CODE SUMMARY**  
**FOR ALL COMMERCIAL PROJECTS**

**STRUCTURAL DESIGN**  
**(PROVIDE ON SHEET 1 OR 2 OF THE STRUCUTRAL SHEETS)**

**DESIGN LOAD:**

**Importance Factors:** Wind ( $I_w$ ) \_\_\_\_\_  
 Snow ( $I_s$ ) \_\_\_\_\_  
 Seismic ( $I_E$ ) \_\_\_\_\_

**Live Loads:** Roof \_\_\_\_\_ psf  
 Mezzanine \_\_\_\_\_ psf  
 Floor \_\_\_\_\_ psf

**Ground Snow Load:** \_\_\_\_\_ psf

**Wind Load:** Basic Wind Speed \_\_\_\_\_ mph (ASCE-7)  
 Exposure Category \_\_\_\_\_

**SEISMIC DESIGN CATEGORY:**  A  B  C  D

Provide the following Seismic Design Parameters:

**Occupancy Category:** (Table 1604.5)  I  II  III  IV

**Spectral Response Acceleration:**  $S_s$  \_\_\_\_\_ %g  $S_1$  \_\_\_\_\_ %g

**Site Classification:** (ASCE 7)  A  B  C  D  E  F

Data Source:  Field Test  Presumptive  Historical Data

**Basic structural system** (check one)

- Bearing Wall  Dual w/Special Moment Frame
- Building Frame  Dual w/Intermediate R/C or Special Steel
- Moment Frame  Inverted Pendulum

**Analysis Procedure:**  Simplified  Equivalent Lateral Force  Dynamic

**Architrcual, Mechanical, Components anchored?**  Yes  No

**LATERAL DESIGN CONTROL:**  Earthquake  Wind

**SOIL BEARING CAPACITIES:**

Field Test (provide copy of test report) \_\_\_\_\_ psf  
 Presumptive Bearing capacity \_\_\_\_\_ psf  
 Pile size, type, and capacity \_\_\_\_\_

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APPENDIX B

**20182024 BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

MECHANICAL DESIGN  
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)  
MECHANICAL SUMMARY

**MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT**

**Thermal Zone**

winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_

**Interior design conditions**

winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_  
relative humidity: \_\_\_\_\_

**Building heating load:** \_\_\_\_\_

**Building cooling load:** \_\_\_\_\_

**Mechanical Spacing Conditioning System**

Unitary  
description of unit: \_\_\_\_\_  
heating efficiency: \_\_\_\_\_  
cooling efficiency: \_\_\_\_\_  
size category of unit: \_\_\_\_\_

Boiler  
Size category. If oversized, state reason.: \_\_\_\_\_

Chiller  
Size category. If oversized, state reason.: \_\_\_\_\_

**List equipment efficiencies:** \_\_\_\_\_

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APPENDIX B

**2018~~2024~~ BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

ELECTRICAL DESIGN  
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)  
ELECTRICAL SUMMARY

**ELECTRICAL SYSTEM AND EQUIPMENT**

**Method of Compliance:**

- Energy Code:     Prescriptive    Performance  
ASHRAE 90.1:    Prescriptive    Performance

**Lighting schedule** (each fixture type) lamp type required in fixture number of lamps in fixture ballast type used in the fixture number of ballasts in fixture total wattage per fixture total interior wattage specified versus allowed (whole building or space by space) total exterior wattage specified versus allowed

**Additional Prescriptive Compliance**

- 506.2.1 More Efficient Mechanical Equipment
  - 506.2.2 Reduced Lighting Power Density
  - 506.2.3 Energy Recovery Ventilation Systems
  - 506.2.4 Higher Efficiency Service Water Heating
  - 506.2.5 On-Site Supply of Renewable Energy
  - 506.2.6 Automatic Daylighting Control Systems
-



# APPENDIX C CODE CHANGE PROPOSAL NORTH CAROLINA BUILDING CODE COUNCIL

325 North Salisbury Street, Room 5-44  
Raleigh, North Carolina 27603  
(919) 647-0019 (919) 647-0008

barry.gupton@ncdoi.gov david.rittlinger@ncdoi.gov  
Petition for Rule Making

Item Number \_\_\_\_\_

Granted by BCC \_\_\_\_\_ Adopted by BCC \_\_\_\_\_ Approved by RRC \_\_\_\_\_  
Denied by BCC \_\_\_\_\_ Disapproved by BCC \_\_\_\_\_ Objection by RRC \_\_\_\_\_

PROPONENT \_\_\_\_\_ PHONE (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  
REPRESENTING \_\_\_\_\_  
ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
E-MAIL \_\_\_\_\_ FAX (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

North Carolina State Building Code, Volume \_\_\_\_\_ Section \_\_\_\_\_ (select as many codes as apply):  
 Administrative  Building  Fire  Residential  
 Mechanical  Plumbing  Fuel Gas  Energy  
Section(s) \_\_\_\_\_

CHECK ONE:  Revise section to read as follows:  Delete section and substitute the following:  
 Add new section to read as follows:  Delete section without substitution:

~~LINE THROUGH LANGUAGE TO BE DELETED~~      UNDERLINE LANGUAGE TO BE ADDED

Type or print. Continue proposal or reason on plain paper attached to this form. See reverse side for instructions.

Will this proposal change the cost of construction?      Decrease       Increase       No   
Will this proposal increase the cost of a dwelling by \$80 or more?      Yes       No   
Will this proposal affect Local or State funds?      Local       State       No   
Will this proposal cause a substantial economic impact (≥ \$1,000,000)?      Yes       No

- Non-Substantial – Provide an economic analysis including benefit/cost estimates.
- Substantial – The economic analysis must also include two alternatives, time value of money and risk analysis.
- Pursuant to §143-138(a1)(2) a cost-benefit analysis is required for all proposed amendments to the NC Energy Conservation Code and the NC Residential Code, Chapter 11.

REASON:

Signature \_\_\_\_\_

BCC CODE CHANGES

DATE: \_\_\_\_\_ FORM

3/14/17 12/13/22





## INSTRUCTIONS

(This page is not required to be submitted with the proposed code amendment.)

**Each proposed code change request shall comply with the following rules:**

**Rule 1:** The Original, ~~and twenty two (22) copies~~ twenty-one (21) hardcopies, one (1) pdf and one (1) editable softcopy of the proposed Petition for Rule-Making ~~along with~~ including supporting documentation shall be filed with the Building Code Council Secretary. ~~Submit one (1) electronic copy via email.~~ The softcopies can be submitted via email to the Building Code Council Secretary.

**Rule 2:** The filing shall be received by the first day of the month prior to the quarterly scheduled meeting date.

**Rule 3:** Each request shall be typewritten on this form and shall contain the following:

- (1) The proposed rule change must be set forth in full and contain explicit reference to the affected section or sections of the code.
- (2) The request shall state the reasons for the proposed rule change with supporting documentation.
- (3) The proposed rule change shall comply with the standards set forth in GS 143-138(c) and reference to the particular standards shall be set forth in the request for the amendment.
- (4) The proposed rule change shall contain an economic impact analysis as required by GS 143-138(a).

**Rule 4:** When a request is improperly filed or not in accordance with all the rules listed above, the Council Secretary shall reject the submittal and notify the applicant of the proper procedure to follow.

**Rule 5:** Upon the proper filing of a request, the Council Secretary shall forward one copy of said request to each ~~council~~ Council member prior to the scheduled meeting date. Persons filing proposed petitions are hereby notified of the place and time of the scheduled hearings. The Council Secretary shall cause to be published the notice of public hearing as specified in GS 143-138(a).

**Rule 6:** The Council shall either grant or deny the proposed Petition for Rule-making at the meeting following receipt of the proposed rule change. The Council will take no further action on items that are Denied. Granted items may be referred to Committee for review.

**Rule 7:** The Council will hold a public hearing on granted items at the next quarterly scheduled meeting. The Council will take final action on granted items at the next quarterly scheduled meeting after the public hearing.

<b>Timeline Example</b>	
Petition Received:	February 1
Petition Granted:	March BCC meeting
Notice of Hearing Published:	April NC Register
Committee Review:	May - June
Hearing Held:	June BCC meeting
Final Adoption:	September BCC meeting
Rules Review Hearing:	November RRC meeting
Approved:	December 1

## APPENDIX D

### AFFIDAVIT OF WORKERS' COMPENSATION COVERAGE N.C.G.S. §87-14

The undersigned applicant for Building Permit # \_\_\_\_\_ being the

\_\_\_\_\_ Contractor

\_\_\_\_\_ Owner

\_\_\_\_\_ Officer/Agent of the Contractor or Owner

Do hereby aver under penalties of perjury that the person(s), firm(s) or corporation(s) performing the work set forth in the permit:

\_\_\_\_\_ has/have three (3) or more employees and have obtained workers' compensation insurance to cover them,

\_\_\_\_\_ has/have one or more subcontractor(s) and have obtained workers' compensation insurance to cover them,

\_\_\_\_\_ has/have one or more subcontractor(s) who has/have their own policy of workers' compensation covering themselves,

\_\_\_\_\_ has/have not more than two (2) employees and no subcontractors,

while working on the project for which this permit is sought. It is understood that the Inspection Department issuing the permit may require certificates of coverage of workers, compensation insurance prior to issuance of the permit and at any time during the permitted work from any person, firm or corporation carrying out the work.

Firm name: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



# APPENDIX E APPEALS NORTH CAROLINA BUILDING CODE COUNCIL

325 North Salisbury Street, Room  
5\_44 Raleigh, North Carolina 27603  
(919) 647-0049 (919) 647-0009

APPEAL TO NCDOI/NCBCC

Hearing Date \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

GS 160D-1127

Formal Interpretation by NCDOI \_\_\_\_\_

Appeal of Local Decision to NCDOI \_\_\_\_\_

GS 143-140, GS 143-141

Appeal of Local Decision to NCBCC \_\_\_\_\_

Appeal of NCDOI Decision to NCBCC \_\_\_\_\_

APPELLANT \_\_\_\_\_ PHONE (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ X \_\_\_\_\_.

REPRESENTING \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

E-MAIL \_\_\_\_\_ FAX (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

North Carolina State Building Code, Volume \_\_\_\_\_ Section \_\_\_\_\_ (select as many codes as apply):

- |   |                                   |                                   |                                      |
|---|-----------------------------------|-----------------------------------|--------------------------------------|
| <input type="checkbox"/> Administrative | <input type="checkbox"/> Building | <input type="checkbox"/> Fire     | <input type="checkbox"/> Residential |
| <input type="checkbox"/> Mechanical     | <input type="checkbox"/> Plumbing | <input type="checkbox"/> Fuel Gas | <input type="checkbox"/> Energy      |

Section(s) \_\_\_\_\_

- REQUEST ONE:       Formal Interpretation by NCDOI                       Appeal of Local Decision to NCBCC  
                           Appeal of Local Decision to NCDOI                       Appeal of NCDOI Decision to NCBCC

Type or print. Include all background information as required by the referenced General Statutes and the attached policies. Attach additional supporting information.

REASON:

Signature \_\_\_\_\_ DATE: \_\_\_\_\_ APPEAL TO NCDOI/NCBCC/NCDOI/NCBCC FORM 3/14/17 12/13/22

**202.9 Appeals.**

**202.9.1 Engineering Division.** A written technical interpretation shall be provided as specified in Section 203.2.1.2. Any person may appeal in writing an order, decision, or determination pertaining to the code or any state building law by filing written notice with the Commissioner of Insurance or his designee within 10 days after the order, decision or determination. A copy of the appeal shall be furnished to each party.

(General Statutes 143-140, 153A-374 and 160A-434)

**203.2.1 Interpretations.**

**203.2.1.1 Informal interpretations.** The Engineering Division shall provide informal interpretations on code related matters either by e-mail, letter or telephone. These informal interpretations may be accepted by the local code enforcement official or party requesting the interpretation. Either party may request a formal interpretation of the code.

**203.2.1.2 Formal interpretations.** Any person may request in writing a formal interpretation of the code. The request shall be addressed to the Chief Code Consultant for the Department of Insurance. The request shall be specific and shall reference the code sections in question. All formal interpretations shall be in writing. A formal interpretation shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. Formal interpretations determined to be of a general nature may be posted on the department web site. (General Statute 143-140)

**203.2.2 Appeals.** Any person may appeal in writing an order, decision or determination of a code enforcement official pertaining to the code or any state building law. The appeal shall be addressed to the Chief Engineer for the Department of Insurance by filing written notice within 10 days after the order, decision or determination. The appeal shall contain the type and size of the building in question, the location of the building, and shall reference the code sections in question. The decision shall be in writing and shall set forth the facts found. The decision rendered shall be based on the technical provisions of the code, public health and safety and shall be construed liberally to those ends. A decision shall be binding on all parties unless an appeal is submitted to the Building Code Council as specified in Section 201.9.2. A copy of the appeal and written decision shall be furnished to each party.

(General Statutes 153A-374 and 160A-434)

**202.9.2 Building Code Council.** The Building Code Council shall hear appeals from the decisions of a state enforcement agencies relating to any matter related to the code. Any person wishing to appeal a decision of a state enforcement agency to the Building Code Council shall give written notice of appeal as follows:

**202.9.2.1** Twenty one copies including an original of the Notice of Appeal shall be filed with the Building Code Council c/o NC Department of Insurance, Engineering Division, 325 North Salisbury Street, Room 5-44, Raleigh, NC 27603 and one copy shall be filed with the State enforcement agency from which the appeal is taken.

**202.9.2.2** The Notice of Appeal shall be received no later than 30 days from the date of the decision of the State enforcement agency.

**202.9.2.3** The Notice of Appeal shall be legibly printed, typewritten or copied and shall contain the following:

- (1) Name, address of the party or parties requesting the appeal.
- (2) The name of the State enforcement agency, the date of the decision from which the appeal is taken, and a copy of the written decision received from the enforcement agency.
- (3) The decision from which the appeal is taken shall be set forth in full in the Notice of Appeal or a copy of the decision shall be attached to all copies of the Notice of Appeal.
- (4) The contentions and allegations of fact must be set forth in full in a clear and concise manner with reference to the sections of the code in controversy.
- (5) The original Notice of Appeal shall be signed by the party or parties filing appeal.
- (6) The Notice of Appeal shall be received by the first day of the month prior to the Building Code Council's quarterly scheduled meeting in order to be placed on the agenda for that meeting. The Chairman may schedule a special meeting to hear an appeal.

**202.9.2.4** Upon the proper filing of the Notice of Appeal, the Building Code Council Secretary shall forward one copy of the Notice of Appeal to each member of the Building Code Council. The Chairman may appoint a Hearing Committee to hear appeals. The Secretary shall send notice in writing to the party or parties requesting an appeal and to the Building Code Council Hearing Committee members at least 15 days prior to the Hearing Committee meeting. A written decision of the Hearing Committee meeting shall be provided to all Building Code Council Members. The actions of the Hearing Committee shall be final, unless appealed to the full Building Code Council in writing within 30 days of the Hearing Committee's action. If a Hearing Committee consists of at least seven council members, it will constitute a quorum of the full council.

## APPENDIX E

Further appeals shall be as specified in Section 202.9.3.

~~202.9.2.5~~ The Building Code Council shall, upon a motion of the State enforcement agency or on its own motion, dismiss appeals for the following reasons:

1. Not pursued by the appellant or withdrawn;
2. Appeal not filed in accordance with these rules; or
3. Lack of jurisdiction.

~~202.9.2.6~~ When the Building Code Council finds that a State enforcement agency was in error in its interpretation of the code, the Building Code Council shall remand the case to the agency with instructions to take such actions as the Building Code Council directs. When the Building Code Council finds on appeal that materials or methods of construction proposed are equivalent to those required by the code, the Building Code Council shall remand the case to the State enforcement agency with instructions to permit the use of such materials or methods of construction. The Building Code Council shall immediately initiate procedures for amending the code to permit the use of such materials or methods of construction.

~~202.9.2.7~~ 202.9.2.7 The Building Code Council shall provide a written decision setting forth the findings of fact and the Building Code Council's conclusions to each party or parties filing the appeal and to the state enforcement agency from which the appeal was taken.

~~202.9.3~~ **Superior court.** Whenever any person desires to appeal a decision of the Building Code Council or a decision of a State or local enforcement agency, he may appeal either to the Wake County Superior Court or the Superior Court of the county in which the proposed building is to be situated in accordance with the provisions of Chapter 150B of the General Statutes.

[General Statute 143-141(d)]

# APPENDIX F

STATE OF NORTH CAROLINA

**OWNER EXEMPTION AFFIDAVIT  
PURSUANT TO G.S. 87-14(a)(1)**

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ Inspections Department

Address and Parcel Identification of Real Property Where Building is to be Constructed or Altered:

\_\_\_\_\_

I, \_\_\_\_\_,

(Print Full Name)

hereby claim an exemption from licensure under G.S. 87-1(b)(2) by initialing the relevant provision in paragraph 1 and initialing paragraphs 2 – 4 below and attesting to the following:

1. \_\_\_\_\_ I certify that I am the owner of the property set forth above on which this building is to be constructed or altered;

OR

\_\_\_\_\_ I am legally authorized to act on behalf of the firm or corporation which is constructing or altering this building on the property owned by the firm or corporation as set forth above (name of firm or corporation:

\_\_\_\_\_);

2. \_\_\_\_\_ I will personally superintend and manage all aspects of the construction or alteration of the building and that duty will not be delegated to any person not duly licensed under the terms of Article 1 of Chapter 87 of the General Statutes of North Carolina;
3. \_\_\_\_\_ I will be personally present for all inspections required by the *North Carolina State Building Code*, unless the plans for the construction or alteration of the building were drawn and sealed by an architect licensed pursuant to Chapter 83A of the General Statutes of North Carolina;
4. \_\_\_\_\_ I understand that a copy of this AFFIDAVIT will be transmitted to the North Carolina Licensing Board for General Contractors for verification that I am validly entitled to claim an exemption under G.S. 87-1(b)(2) for the building construction or alteration specified herein. I further understand that, if the North Carolina Licensing Board for General Contractors determines that I was not entitled to claim this exemption, the building permit issued for the building construction or alteration specified herein shall be revoked pursuant to G.S. ~~153A-362~~ or G.S. ~~160A-422~~ 160D-1115.

\_\_\_\_\_  
(Signature of Affiant)

\_\_\_\_\_  
Date

Sworn to (or affirmed) and Subscribed before me this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Printed Name of Notary Public

My Commission Expires: \_\_\_\_\_ (Notary Stamp or Seal)

(NOTE: It is a Class F felony to willfully commit perjury in any affidavit taken pursuant to law—G.S. 14-209)

## APPENDIX F

To: All NC Building Code Enforcement Jurisdictions

The North Carolina Licensing Board for General Contractors has implementing procedures to comply with NC General Statute 87-14. For projects costing \$30,000 or more, property owners claiming exemption to the general contractor licensing requirement when applying for a building permit are required, before being entitled to the permit, to execute a verified affidavit attesting:

- a. That the person is the owner of the property on which the building is being constructed or, in the case of a firm or corporation, is legally authorized to act on behalf of the firm or corporation.
- b. That the person will personally superintend and manage all aspects of the construction of the building and that the duty will not be delegated to any other person not duly licensed.
- c. That the person will be personally present for all inspections required by the *North Carolina State Building Code*, unless the plans for the building were drawn and sealed by an architect licensed pursuant to Chapter 83A of the General Statutes.

The statute further requires that a copy of the affidavit be transmitted to the North Carolina Licensing Board for General Contractors for the purpose of verifying the applicant was validly entitled to claim the exemption. If during the permitting process any irregularities are detected that call in to question whether a permit applicant is fully complying with all applicable laws, the person issuing the permit should make note of the circumstances when forwarding information to the Board and provide a copy of the building permit application, including contact information for any subcontractors listed. **Please be aware the new requirements are not intended to delay the issuance of the building permit. When the person applying for the building permit reasonably satisfies the permitting authority that the applicable laws are being complied with, and executes all required documents, the building permit should be issued without delay.** Upon review of the documents, should any irregularities be detected that require further action, the Board's staff will contact the code enforcement authority.

Whenever possible, the most practical method of submitting affidavits to the Board is to scan the documents and transmit them as PDF email attachments to the appropriate Field Investigator serving the various code enforcement jurisdictions throughout the state. Specific email addresses have been set up for this purpose. Alternately, the documents may be faxed or sent via US Mail. ~~Attached to this email are pages with the~~ The assigned territories, email addresses for affidavit transmittal, fax numbers and contact information for the Board's field staff are found on the next page. Please contact the staff member serving your area with any questions you may have. ~~Also attached to this email is a model affidavit developed by the NC Home Builders Association in conjunction with the UNC School of Government. You may use this model affidavit or develop your own, as long as all the required information is provided.~~ Additional information is available on the UNC School of Government website using the following link: <http://www.sog.unc.edu/node/767>.

Thank you for your assistance in this matter. The Board sincerely appreciates your cooperation in implementing these new requirements.

**FIELD INVESTIGATOR REGIONS**

**Region 1 — Coastal/SE (14) (Joel Macon 910-458-8899)  
Email: joelmacon@nclbgc.org**

Bladen	Columbus	Duplin	Johnston	New Hanover	Pender
Brunswick	Craven	Harnett	Jones	Onslow	Sampson
Carteret	Cumberland				

**Region 2 — Coastal N/E (27)(28) (Dean Burbage 252-927-3326)  
Email: deanburbage@nclbgc.org**

Beaufort	Dare	Greene	Martin	Perquimans	<u>Warren</u>
Bertie	Edgecombe	Halifax	Nash	Pitt	Wayne
Camden	<u>Franklin</u>	Hertford	Northampton	Tyrrell	Wilson
Chowan	Gates	Hyde	Pamlico	Vance	
Currituck	Granville	Lenoir	Pasquotank	Washington	

**Region 3 — Upper Piedmont (17)(16) (Curtis Huff 919-690-8734)  
Email: curtishuff@nclbgc.org**

Alamance	Durham	Lee	Randolph	Surry	Yadkin
Caswell	Forsyth	Orange	Rockingham	<u>Wake</u>	
Chatham	<del>Franklin</del>	<del>Warren</del>			
Guilford	Person	Stokes	Wilkes		

**Region 4 — Lower Piedmont (15) (Waties Greene 980-210-3627/910-653-5356)  
Email: watiesgreene@nclbgc.org**

Anson	Davidson	Mecklenburg	Richmond	Scotland
Cabarrus	Hoke	Montgomery	Robeson	Stanly
Davie	Iredell	Moore	Rowan	Union

**Region 5 — Western (27) (Ryan Cody 828-689-3388)  
Email: ryancody@nclbgc.org**

Alexander	Burke	Cleveland	Jackson	Mitchell	Watauga
Alleghany	Caldwell	Gaston	Lincoln	Polk	Yancey
Ashe	Catawba	Graham	Macon	Rutherford	
Avery	Cherokee	Haywood	Madison	Swain	
Buncombe	Clay	Henderson	McDowell	Transylvania	

Affidavits transmitted to the Board via IJS Mail should be sent to:

Susan Sullivan, Director of Investigations  
 NC Licensing Board for General Contractors  
P.O. Box 171875400 Creedmoor Road  
 Raleigh, North Carolina 2761927612  
www.nclbgc.org / email: complaints@nclbgc.org



# APPENDIX G

## DESIGN PROFESSIONAL INSPECTION FORM

RECORD OF THE INSPECTION OF A COMPONENT OR ELEMENT BY A NC LICENSED ARCHITECT OR ENGINEER

### Project Information:

Residential Single-Family Project: Y N	Commercial Project: Y N
Code Enforcement Project No:	Permit No:
Project Name:	Owner:
Project Address:	Suite No:
Date Inspected:	Contractor Name:
Component Inspected:	

### Responsible Licensed NC Architect or NC Engineer

Name:	
Firm Name:	
Phone Numbers:	Office: Mobile:
Email Address:	
Mailing Address:	

### APPLICABLE CODE:

2024 NCBC = 2024 NC Building Code; 2024 NCRC = 2024 NC Residential Code

Describe Element/Component/Type of Inspection: \*

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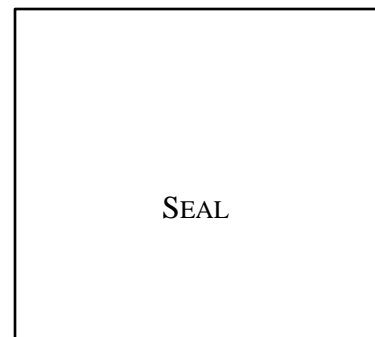
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\*(subgrade form/letter may also be required)

### Attestation/Signature:

By signing below, I certify that the component and/or element of the building as identified on this form has been inspected by me or someone under my direct supervision per G.S. ~~160D-11-6~~160D-1106 and is in compliance with the Code or other proposal of the architect or engineer for the project. This inspection is in compliance with all of the requirements of the above referenced code. Attach any additional documents if needed.

\_\_\_\_\_  
Licensed Architect or Engineer



### Inspection Department disclaimer:

Upon the receipt of a signed written document as required by G.S. ~~160D-11-6~~160D-1106, Code Enforcement shall be discharged and released from any liabilities, duties and responsibilities imposed by this article or in common law from any claim arising out of or attributed to the component or element in the construction of the building for which the signed written document was submitted. Be aware that this inspection will be noted in all inspection records including the Certificate of Occupancy or

DRAFT

## Burgos, Alexander N

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**Subject:** FW: 2024 NC Administrative Code Requests for Changes

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**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Monday, January 22, 2024 5:17 PM

**To:** Rittlinger, David B <david.rittlinger@ncdoj.gov>

**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>

**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Hi David,

Thanks for making the changes. I am good with almost all of them, except one, which I have listed below. My follow up remains in blue. If it would be helpful to discuss, I'd be more than happy to talk it out, just let me know.

*Also in 202.5.4, what does the sentence "Persons filing proposed petitions are hereby notified of the place and time of the scheduled hearings" mean?*

*DBR response: Proposed amendment petitions are received primarily by email and occasionally by regular mail. Once the secretary acknowledges that the proposed amendment petition using Appendix C is accurate, the secretary will notify the petitioner of the place and time of the scheduled meeting. "Hearings" is changed to "meetings" for clarity.*

I'm not sure the changes address my concern. It sounds like the Code language is providing notice, when what I think you mean is that the Secretary will notify the petitioner after receipt of the petition.

*DBR Response: The second sentence is modified as follows: "Persons filing proposed amendment petitions are hereby notified by the Building Code Council Secretary of the place and time of the scheduled meetings."*

The issue here is that the language in 202.5.4 reads like it is actually providing notice of a hearing—"Persons filing proposed amendment petitions **are hereby notified** by the BCC Secretary of the place and time of the scheduled meeting." Obviously, the Code cannot itself give notice of a hearing. I think what you mean to say is that when the Secretary receives a petition, he or she will send it out to the members of the Council and then will send notice of the meeting at which the petition will be considered to the petitioner. That isn't clear from the text, however.

Thanks,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law N.C.G.S. Chapter 132 and may be disclosed to third parties.

## Burgos, Alexander N

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**Subject:** FW: 2024 NC Administrative Code Requests for Changes  
**Attachments:** RRC format v2 D-1 2024 NC Administrative Code and Policies Proposed.pdf; D-1 20221213 Item B-1 2024 NCACandP Rev 2. Form\_0400\_for\_Permanent\_Rule\_June\_2023.docx; D-1 20221213 Item B-1 2024 NCACandP Rev 2. Form\_0400\_for\_Permanent\_Rule\_June\_2023.pdf; RRC format v2 D-1 2024 NC Administrative Code and Policies Proposed.docx

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**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Sent:** Friday, January 19, 2024 3:44 PM  
**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Cc:** Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>  
**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Brian,  
Good afternoon. I hope you are well.  
My responses to your comments are in **GREEN** text below.  
The updated documents are attached.  
Let me know if you have any further questions or concerns.  
Thank you for your work on this.

**David B. Rittlinger, PE, LEED AP**  
**Deputy Commissioner of Engineering**  
**Engineering & Codes Division**



**North Carolina Office of State Fire Marshal**  
1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
919.647.0008

[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)

Link to free view of 2018 NC Codes  
<https://codes.iccsafe.org/codes/north-carolina>

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**From:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>  
**Sent:** Thursday, January 18, 2024 11:43 PM  
**To:** Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>  
**Cc:** Childs, Nathan D <[nchilds@NCDOJ.GOV](mailto:nchilds@NCDOJ.GOV)>; Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>  
**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Hi David,

Thanks for getting these back to me. For the most part, things look good. I have a few more follow ups though. See below:

Also in 202.5.4, what does the sentence “Persons filing proposed petitions are hereby notified of the place and time of the scheduled hearings” mean?

*DBR response: Proposed amendment petitions are received primarily by email and occasionally by regular mail. Once the secretary acknowledges that the proposed amendment petition using Appendix C is accurate, the secretary will notify the petitioner of the place and time of the scheduled meeting. “Hearings” is changed to “meetings” for clarity.*

I’m not sure the changes address my concern. It sounds like the Code language is providing notice, when what I think you mean is that the Secretary will notify the petitioner after receipt of the petition.

*DBR Response: The second sentence is modified as follows: “Persons filing proposed amendment petitions are hereby notified by the Building Code Council Secretary of the place and time of the scheduled meetings.”*

In the second paragraph of 202.5.5.3, on p.13, define “substantially similar.”

*DBR response: If a denied proposed amendment petition is tweaked a bit to create a newly-proposed amendment petition but the same denied action is achieved, the Council has the authority to deny the newly-proposed amendment petition for 12 months. Given the NCBCCC is made up of appointed people that are not paid for their service, this rule promotes effective time and resources management. No corrections were made.*

I understand why the BCC would want to prevent denied petitions from being re filed, but the issue is that there is nothing to say what “substantially similar” means. From what you’re telling me, I understand the intent, but I think the language needs tweaking for it to express that intent effectively.

*DBR Response: “Substantially similar” is replaced with “identical”.*

In 202.5.5.4, I think there’s some confusion on the term “adopted”. G.S. 150B-2(1a) defines “adopt” as “to take final action to create, amend, or repeal a rule. Thus, a rule is adopted before it is sent to RRC for review. Here, you say an amendment is not “adopted” until after RRC approves it. Perhaps there is another term you could use, such as “effective”? The only catch there is that often BCC submits rules with delayed effective dates, so I’m not sure that works.

*DBR response: Corrected to reflect the correct use of the term “adopted”. Not publishing the amendment until RRC approves it regardless of the effective date avoids potential conflicts for the public. Amendments are not approved for use based on the effective date under which the amendment was adopted by the Council until approved by the commission.*

I have a hard time understanding what 202.5.5.4 means as rewritten. Under the APA, an agency publishes a rule, receives public comment, then adopts a rule, sends it RRC for review, and the rule becomes effective on the first day of the next month after RRC approves the rule. When we send rules back to the agency for “further work” (i.e. a request for changes), I don’t believe the agency goes back and adopts language anew, they just make the requested changes and send the final versions back to RRC for approval. In 202.5.5.4, it sounds like you’re publishing after RRC approval? Also the term “readoption” has a specialized meaning under the APA (see 150B-21.3A), so I would avoid the use of that term. What is it you’re trying to say here?

*DBR Response: The second sentence is modified as follows: “If the commission sends an adopted amendment back to the Council with a request for changes, the adopted amendment shall be corrected and will not be published until it is resubmitted to the commission and the commission approves the corrected adopted amendment.”*

In 203.1.1., p.16, number 6, “Natural or liquified petroleum gas systems”, this is not in the scope DOI’s authority under G.S. 143-139(b).

*DBR response: Moved the reference to statute below to indicate it applies to 203.1.1.*

I’m not sure this addresses the issue, which is that the citation does not contain authority to regulate natural or liquifies petroleum gas systems. Is there another statute that gives the BCC that authority? If so, please cite it here.

*DBR Response: Modified #6 as follows: “Natural or liquified petroleum gas systems included in the technical codes.” This limits the scope to the technical codes only and does not create conflicts with other laws.*

In 204.3.3, what is a fire prevention department? Is that different from a local fire department?

*DBR response: A fire prevention department enforces the Nc Fire Code as noted in 204.3.1. No corrections were made.*

204.3.1 states that the Fire Prevention Code is enforced by “county fire marshals and city fire chiefs,” which to me sounds like local fire departments. Then, 204.3.2 refers to “municipal fire department[s]” so I continue to wonder what the difference is between a “fire prevention department” and a “fire department”.

*DBR Response: City, town and county fire marshals have the authority to enforce the NC Fire Prevention Code. Replaced “department” with “code enforcement” to alleviate any perceived confusion with fire departments. Replaced “municipal” with “city or town” Edited all of 204.3 to emphasize that city and town fire chiefs and county fire marshals can also have the authority to enforce the NC Fire Prevention Code.*

*In 204.3.3, item 8, what does “other actions” mean?*

*DBR response: Item #8 is corrected to say “Code enforcement actions”*

The idea is good, the grammar is a bit off. Consider “take action to enforce the Code”.

*DBR Response: Modified #8 as follows: “Take actions to enforce the North Carolina Fire Prevention Code;”*

*In 204.3.8, define “proper identification” and “proper credentials”.*

*DBR response: “Proper identification” is changed to “proper credentials” to reflect 160D-1117.*

What are the “proper credentials”? The statute uses the term, but does not define it. What does the enforcement official have to carry?

*DBR Response: Typically the credentials are an official badge that demonstrates their position and authority. Corrected with “official credentials such as badge or certificate that demonstrates the official’s authority”*

*In 204.4.3, p.19, define “substantially”.*

*DBR response: A substantial deviation is at the discretion of the code official based on the scope of the work performed under the permit. No corrections were made.*

*In 204.6.3.1, p.20, define “substantial”.*

*DBR response: A substantial departure is at the discretion of the code official based on the scope of the work performed under the permit. No corrections were made.*

I understand the code enforcement official has to exercise some discretion, but the question is, how much? Substantial is a completely subjective term, and you’re giving no guidance as to where the line between substantial and insubstantial is. This is particularly important because this is a factor in whether a permit is revoked or granted.

*DBR Response: Updated both sections accordingly based on NCGS 160D-1112 and 160D-1115.*

*In 204.10.1.1, p.21, what is “the information and data necessary to determine compliance”?*

*DBR response: The information and data necessary to determine code compliance is drawings, manufacturer’s installation instructions, product information, product test reports, third-party testing agency reports, etc. No corrections were made.*

Why not include these documents explicitly in the Rule? This provision supposedly tells the applicant what information to put in the application, but doesn’t state with specificity what is necessary. Please revise to include what documents the applicant shall provide when submitting a permit application.

*DBR Response: Modified sentence #1 and #2 as follows: “A certificate of occupancy for any existing building, including upfits and shell buildings, may be obtained by applying to the inspection department and supplying the building and technical information requested by the inspection department to determine compliance with the technical codes for the occupancy intended. Where necessary, the code enforcement official may require detailed drawings, specifications, product manufacturer’s installation instructions, product listing and labeling information and inspections to determine compliance with the applicable technical codes.”*

*In 204.12, define “promptly”.*

*DBR response: The term “promptly” is not defined by 160D-1114. No corrections were made.*

*In 204.12, who is “the person affected”? The owner? The builder? Anyone else?*

*DBR response: The term “person affected” is not defined in 160D-1114. No corrections were made.*

For both of these, I understand that the statute doesn’t define the term. That’s why I’m asking you to define these terms.

*DBR Response: Deleted “promptly” as a timeline really cannot be placed on these investigations as they are often very complicated and it can take months or more for all parties involved to provide the requested information necessary to render a decision. Changed “person affected” to “owner or builder” since the appeal of the stop work order is by the owner or the builder as noted in the first sentence.*

For consideration at the January meeting, please return your responses by January 24. Otherwise, keep in mind that the extension from the December meeting would let you take this to the February meeting.

Thanks,  
Brian

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**Notes to RRC: THIS DOCUMENT CONTAINS THE PROPOSED 2024 NORTH CAROLINA ADMINISTRATIVE CODE AND POLICIES.**

**TEXT THAT IS STRUCK THROUGH IS DELETED FROM THE 2018 EDITION TO CREATE THE 2024 EDITION.**

**TEXT THAT IS UNDERLINED IS NEW TEXT TO CREATE THE 2024 EDITION.**

DRAFT



North Carolina State Building Code: Administrative Code and Policies, ~~2018~~2024 edition

First Printing: ~~June~~January ~~2018~~2024



Notes to RRC: The NC Seal above is added to the 2024 North Carolina Administrative Code and Policies. International Code Council, Inc. copyright statements and information (not shown) will appear here once this code published and made available to the public. Page numbers and Table of Contents will be updated once this code published and made available to the public.

# PREFACE of the ~~2018~~2024 NORTH CAROLINA STATE BUILDING CODES

North Carolina has been a pioneer in the field of Statewide Building Regulations that have been enacted for the protection of the public. The Building Laws passed in 1903 and 1905 created a Building Code for materials and methods of construction in use at that time in the State.

The General Assembly of 1933 created a Building Code Council and authorized it to, in cooperation with the Commissioner of Insurance, prepare and adopt a State Building Code. The first State Building Code was adopted in 1935 and ratified by the 1941 General Assembly.

The 1957 Legislature rewrote the 1933 Act, ratified the 1953 Edition, and reorganized and expanded the membership and responsibility of the Council. The 1953 Edition of the State Building Code was revised in accordance with the 1957 Act and printed as the 1958 Edition.

The 1933 Act of the General Assembly provided that any city or county could adopt any building regulation that was more stringent than the State Building Code regulations. However, after a General Assembly Study Commission Report, the 1957 Legislature provided that any local building regulation that was different from the State regulation would have to be approved by the Building Code Council. The Council adopted a policy to only approve local amendments to the State Code that were absolutely necessary. The policy includes that when the Council sees the need for local amendments, they would be incorporated as a part of the State Building Code in lieu of approving the regulations applying to a specific city or county unless local conditions warranted such specific regulations.

The 1967 Edition of the State Building Code was prepared utilizing the framework of the Standard Building Code, with several chapters taken from the American Insurance Association's National Building Code and the egress chapter taken from the Life Safety Code of NFPA.

The 1978, 1991 and 1996 Editions were prepared by the Building Code Council with the assistance of specially appointed Advisory and Ad-Hoc Committees representing Code Enforcement Officials, Contractors, Designers and others affected by the regulations. These Editions were the latest Standard Building Code with North Carolina amendments.

The 2002, 2006, 2009, ~~2012~~2012, ~~and~~ 2018 and 2024 Editions were prepared by Ad-Hoc Committees representing Code Enforcement Officials, Contractors, Designers and others affected by the regulations. These Editions were the *International Building Code* with North Carolina amendments.

The ~~2018~~2024 North Carolina State Code is presented with the hope that its use will protect the public from dangerous and unsanitary buildings. This Code is intended to provide Code Enforcement Officials, Contractors and Designers a set of minimum standards to follow in design and construction. The Building Code Council has the authority to amend the Code when the wider use of materials and methods comply with the safety standards set forth in the laws.

## PREFACE of the ~~2018~~2024 NORTH CAROLINA ADMINISTRATIVE CODE and POLICIES

The purpose of the *North Carolina Administrative Code and Policies* is to serve as a comprehensive document to guide decisions aimed at protecting the public's health, safety and welfare in the built environment. This protection is provided through the enforcement, by state and local governments, of the technical codes incorporated by reference herein.

The *North Carolina Administrative Code* was first adopted by the Building Council in 1991. The 1996 and 2002 Editions were published in conjunction with the subsequent Code Editions. The 2006 *North Carolina Administrative Code and Policies* was a reorganization and rewrite of the 2002 *Administration and Enforcements Code*. The 2009, ~~2012~~2012, and 2018 and 2024 Edition of the *North Carolina Administrative Code and Policies* is an administrative update of the 2006 *Administration and Enforcements Code*. Chapter 1, Administrative Code, contains Rules adopted by the Building Code Council and approved by the Rules Review Commission. Chapter 2, Policies, contains generally accepted policies and procedures based on the North Carolina General Statutes. Chapter 3, Referenced Statutes, contains references to many applicable General Statutes. The appendices include representative administrative forms.

### EDITIONS of the NORTH CAROLINA STATE BUILDING CODES

Administrative	1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Building	1936, 1953, 1958, 1967, 1978, 1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Residential	1968, 1993, 1997, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Accessibility	1973, 1991, 1999 (Accessibility requirements were part of the Building Code before 9/1/1973 and after 1/1/2009.)
Electrical (NEC)	1931, 1933, 1935, 1937, 1940, 1942, 1943, 1947, 1949, 1951, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1962, 1965, 1968, 1971, 1975, 1978, 1981, 1984, 1987, 1990, 1993, 1996, 1999, 2002, 2005, 2008, 2011, 2014, 2017, <u>2020</u>
Existing Building	2015, <del>2018</del> <u>2018, 2024</u>
Fire	1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Mechanical	1971, 1980, 1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Energy Conservation	1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Plumbing	1963, 1968, 1980, 1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>
Fuel Gas	1991, 1996, 2002, 2006, 2009, 2012, <del>2018</del> <u>2018, 2024</u>

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# CHAPTER 1

## ADMINISTRATIVE CODE

### SECTION 101 TITLE AND SCOPE

**101.1 Title.** This document is “The North Carolina Administrative Code and Policies,” hereinafter known as “this code.” Any references to International Codes shall refer to North Carolina State Building Codes.

**101.2 Purpose.** The purpose of this code is to provide for the administration and enforcement of the North Carolina State Building Codes as adopted by the Building Code Council and enforced by State and local code enforcement officials. This code is incorporated by reference into the North Carolina Building, **Accessibility**, Plumbing, Mechanical, Electrical, Fire Prevention, Fuel Gas, Energy Conservation, Existing Buildings, **Rehabilitation**, and Residential Codes, hereinafter referred to collectively as the “technical codes.” This code is intended to provide for the administrative aspects of each of the technical codes. In this code, the plumbing, mechanical, electrical, fire prevention and gas systems shall be referred to as “service systems.”

#### 101.3 Scope.

**101.3.1 Requirements of other state agencies, occupational licensing boards or commissions.** The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other state agencies, occupational licensing boards or commissions. It shall be the responsibility of a permit holder, design professional, contractor or occupational license holder to determine whether any additional requirements exist.

*Commentary: Many State agencies, occupational licensing boards or commissions have specific design and construction requirements that are not incorporated into the North Carolina State Building Codes and are not enforced by code enforcement officials. Permit holders, design professionals, contractors or occupational license holders should consult with any relevant boards or agencies to determine whether there are any additional construction and design requirements for their projects.*

**101.3.2 Technical Codes.** Where sections 101.3.2.1 through 101.3.2.10 conflict with the applicability and scope as provided in the technical codes the applicability and scope in the technical codes shall apply.

**101.3.2.1 North Carolina Building Code.** The provisions of the Building Code shall apply to the construction, alteration, repair, equipment, use and occupancy, location, movement to another site, removal and demolition, or any appurtenances connected or attached to every building or structure, other than one- or two-family dwellings and townhouses.

~~**101.3.2.2 North Carolina Accessibility Provisions.** The accessibility provisions shall apply to the construction, alteration, repair, replacement, equipment, appliances, fixtures, fittings and appurtenances of all buildings or structures, other than one- and two- family dwellings and townhouses.~~

~~**101.3.2.3**~~ **101.3.2.2 North Carolina Plumbing Code.** The provisions of the Plumbing Code shall apply to every plumbing installation, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances.

~~**101.3.2.4**~~ **101.3.2.3 North Carolina Mechanical Code.** The provisions of the Mechanical Code shall apply to the installation of mechanical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

~~**101.3.2.5**~~ **101.3.2.4 North Carolina Electrical Code.** The provisions of the Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances.

~~101.3.2.6~~**101.3.2.5 North Carolina Fire Prevention Code.** The provisions of the Fire Prevention Code shall apply to the ~~repair, equipment, use, occupancy and maintenance of every existing building or structure, other than one or two family dwellings and townhouses.~~ The provisions of the fire prevention code shall apply to the installation of fire protection systems minimum fire safety requirements to all new and existing buildings, facilities, storage, and processes, except for one- or two-family dwellings and townhouses. The Fire Prevention Code provides a total approach of controlling hazards in all regulated buildings and sites, regardless of the hazard being indoors or outdoors.

~~101.3.2.7~~**101.3.2.6 North Carolina Fuel Gas Code.** The provisions of the Fuel Gas Code shall apply to the installation of gas piping systems extending from the point of delivery to the inlet connections of equipment served, and the installation and operation of residential and commercial gas appliances and related accessories.

~~101.3.2.8~~**101.3.2.7 North Carolina Energy Conservation Code.** The provisions of the Energy Conservation Code shall apply to the thermal envelope of the building and installation of energy systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances, ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

~~101.3.2.9~~**101.3.2.8 North Carolina Existing Buildings Code.** All work on any building that undergoes alterations, repairs, replacement, rehabilitation or change of occupancy shall comply with the Existing Buildings Code or the technical codes for the proposed work.

~~101.3.2.10~~**101.3.2.9 North Carolina Residential Code.** The provisions of the Residential Code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures.

*Commentary: Exceptions to the technical codes. Note that there are statutory exceptions to the applicability of the technical codes. These exceptions can be found in North Carolina General Statutes **(NCGS § 143-138(b))** **(NCGS § 143-138)**. The exceptions include the following as well as other exceptions:*

- (1) farm buildings located outside the jurisdiction of any municipality;*
- (2) equipment for storing, handling, transporting and utilizing liquefied petroleum gases for fuel purposes; and*
- (3) equipment or facilities, other than buildings, of a public utility, as defined in NCGS § 62-3, or of an electric or telephone membership corporation, including poles, towers and other structures supporting electric or communication lines.*

*Commentary: “Farm building” means any building that is not open to the general public and is used primarily for a bona fide farm purpose. “A bona fide farm purpose” includes the production or storage of agricultural products or commodities, including crops, fruits, vegetables, ornamental or flowering plants, dairy, timber, livestock, poultry and all other forms of agricultural products. Farm buildings do not include such buildings used for purposes of education and research.*

**101.3.3 Workmanship.** Workmanship is not within the purview of the technical codes unless specifically stated within the code.

**101.3.4 Appendices.** Provisions in the appendices shall not be enforceable unless specifically ~~incorporated~~ adopted or referenced in the technical codes.

*Commentary: Use of appendices. An appendix is part of the technical codes only when the technical code specifically references that appendix in the body of the technical code. Conversely, appendices that are not referenced in the technical codes are not part of the North Carolina Building Codes. These unenforceable appendices are provided solely for the convenience of the reader. Each appendix will indicate under its title whether it is enforceable and required as part of the technical code.*

**101.3.5 Referenced standards.** Standards referenced in the technical codes shall be considered an integral part of the codes. If specific portions of a standard are denoted by code text, only those specific portions of the standard shall be enforced. Where code provisions conflict with a standard, the code provisions shall be enforced. Permissive and advisory provisions in a standard shall not be construed as mandatory.

~~101.3.6 Existing buildings.~~ Additions, alterations, repairs, replacement, rehabilitations or changes of occupancy shall be permitted to any existing structure or service system without requiring the existing systems to comply with all the requirements of the current building codes. All new work shall conform to the requirements of the technical codes for new construction except as modified by either the existing buildings code or the rehabilitation code. For any portion of an existing building or service system that creates a hazard or unsafe condition, the code enforcement official shall determine the extent to which that portion of the existing building or service system is to be upgraded to conform to the requirements of either the Existing Buildings Code, the Rehabilitation Code or the technical codes.

## SECTION 102 RULE-MAKING TO AMEND THE TECHNICAL CODES

### 102.1 Petition for rule-making.

**102.1.1 Petition Filing.** ~~1-~~ Any person wishing to file a petition requesting the adoption, amendment or repeal of a rule by the Building Code Council shall file a written petition on a form (see Appendix C) provided by the Building Code Council, ~~and 21 copies~~ Twenty-one hardcopies of the petition and supporting documentation shall be sent to with the Building Code Council Secretary or a single pdf and editable softcopy of the petition can be emailed to the Building Code Council Secretary.

**102.1.2 Required information.** ~~2-~~ The petition shall include the following information:

- a. ~~2.1~~ Name, address and occupation of petitioner;
- b. ~~2.2~~ A summary of the proposed action (adoption, amendment or repeal of a rule or rules);
- c. ~~2.3~~ A draft of the proposed rule or other action;
- d. ~~2.4~~ A complete statement of the reason for the proposed action with supporting documentation;
- e. ~~2.5~~ An identification of the persons or class of persons most likely to be affected by the proposed action; and
- f. ~~2.6 An economic impact analysis~~ A fiscal note performed by the petitioner and approved by the Office of State Budget Management as required by General Statute ~~§143-138(a)~~ Statutes 143- 138(a1) and 150B-21.4.
- g. A cost/benefit analysis performed by the petitioner for North Carolina Energy Code proposed amendments as required by General Statute §143-138(a1)(2).

**102.2 Presiding officer.** The presiding officer at any rule-making meeting or hearing shall have control of the proceedings, including: recognition of speakers, time allotments for presentations, the right to question speakers, direction of the discussion and management of the meeting or hearing.

**102.3 Record of proceedings.** A record of rule-making proceedings will be available for public inspection during regular office hours at the Building Code Council's office. This record will contain the original petition, if any, the notice, all written memoranda and information submitted, and a record or summary of oral presentations, if any, and, in any case where a proposal was rejected, the reason therefore.

**102.4 Effective date of rules.** Any rules that are adopted by the Building Code Council and approved by the Rules Review Commission shall be effective when the next edition of the relevant technical code is effective as provided in Rule 102.6 unless specified otherwise by the Building Code Council.

**102.5 Interim use of approved rules.** Any rules that are adopted by the Building Code Council and approved by the Rules Review Commission shall be accepted by the Code Enforcement Official as an approved alternate method of construction prior to the effective date if requested by the owner or his agent.

**102.6 Effective date of code editions.** The provisions of any code edition which have been approved/adopted by both the Building Code Council and approved by the Rules Review Commission shall become effective the first day of January of the following year unless specified otherwise by the Building Code Council.

## SECTION 103 APPEALS

**103.1 General.** The following are appeals addressed by this code:

- (a) Appeal by a permit holder to local code enforcement management regarding a code determination/interpretation

made by a local code official for a specific job site.

- (b) Appeal by a permit holder to the NC Department of Insurance, Engineering Division regarding a code determination or interpretation by local code enforcement.
- (c) Appeal by an inspection department or permit holder to the NC Building Code Council regarding an appeal decision issued by the NC Department of Insurance, Engineering Division.
- (d) Appeal by a permit holder, designer, general public, or local code enforcement to the NC Building Code Council regarding a formal code interpretation issued by NC Department of Insurance, Engineering Division.

**103.1103.2 Form of complaints and other pleadings supporting information.**

**103.2.1 Complaints.** 1- There shall be no specific form required for complaints. To be sufficient, a complaint shall be in writing, identify the parties and shall reasonably apprise the Building Code Council of the facts that form the basis of the complaint.

**103.2.2 Other pleadings Supporting information.** 2- There shall be no specific form Appendix E shall be required for answers, motions or other pleadings supporting information relating to appeals before the Building Code Council, except they shall be in writing. To be sufficient, the document The pleadings supporting information shall identify the case to which it refers and reasonably apprise the Building Code Council of the matters it alleges, answers or requests. In lieu of submission in writing, motions, requests and other pleadings supporting information may be made on the record during the course of the hearing before the Building Code Council.

**103.2103.3 Governing provisions.** Hearings before the Building Code Council shall be governed by the provisions of General Statutes 150B, Article 3A.

**103.3103.4 Presiding officer.** The Building Code Council may designate any of its members to preside over the hearing in a case on appeal. When no designation is made, the chairman Chair of the Building Code Council shall preside, or, in his the Chair's absence, the vice chairman Vice Chair shall preside. The presiding officer shall rule on motions or other requests made in an appeal case prior to the hearing in that case, except when the ruling on the motion would be dispositive of the case. When the ruling on a motion or request would be dispositive of the case, the presiding officer shall make no ruling and the motion or request shall be determined by a majority of the Building Code Council.

**103.4103.5 Continuances.** The Building Code Council's Secretary Chair may grant the first request requests for a continuance of a hearing for good cause. Any subsequent requests for continuance may be granted by the chairman of the board. The granting of a continuance is wholly discretionary.

**103.5103.6 Modifications.** Whenever there are practical difficulties involved in carrying out the provisions of the technical codes, the Building Code Council shall have the authority to grant modifications for individual cases, after the Building Code Council finds on appeal that (1) special individual reasons, conditions, and/or circumstances exist that make the strict letter of the technical codes impractical, (2) the modification is in compliance with the intent and purpose of the technical codes, and (3) the modification does not lessen health, accessibility, life, fire-safety or structural requirements.

**(General Statute 143-141)**

*Commentary: Limitation on what constitutes "practical difficulties." This section is not intended to permit setting aside or ignoring a code provision; rather, it is intended to provide for the acceptance of equivalent protection. Such modifications do not, however, extend to actions that are necessary to correct violations of the code. In other words, a code violation or the expense of correcting a code violation does not necessarily constitute a practical difficulty.*

**SECTION 104  
ADMINISTRATION**

**104.1 North Carolina Department of Insurance, Engineering Division.**

**104.1.1 Document approval.** Construction specifications and drawings, including Appendix B of this code, for buildings specified in Table 104.1 shall be submitted to the Engineering Division of the North Carolina Department of Insurance. The Engineering Division shall grant document approval before a permit is issued on any building listed in Table 104.1.

**TABLE 104.1  
NORTH CAROLINA DEPARTMENT OF INSURANCE, ENGINEERING DIVISION  
DOCUMENT APPROVAL FOR NEW CONSTRUCTION AND ADDITIONS**

OCCUPANCY GROUP	BUILDING PLANS TO BE APPROVED
Section 403 – High Rise <sup>1</sup>	All buildings
Section 402 – Covered Mall Buildings <sup>1</sup>	All buildings
City/county owned	All buildings 20,000 sq. ft. or greater as required by G.S. §58-31-40
Group A <sup>1, 2</sup>	Occupant load over 1,000
Group E <sup>1</sup>	Over 2 stories or over 20,000 sq. ft./story
Group H <sup>1</sup>	Occupant load over 100
Group I <sup>1</sup>	Over 3 stories or over 10,000 sq. ft./story
Group R <sup>1</sup>	Over 4 stories or over 100 units/building

For SI: 1 square foot = 0.0929 m<sup>2</sup>.

- Plans and specifications are not required to be reviewed or approved by the Engineering Division ~~on~~ for buildings, ~~except city/county owned~~, that are located in a city or county inspection jurisdiction approved to perform plans review by the NC Building Code Council, ~~except city/county owned buildings are not exempt.~~
- Except temporary bleachers.

*Commentary: The square footage listed above refers to the footprint of a new building or building addition.*

*The occupant loads refer to a new building or building addition area only.*

*For the purpose of this table only, the occupant load for a church is based on the occupant load of the Occupant Group A-3 main meeting area. If the A-3 area is over 1,000 occupants, then DOI plan review is required unless exception 2 applies.*

*General Statute 58-31-40 indicates that such city/county owned buildings must be greater than 20,000 square feet (1858 m<sup>2</sup>) of new or additional building footprint to require DOI review. The 20,000 square feet (1858 m<sup>2</sup>) applies to individual structures on the site and not the sum of the structures.*

**104.1.2 Local plan review approval.** ~~1. An~~ local inspection department may make a written request to the Building Code Council to review plans and specifications on buildings listed in Table 104.1. This authority ~~shall~~ may be granted provided that the following is met:

1. The inspection department is adequately staffed by code enforcement officials with Standard Level III Certificates issued by the North Carolina Code Officials Qualification Board in all areas and attest that the for Building, Electrical, Fire, Mechanical and Plumbing.

2. The jurisdiction attests it is capable of performing required inspections within 2 business days of request for inspection as required by NCGS 143-139.4.

**104.1.3 List of approved local jurisdictions.** ~~2.~~ Local inspection departments approved under this section shall be listed on the Department of Insurance web page, or a list shall be provided by the Building Code Council Secretary. [www.ncdoi.com/osfm](http://www.ncdoi.com/osfm).

## SECTION 105 ALTERNATE MATERIAL, DESIGN OR METHODS

**105.1 Approval General.** The provisions of ~~this code~~ the technical codes are intended to allow the use of any alternate material, design or method of construction, provided that the alternate has been approved by the code enforcement official. An alternative material, design or method of construction shall be approved where the code enforcement official finds that the proposed alternative material, design or method of construction complies with the intent and provisions of the technical codes. ~~Section 105.2.~~

*Commentary: The technical codes are not intended to inhibit innovative ideas or technological advances. A comprehensive regulatory document, such as the North Carolina State Building Codes, cannot envision and then address all future innovations in the industry. As a result, a performance code must be applicable to and provide a basis for the approval of an increasing number of newly developed, innovative materials, systems and methods for which no technical code text or referenced standards yet exist. The fact that a material, product or method of construction is not addressed in the technical codes is not an indication that such material, product or method is intended to be prohibited. The code enforcement official is expected to apply sound technical judgment in accepting materials, systems or methods that, while not anticipated by the drafters of the current technical code text, can be demonstrated to offer equivalent performance. By virtue of its text, the ~~code regulates~~technical codes regulate new and innovative construction practices while addressing the relative safety of building occupants. The code enforcement official is responsible for determining if a requested alternative provides the equivalent level of protection of public health, safety and welfare as required by the ~~code~~technical codes.*

**105.2 Approval process.** The two paths for approval are a prescriptive method and a performance method as required in Sections 105.2.1 and 105.2.2.

**105.2.1 Prescriptive method.** The alternate method shall demonstrate equal or safer characteristics as required prescriptively by the technical codes.

**105.2.2 Performance method.** The alternate method shall demonstrate equal or safer performance as required by the technical codes.

*Commentary: “Prescriptive method” refers to sections of the technical codes that indicate a specific material or method. An example would be from the NC Residential Code the requirement that a pier footing for a 1-story house be 1’-4”x2’-0”x8”. That would be the minimum footing size if the footing is designed prescriptively.*

*“Performance method” refers to sections of the technical codes that indicate minimum design value. The footing for the same pier as described above could be designed to a lesser size if the performance requirements of the NC Residential ~~Code~~Code are met. An example could be that the ~~dead and/or load~~loads of the structure supported by the pier ~~is~~are less than expected by the code or the soil capacity is greater than 2,000 psf. Any of these factors could reduce the size of the footing to less than that required prescriptively in the NC Residential Code.*

**105.2.3 Tests or analysis.** Whenever there is insufficient evidence of compliance with the provisions of the technical codes, or evidence that a material, design or method does not conform to the requirements of the technical codes, or in order to substantiate claims for an alternative material, design or method, the code enforcement official shall have the authority to require tests as evidence of compliance to be made at no expense to the authority having jurisdiction. Test methods shall be as specified in the technical codes or by other recognized test standards. In the absence of recognized and accepted test methods, the code enforcement official shall ~~approve the~~have authority to review and approve or disapprove proposed testing procedures. The following are accepted testing agencies:

- a. A certified testing lab approved by the International Accreditation Service (IAS) for the specific standard that the alternate material or method is required by the code to comply.
- b. International Code Council approved testing agencies.
- c. Other testing agencies as approved by the local inspection jurisdiction.
- d. North Carolina registered design professionals providing sealed reports or evaluation letters in their area of expertise.
- e. Mechanical and electrical 3<sup>rd</sup> party testing agencies approved by the NC Office of State Fire Marshal in accordance with N.C.G.S. § 66-25 and § 143-139.1 and listed on their website at: Third Party Testing Agencies | OSFM (ncosfm.gov).

## **105.3 Appeals.**

**105.3.1 Local government.** The local building safety agency and fire marshal shall establish documented procedures to address requests for acceptance of a proposed alternate method. The procedure shall be published and made available to the general public upon request. The procedure shall include a requirement for a written response by the local government to the requesting party for a properly submitted request for appeal. The procedure shall require an acceptance or denial response be issued by the local government in 10 business days or less from the date of receipt of the request by the local government. The response shall include the evidence and technical codes considered in the decision as well as conclusions drawn from the evidence and technical codes.



**105.3.2 Decision of local government.** Appeal a of local jurisdiction decision is directed to the NC Department of Insurance in accordance with Section 203.2.2.

**105.3.3 Decision of North Carolina Department of Insurance, Engineering Division.** Appeal of a NC Department of Insurance, Engineering Division decision is directed to the North Carolina Building Code Council in accordance with Section 202.9.

## SECTION 106 PERMITS

**106.1 Permit required.** A current permit is required for all work described in the technical codes unless specifically exempted by the North Carolina General Statutes or the technical codes.

*Commentary: Reference North Carolina General Statute 160D-1110 for exemptions.*

### 106.2 Drawings and specifications.

**106.2.1 Requirements.** Drawings and specifications, as required by the inspection department, shall be drawn to scale with sufficient clarity and detail to indicate the nature and character of the work and shall accompany the application for a permit. All information, drawings, specifications and accompanying data shall bear the name, address and signature of the person responsible for the design.

**Exception**~~Exceptions:~~

1. Projects using the Building Information Modeling-Integrated Project Delivery (BIM-IPD) process, see Section 106.2.3.1.
2. Residential buildings exempted by ~~NCCGS 160D-1110, paragraph (b).~~ **NCCGS 160D-1110(b).**

**106.2.2 Additional data.** The inspection department may require details, computations, stress diagrams or documentation sealed by a registered design professional and other data necessary to describe the construction or installation of a system.

**Exception:** Projects using the BIM-IPD process, see Section 106.2.3.1.

**106.2.3 Review and approval.** When the inspection department issues a permit, it shall approve, in writing or by stamp, all sets of drawings and specifications “Reviewed for Code Compliance.”

**Exception:** Nothing in this section shall require the review and approval of one- and two-family dwelling plans.

*Commentary: Drawings and specifications shall be kept in a manner prescribed by North Carolina General Statute 160D-1126.*

**106.2.3.1 Building Information Modeling—Integrated Project Delivery Process.** When proposed by the permit applicant and when acceptable to the authority having jurisdiction, the BIM-IPD process may be utilized, replacing the requirements of Section 106.2.3, with the following permitting and inspection steps.

1. At the project start, the owner’s project team (Architect, Engineer, contractor, et al.) shall meet with the Code Enforcement Official (CEO) to determine the prevailing **technical** code compliance strategy for the full scope of the project, to be documented in an electronic Appendix B format or an equivalent format, acceptable to the CEO.
2. The CEO may issue a single project master permit, based on the initial project description and **technical** code compliance strategy agreement.

*Commentary: The CEO should work collaboratively to review building components or details as scheduled by the owner’s project team.*

3. The CEO shall inspect built work, as described in Section 107 of this code.
  - 3.1 Concurrence on compliance with the **technical** code, with respect to both the model and built product, shall be gained before inspections are approved.
4. The owner’s project team shall submit a validation document, at project substantial completion, documenting the building as constructed and compliance with the *North Carolina State Building Code*, for

records retention by the Authority Having Jurisdiction. Validation document: may be a three dimensional model, two dimensional electronic drawings and records, or a combination of both, accurately reflecting the completed building as approved by the code official in the field, and verified with respect to same.

- Where the validation document varies from the approved virtual model regarding **buildingtechnical** code compliance, the related Architect/ Engineer must approve the change.
- Receipt of the validation document shall be a condition on issuance of Certificate of Occupancy.

#### 106.2.3.2 Definitions.

**BIM:** Model-based technology linked with a data base of project information, using three-dimensional, real time dynamic modeling software, to plan all building construction. The model encompasses building geometry, spatial relationships, geographic information, and quantities and properties of building components.

**IPD:** A project delivery method that integrates key participants (owner, Architect, Engineer, contractor, code official, et al.), systems, business structures and practices into a process that collaboratively plans and constructs facilities. The collaborative process begins in early design and continues through all phases of design, fabrication and construction.

*Commentary: This applies to any project delivery method employing three-dimensional modeling software, to virtually construct all building components, by a collaborative team based process from design start to construction completion.*

#### 106.3 Permit application.

**Note to RRC:** Below text was submitted to RRC in error on 11/20/23 as this amendment (210608 Item B-2) was not carried forward by the NCBCCC during its approval process.

**106.3.1 Information required.** A permit application shall be filed with the Inspection Department on a form (see Appendix A) furnished for that purpose. The Inspection Department shall make available a list of information which that must be submitted with the building permit application, including a complete Building Code Summary (see Appendix B) complying with 106.3.2.

**Exception:** A Building Code Summary is not required if the AHJ (Authority Having Jurisdiction) determines plan review can be performed without the Building Code Summary.

**106.3.2 Building Code Summary.** The Building Code Summary used by an AHJ shall be in the exact format as, and contain only the information in, Appendix B of the Administrative Code and Policies. An AHJ shall only modify the Building Code Summary as set forth in section 103.5 103.6 Modifications, or as necessary to reflect any changes by the Office of State Fire Marshal to Appendix B which that have been approved of by the Building Code Council.

**Note to RRC:** Above text was submitted to RRC in error on 11/20/23 as this amendment (210608 Item B-2) was not carried forward by the NCBCCC during its approval process.

**Note to RRC:** The text below was approved by the NCBCCC on 6/13/23 and was unchanged.

**106.3.1 Information required.** A permit application shall be filed with the ~~Inspection Department~~ inspection department on a form furnished for that purpose. The ~~Inspection Department~~ inspection department shall make available a list of information that must be submitted with the building permit application, including a complete building code summary (see Appendix A of the Administrative Code and Policies). The ~~Inspection Department's~~ inspection department's building code summary shall be in the exact format as, and contain only the information in, Appendix B of the Administrative Code and Policies. The ~~Inspection Department~~ inspection department shall only modify its building code summary as set forth in section\_103.5 Modifications, or as necessary to reflect any changes by the Office of State Fire Marshal to Appendix B that have been approved by the Building Code Council.

**Note to RRC:** The text above was approved by the NCBCCC on 6/13/23 and was unchanged.

**106.4 Site address signage.** It is the responsibility of the permit applicant or designee to post the 911 **emergency** site address on an active jobsite at the commencement of work regulated by the NC Building Codes. The signage shall be temporary or permanent per 106.4.1 or 106.4.3.

**106.4.1 Temporary signage.** Signage to identify a construction site location can be temporary. Acceptable temporary signage may include such items as a permit placard, an address written on job box, yard signage or other

approved temporary street name markers shall be required if permanent street signs are not in place for new developments or subdivisions.

**106.4.2 Temporary Signage Location.** Address signage shall be placed such that it is legible from the street or road that fronts the property at all times during construction.

**106.4.3 Permanent signage.** Address signage meeting the requirements of the *International Residential Code* Section R319 for One- and Two-family Dwellings, *International Building Code* Section 501.2 or *International Fire Code* Section 505.1 for commercial buildings shall be deemed as meeting the requirements of this section.

## **SECTION 107 CONSTRUCTION INSPECTIONS**

**107.1 General.** The inspection department shall perform the following inspections:

1. Footing inspection – 107.1.1;
2. Under slab inspection, as appropriate – 107.1.2;
3. Foundation inspection – 107.1.3;
4. ~~Rough-in inspection~~ Building framing – 107.1.4;
5. ~~Building framing inspection~~ Rough-in – 107.1.5;
6. Insulation inspection – 107.1.6;
7. Fire protection inspection – 107.1.7; and
8. Final inspection – 107.1.8.

*Commentary: The code enforcement official makes these inspections during certain phases of construction and is not on site at all times when construction is in progress. The code official verifies technical code compliance and/or technical code defects visible and subject to discovery during the above listed inspections and spot checks numerous similar items.*

*Nothing in any of Sections 107.1.1 through 107.1.8 requirements is intended to prevent partial inspections of the inspection types listed in Section 107.1 “General” as requested by the permit holder as allowed by the local inspection department. Cumulative partial inspections approved by the code official shall satisfy the same degree of readiness for inspection for viewing as described in Sections 107.1.1 through 107.1.8.*

*Not all items, such as, but not limited to, nailing of roof or other sheathing material, are always visible at framing inspection, but remain the responsibility of the permit holder to comply with the code technical codes.*

*Temporary electrical service poles may be inspected at any phase of construction as requested by the permit holder. Temporary utility (TU) applications deemed safe by the AHJ or as otherwise permitted by the technical code shall be allowed.*

**107.1.1 Footing inspection.** Footing inspections shall be made after the trenches are excavated, all grade stakes are installed, all reinforcing steel and supports are in place and tied, and all necessary forms are in place and braced before any concrete is placed.

**107.1.2 Under-slab inspection.** Under-slab inspections, as appropriate, shall be made after all materials and equipment to be concealed by the concrete slab are completed.

**107.1.3 Foundation inspection, crawl space.** Foundation and crawl space inspections shall be made after all foundation supports are installed.

*Commentary: Foundation inspections are conducted to verify correct installation and proper bearing support. Poured concrete and masonry walls that have reinforcement steel should be inspected prior to concrete placement. Crawl space leveling, ground clearances, positive drainage and waterproofing/dampproofing, when required, may be inspected at future inspections prior to concealment.*

~~107.1.5~~ **107.1.4 Building framing inspection.** Framing inspections shall be made after the roof (excluding permanent roof covering), wall ceiling, and floor framing is complete with appropriate blocking, bracing, and firestopping in place. The following items shall be in place and visible for inspection:

1. Pipes;
2. Chimneys and vents;

3. Flashing for roofs and chimneys;
4. Insulation baffles; and
5. All lintels that are required to be bolted to the framing for support shall not be covered by any exterior or interior wall or ceiling finish material before approval. Work may continue without approval for lintels supported on masonry or concrete.

**107.1.4**~~107.1.5~~ **Rough-in inspection.** Rough-in inspections shall be made when all building framing and parts of the electrical, plumbing, fire protection, or heating-ventilation or cooling system that will be hidden from view in the finished building have been placed, but before any wall, ceiling finish, or building insulation is installed.

*Commentary: Plumbing, mechanical, and electrical components installed underground should be considered as rough-in inspections and may be inspected at any point during construction prior to covering.*

**107.1.6 Insulation inspection.** Insulation inspections shall be made after an approved building framing and rough-in inspection and after the permanent roof covering is installed, with all insulation and vapor retarders in place, but before any wall or ceiling covering is applied.

*Commentary: Insulation baffles that cannot be seen at this inspection, such as vaulted ceilings with concealed rafter cavities, should have baffles installed at framing inspection for verification.*  
*It is acceptable that wall cavity insulation enclosed by an air barrier material behind tubs, showers, and fireplace units installed on exterior walls may not be observable by the code official.*

**107.1.6 Fire protection inspection.** Fire protection inspections shall be made in all buildings where any material is used for fire protection purposes. The permit holder or his agent shall notify the inspection department after all fire protection materials are in place. Fire protection materials shall not be concealed until inspected and approved by the code enforcement official.

*Commentary: Fire protection inspection is typically performed in commercial building structures and is required in addition to any special inspection as listed in Chapter 17 of the North Carolina Building Code.*

**107.1.8 Final inspection.** Final inspections shall be made for each trade after completion of the work authorized under the technical codes.

*Commentary: Each trade shall complete a final inspection giving approval to permitted work. Work required by the technical codes shall be complete before being requested. Temporary power and temporary certificate of occupancy (TCO) requests are allowed prior to final inspection.*

**107.2 Inspection requests.** It shall be the duty of the permit holder or his or her agent to notify the code enforcement official when work is ready for inspection and to provide access to and means for inspection of the work for any inspections that are required by this code.

**107.3 Approval required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code enforcement official. The code enforcement official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder that the work fails to comply with the technical codes. The code enforcement official shall identify code violations and when requested shall identify the specific sections of the technical ~~codes that isare violated.~~ Any work that does not comply shall be corrected and shall not be covered or concealed until authorized by the code enforcement official.

**107.4 Independent inspections authorized by the code enforcement official.** The code enforcement official may authorize a North Carolina registered design professional to inspect the following structural elements, components and systems:

1. The excavation of soil and/or forming of footings with the associated placement of reinforcing steel prior to pouring concrete; and
2. The forming of floors, columns, beams and other structural members, including the placement of reinforcing steel prior to pouring concrete.

To utilize this procedure, the permit holder must continue to schedule all inspections normally required for this work by the inspection department. The registered design professional shall provide weekly reports bearing his seal to the inspection department indicating that the placement of the related construction elements, components and systems either complies or does not comply with the approved permit documents. Any change from the permit documents shall be approved by the code enforcement official prior to its implementation. The permit holder shall immediately inform the code enforcement official if he or she terminates his or her relationship with the registered design professional.

**107.5 Special inspections.** Special inspections required by the building code or the building inspector shall be performed by a North Carolina registered design professional or an inspector under his responsible charge.

**107.6 Inspections of component or element.** Acceptance of inspection of a component or element by a NC registered architect or engineer will require completion of the “Design Professional Inspection Form” found in Appendix G.

DRAFT

## CHAPTER 2

# ADMINISTRATIVE POLICIES

### SECTION 201 SCOPE

**201.1 Scope.** Chapter 2 is provided as procedural policies. ~~Items discussed in this chapter are intended as commentary to the General Statutes.~~

### SECTION 202 BUILDING CODE COUNCIL

www.ncbuildingcodes.com

**202.1 Duties.** The Building Code Council has the following duties:

- 1 Prepare and adopt the North Carolina State Building Code;
2. Revise or amend the ~~code;~~ North Carolina State Building Code;
3. Hear appeals from decisions of state code enforcement agencies as to any matter related to the ~~code;~~ North Carolina State Building Code;
4. Make a thorough and continuing study of the manner of enforcement of the ~~code~~ technical codes and building laws;
5. Make recommendations to State agencies about any changes in administrative practices which could improve the enforcement of the ~~code~~ technical codes or building laws; and
6. Recommend to the General Assembly statutory changes to simplify and improve the building laws.  
(General Statutes 143-138, 143-140 and 143-142)

**202.2 Composition.** The Building Code Council shall consist of 17 members appointed by the governor as follows:

- ~~1 and~~ 2. Two registered architects;
- ~~3~~ 2. One licensed general contractor;
- ~~4~~ 3. One licensed general contractor specializing in residential construction;
- ~~5~~ 4. One licensed general contractor specializing in coastal residential construction;
- ~~6~~ 5. One licensed engineer practicing structural engineering;
- ~~7~~ 6. One licensed engineer practicing mechanical engineering;
- ~~8~~ 7. One licensed engineer practicing electrical engineering;
- ~~9~~ 8. One licensed plumbing and heating contractor;
- ~~10~~ 9. One municipal or county building inspector;
- ~~11~~ 10. One representative of the public who is not a member of the building construction industry;
- ~~12~~ 11. One licensed electrical contractor;
- ~~13~~ 12. One licensed engineer on the engineering staff of a State agency charged with approval of plans of State-owned buildings;
- ~~14~~ 13. One representative of the fire services;
- ~~15~~ 14. One licensed liquid petroleum gas dealer/contractor involved in the design of natural and liquified petroleum gas systems who has expertise and experience in natural and liquid petroleum gas piping, venting and appliances;
- ~~16~~ 15. One municipal elected official or city manager; and
- ~~17~~ 16. One county commissioner or county manager.

(General Statute 143-136)

**202.3 Officers and committees.** The Building Code Council shall elect a ~~chairman~~Chair and ~~vice-chairman~~Vice Chair from its appointed members. The officers shall serve for a period of two years from the date of election or until their successors are elected. The ~~Building Code Council~~NC Department of Insurance shall appoint a person from the Engineering Division to serve as ~~secretary~~Secretary to the Building Code ~~Council from the Engineering Division of the Department of Insurance-Council.~~  
(General Statute 143-137)

**202.4 Meetings.** The Building Code Council shall meet regularly at least every 6 months. Special meetings may be called by the ~~chairman~~Chair. Any seven members of the Building Code Council shall constitute a quorum. Information concerning the exact time and place of all regular meetings and regular public hearings shall be made available to the public by the Engineering Division of the Department of Insurance 60 calendar days prior to each such meeting or public hearing. Information concerning the exact time and place of ~~eachall meetings~~special meetings with public hearings required to be noticed in the NC Register shall be made available ~~from~~to the public by the Engineering Division of the Department of Insurance 15 calendar days prior to each such meeting. Information concerning the exact time and place of all special meetings that do not have public hearings required to be noticed in the NC Register shall be made available to the public by the Engineering Division of the Department of Insurance 7 calendar days prior to each such meeting. Agenda items, other than proposed amendments, must be submitted to the Building Code Council Secretary 21 calendar days prior to the scheduled meeting.  
(General ~~Statute 143-137~~Statutes143-137 and 143-138)

**202.5 Proposed amendments.** The Building Code Council may revise or amend the ~~code~~technical codes, either on its own motion or upon application from any person, state agency or political subdivision of the state. Each request to amend the ~~code~~technical codes shall comply with the following ~~policies of the Building Code Council~~policies:

**202.5.1 Filings.** Twenty-one ~~copies~~hardcopies or a single pdf with an editable softcopy of the proposed amendment with supporting documentation shall be filed with the Building Code Council Secretary.

**202.5.1.1 Improper filings.** When a request proposed amendment is improperly filed or not in accordance with ~~all the rules listed above~~Sections 202.5.1 through 202.5.3, the Building Code Council Secretary shall reject the submittal and notify the applicant of the proper procedure to follow.

**202.5.2 Submission date.** The proper filing shall be received by the first day of the month prior to the ~~quarterly~~next scheduled ~~council~~Council regular meeting date.

**202.5.3 Filing format and required information.** Each request proposed amendment shall be legibly printed, typed or copied on a form (see Appendix C) available from the North Carolina Department of Insurance, Building Code Council section and shall at a minimum contain the following:

1. The proposed amendment must be set forth in full and contain an explicit reference to the affected section or sections of the technical code;
2. The request shall state the reasons for the proposed amendment with supporting documentation;
3. The proposed amendment shall comply with the standards set forth in General Statute 143-138(c) and reference to the particular standards shall be set forth in the request for the amendment; and
4. The proposed amendment shall contain ~~an economic impact analysis~~ a fiscal note performed by the petitioner and approved by the Office of State Budget Management as required by General ~~Statute 143-138(a1)~~Statutes 143-138(a1)(1) and 150B-21.4.
5. A cost/benefit analysis performed by the petitioner for North Carolina Energy Code proposed amendments as required by General Statute 143-138(a1)(2).

**202.5.4 Secretary duties.** Upon the proper filing of a request proposed amendment, the Building Code Council Secretary shall forward one copy of said request proposed amendment to each ~~council~~Council member prior to the scheduled meeting date. Persons filing proposed amendment petitions are hereby notified by the Building Code Council Secretary of the place and time of the scheduled ~~hearings~~meetings. The Building Code Council Secretary shall cause agendas to be published for all meetings and public hearings. The Building Code Council Secretary shall cause to be published the notice of public hearing as specified in North Carolina General Statutes 143-138(a).

**202.5.5 Actions taken.** This section addresses actions taken by the North Carolina Building Code Council for properly filed petitions for rulemaking (code amendments).

**202.5.5.1 New petitions for ~~rulemaking~~rulemaking (B-items).** Prior to the next scheduled ~~council~~Council meeting:

**202.5.5.1.1 Council ~~chair~~Chair.** The ~~council chair~~Council Chair shall assign each proposed amendment to the appropriate standing committee chair(s).

**202.5.5.1.2. Standing committee.** The standing committee(s) shall review the proposed amendment and the

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chair(s) of the committee(s) shall then, based on the committee review, recommend to the council:Council:

- a. denial;
- b. acceptance;
- c. acceptance with committee modifications; or,
- d. tabling the proposed amendment to the next scheduled councilCouncil meeting pending further review by the committee(s) or an ad-hoc committee appointed by the council chair-Council Chair.

**202.5.5.1.3 Council.** The councilCouncil will determine whether the proposed amendment or committee modified proposed amendment will be accepted, denied or tabled for further review by the standing committee or an ad-hoc committee. For proposed amendments that are sent to a committee or ad-hoc committee for review, the councilCouncil shall set a date for the committee to issue its findings to the council-Council.

The councilCouncil will take no further action on itemsproposed amendments that are denied. Granted itemsproposed amendments may be referred to committee for review (General Statute 150B-20(d)). The Secretary to the councilCouncil shall inform the proponent of the proposed amendment in writing of the reason for the denial (General Statute 150B-20(c)).

**202.5.5.2 Notice of rulemaking proceedings and public hearing-hearing (C-items).** AmendmentsProposed amendments that are approved by the councilCouncil in Section 202.5.5.1.3 shall be:

- a. included in the agenda for the following councilCouncil meeting;public hearing;
- b. advertised by the North Carolina Office of Administrative Hearings for public hearing as required by General Statute 150B-21.2; and,
- c. advertised on the North Carolina Department of Insurance website a minimum of 15 calendar days prior to the public hearing date.

**202.5.5.3 Final adoption-adoption (D-items).** The Building Code Council shall either grant or deny properly submitted proposed petitions for rulemakingamendments at the meeting following the public hearing required by Section 202.5.5.2. Granted proposed amendments shall be published on the North Carolina Department of Insurance website within 30 days after the adopted amendment is reviewed and approved by the North Carolina Rules Review Commission and in accordance with Section 202.6.1.

The councilCouncil will take no further action on itemsproposed amendments that are denied. AmendmentsProposed amendments that are substantially similaridentical to a denied proposed amendment cannot be resubmitted for consideration by the councilCouncil for a minimum of 12 months from the date of the denial.

**202.5.5.4 North Carolina Rules Review Commission.** A proposed amendment that is granted by the councilCouncil is not adopted erbut is not published as adopted until it has been approved by the Rules Review Commission. If the commission sends an adopted amendment back to the councilCouncil for further work,with a request for changes, the revised-proposedadopted amendment shall be correctedreadoptedis not considered adopted and will not be published as adoptedreadopted until it is resubmitted to the commission and the commission approves the corrected adopted amendment. Amendments are not approved for use based on the effective date under which the amendment was adopted by the Council until approved by the commission.

**202.5.6** The Building Code Council shall either grant or deny the proposed petition for rule-making at the meeting following receipt of the proposed rule change. The council will take no further action on items that are denied. Granted items may be referred to committee for review.

**202.5.7** The Building Code Council may hold a public hearing on granted items at the next quarterly scheduled meeting. The council may take final action on granted items at the next quarterly scheduled meeting after the public hearing.

**Table 202.5.5  
Typical Timeline Example for Adopted Rules**

<u>Rule Petition Received:</u>	February 1
<u>Standing Committee First Review:</u>	February – March
<u>Rule Petition Granted for Public Hearing:</u>	March BCC meeting
<u>Notice of Hearing Published:</u>	April NC Register
<u>Committee Review:</u>	April – May
<u>Hearing Held:</u>	June BCC <u>meetingpublic hearing</u>



<u>Standing Committee Final Review:</u>	June – September
Final <u>Rule Adoption:</u>	September BCC meeting
Rules Review Meeting:	November RRC meeting
<u>Approved-Effective:</u>	<u>December – First day of the month following the month the adopted rule is approved by RRC or a delayed effective date approved by the BCC.</u>

**202.6 Publications.**

**202.6.1 Amendments.** The Building Code Council shall print all amendments to the codes, and the amendments shall be available for distribution in accordance with General Statute 143-138(g). Publication of adopted amendments on the Building Code Council website is deemed to meet the publication requirement of General Statute 143-138(g). Amendments, Notices meeting and public hearing notices and minutes are available either at no charge on the Council web page or for a fee as prescribed by Agency Rules.page.

**202.6.2 Council webpage.** The minutes and agenda of the Building Code Council may be found on the Council web page located at <http://www.ncbuildingcodes.com> <https://www.ncosfm.gov/codes/building-code-council-bcc/meeting-dates>. Click on the desired information topic.

**202.6.3 Engineering newsletter.** Newsletters will be sent to online subscribers. Archive copies may be found on the Engineering web page located at <http://www.ncdoi.com/osfm>. Click on Building Codes to subscribe.

**202.7 Approval of local ordinances.** The Building Code Council may approve local regulations governing the Fire Prevention Code. All regulations shall be approved by the Building Code Council in order to be legally effective. Regulations approved by the local governing body, which are found to be more stringent than the fire prevention code and, which are found to regulate activities and conditions in buildings, structures, and premises that pose dangers of fire, explosion or related hazards, and are not in conflict with the North Carolina State Building Code, shall be approved once reviewed and filed by the Building Code Council. The rules listed in Section 202.5 shall apply for filing a proposed local deviation to the Fire Prevention Code along with the following:

1. Twenty-one ~~copies~~ hardcopies or a single pdf and editable soft copy of the resolution adopted by the governing body requesting the proposed deviation to the fire prevention code.
2. After approval by the Building Code Council, the Building Code Council Secretary shall advise the local governing body and shall retain a copy in the Building Code Council’s file as a permanent record.

[General Statute 143-138(e)]

**202.8 Committees.**

**202.8.1 Super committees.** There are two supercommittees designated by N.C.G.S. 143-136, commercial committee and residential committee. The duties of those committees are to, in their respective areas of authority, approve or deny proposed code amendments prior to the amendment being addressed by the full councilCouncil and make recommendations to the full councilCouncil regarding appeals before the council.Council.

**202.8.1202.8.2 Standing committees.** The standing committees shall consist of members of the Building Code Council. The ChairmanChair of the Building Code Council shall appoint the chairmenchair and members of each committee.

**202.8.2202.8.3 Ad hoc committees.** For each code edition, the ChairmanChair shall establish and appoint ad hoc code revision committees and appoint the chairmen.chair of each committee. The ad hoc committees shall consider and prepare revisions and amendments to the technical code volumes. Each ad hoc committee shall consist of members of the Building Code Council, Department of Insurance staff, licensed contractors, and design professionals most affected by the technical code volume for which the ad hoc committee is responsible and members of the public.

*Guidelines for Ad Hoc Committees:*

1. ~~Ad Hoc committee is asked to approach its~~Approach code review with the idea of producing a newly amended technical code with as few changes from the ~~2009 ICC model~~ technical codes as the committee deems practicable.
2. Current Code shall be considered ~~base line~~baseline for technical code comparison.
3. ~~Ad Hoc committee is asked to provide~~Provide a list of major changes to the Standing Committee and Council for review.
4. ~~If code changes are thought to be controversial, it is suggested that the Ad Hoc committee consider~~Consider handling ~~such complex technical code change-items as separate standalone~~ technical code ~~changes.~~changes to avoid adoption delays of the technical code volumes.
5. Ad Hoc committees shall submit its report to the appropriate Standing Committee for review.
6. After its review, the Standing Committee is asked to make a recommendation to the Building Code Council for adoption.

**202.8.4 Hearing committee.** The ~~chairman~~Chair may appoint a hearing committee to hear an appeal.

**202.9 Appeals.** [General Statute 143-141(d)]

**202.9.1 Engineering division.** A written technical interpretation shall be provided as specified in Section 203.2.1.2. Any person may appeal in writing an order, decision or ~~determination~~interpretation pertaining to the ~~code~~technical codes or any state building law by filing written notice with the Commissioner of Insurance or his designee within 10 calendar days after the order, decision or ~~determination.~~interpretation. A copy of the appeal shall be furnished to each party.

(General Statutes 143-140 and 160D-1127)

**202.9.2 Building Code Council.** The Building Code Council shall hear appeals from the decisions of state enforcement agencies relating to any matter related to the ~~code.~~technical codes. Any person wishing to appeal a decision of a state enforcement agency to the Building Code Council shall give written notice of appeal as follows:

**202.9.2.1 Filing.** Twenty-one ~~copies~~hardcopies including an original of the Notice of Appeal ~~or a single pdf and~~ editable softcopy shall be filed with the Building Code Council c/o North Carolina Department of Insurance, Engineering Division, 325 North Salisbury Street, Room ~~5-44542,~~ Raleigh, North Carolina 27603, and one copy shall be filed with the state enforcement agency from which the appeal is taken.

**202.9.2.2 Submission date.** The Notice of Appeal shall be received no later than 30 calendar days from the date of the decision of the State enforcement agency. (General Statute 143-141).

**202.9.2.3 Filing format and required information.** The Notice of Appeal shall be legibly printed, typewritten or copied and shall contain the following (See Appendix E):

1. Name, address of the party or parties requesting the appeal.
2. The name of the state enforcement ~~agency, and~~ the date of the decision from which the appeal is ~~taken, and~~ a copy of the written decision received from the enforcement agency.taken.
3. The decision from which the appeal is taken shall be set forth in full in the Notice of Appeal or a copy of the decision shall be attached to all copies of the Notice of Appeal.
4. The contentions and allegations of fact must be set forth in full in a clear and concise manner with reference to the sections of the code in controversy.
5. The original Notice of Appeal shall be signed by the party or parties filing appeal.
6. The Notice of Appeal shall be received by the first day of the month prior to the Building Code Council's quarterly scheduled meeting in order to be placed on the agenda for that meeting. The ~~Chairman~~Chair may schedule a special meeting to hear an appeal.

**202.9.2.4 Secretary duties.** Upon the proper filing of the Notice of Appeal, the Building Code Council Secretary shall forward one copy of the Notice of Appeal to ~~each member of the attorney for the Building Code Council and~~ the ~~council's~~Council's attorney shall distribute the appeal ~~as necessary~~ to each ~~council~~Council member.

**202.9.2.5 Hearing Committee.** The ~~chairman~~Chair may appoint a Hearing Committee to hear appeals. The Secretary shall send notice in writing to the party or parties requesting an appeal and to the Building Code Council Hearing Committee members at least 15 calendar days prior to the Hearing Committee meeting. A written decision of the Hearing Committee meeting shall be provided to all Building Code Council Members. The actions of the Hearing Committee shall be final, unless appealed to the full Building Code Council in writing within 30 calendar days of the Hearing Committee's action. If a Hearing Committee consists of at least seven ~~council~~Council members, it will constitute a quorum of the full ~~council.~~Council. Further appeals shall be as

specified in Section 202.9.3.

**202.9.2.5**~~202.9.2.6~~ **Dismissal.** The Building Code Council shall, upon a motion of the State enforcement agency or on its own motion, dismiss appeals for the following reasons:

1. Not pursued by the appellant or withdrawn;
2. Appeal not filed in accordance with these rules; or
3. Lack of jurisdiction by the Building Code Council.

**202.9.2.6**~~202.9.2.7~~ **Findings.** When the Building Code Council finds that a State enforcement agency was in error in its interpretation of the code, technical codes, the Building Code Council shall remand the case to the agency with instructions to take such actions as the Building Code Council directs. When the Building Code Council finds on appeal that materials or methods of construction proposed are equivalent to those required by the code, technical codes, the Building Code Council shall remand the case to the state enforcement agency with instructions to permit the use of such materials or methods of construction. The Building Code Council shall immediately initiate procedures for amending the code technical codes to permit the use of such materials or methods of construction.

**202.9.2.7**~~202.9.2.8~~ **Decision.** The Building Code Council shall provide a written decision setting forth the findings of fact and the Building Code Council’s conclusions to each party or parties filing the appeal and to the State enforcement agency from which the appeal was taken.

**202.9.3 Superior court.** Whenever any person desires to appeal a decision of the Building Code Council or a decision of a State or local enforcement agency, he that person may appeal either to the Wake County Superior Court or the superior court of the county in which the proposed building is to be situated in accordance with the provisions of Chapter 150B of the General Statutes.

~~{General Statute 143-141(d)}~~

**SECTION 203  
NORTH CAROLINA DEPARTMENT OF INSURANCE**

www.ncdoi.com/osfm

**203.1 Administration.**

**203.1.1 Commissioner of Insurance.** The Commissioner of Insurance through the Engineering Division shall have general supervision of the administration and enforcement of the North Carolina State Building Code. This includes all sections of the code pertaining to:

1. General building restrictions and regulations;
2. Plumbing;
3. Heating and air conditioning;
4. Electrical systems;
5. Fire protection; and
6. Natural or liquified petroleum gas systems. [General Statute 143-139(b)] systems included in the technical codes.

(General Statute 143-139(b))

**203.1.1.1 Investigation of fires.** Whenever the Commissioner of Insurance has reason to believe that investigators of fire or fire prevention inspectors are not fulfilling their responsibilities, he or his designee the Commissioner or deputy assigned by the Commissioner shall take proper steps to have all provisions of the law enforced.

(General Statute 58-2-95)

**203.1.1.2 Investigation of premises for dangerous materials.** The Commissioner of Insurance or his or her designee assigned by the Commissioner shall hear appeals from orders issued by the code enforcement official to remove or remedy combustible materials or inflammable conditions dangerous to any building or premises. The appeal shall be made within 24 hours of issue, not counting weekends or holidays. The commissioner shall cause the complaint to be investigated immediately. The Commissioner or his or her designee assigned by the Commissioner may make inspections of the complaint alone or in the company of the code enforcement official. Unless the Commissioner by his or her authority revokes the order of the code enforcement official, the order remains in force and must be complied with by the owner or occupant.

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(General Statute 58-79-20)

**203.1.1.3 Buildings within primary fire limits.** The Commissioner of Insurance or ~~his or her~~ designee ~~assigned by the Commissioner~~ shall review all permits to erect, alter, repair or move any wood-frame building or structure within the primary fire district of a municipality. Such permits shall be received and approved by the ~~Inspection Department~~~~inspection department~~ and approved by the ~~Municipal Council governing board~~ prior to the Commissioner or ~~his or her~~ Commissioner designee's approval.  
(General Statute 160D-1128)

**203.2 Engineering Division.** The Engineering Division of the Department of Insurance shall serve as staff for the Building Code Council and the Code Official's Qualification Board. The Engineering Division shall work in cooperation with code enforcement officials and provide general supervision in the administration and interpretation of the ~~code~~~~technical codes~~. The staff shall handle correspondence and maintain an accurate and complete record of:

1. All meetings or hearings,
2. Laboratory studies, and
3. Technical work performed by or for the Building Code Council.

All records shall be available for public inspection during regular office hours. All funds for the operation of the Building Code Council shall be appropriated to the Department of Insurance. The Department of Insurance may hire additional staff as may be necessary to handle the work of the Building Code Council with the approval of the ~~council~~~~Council~~.

[General Statute 143-137(c)]

### 203.2.1 Interpretations.

**203.2.1.1 Informal interpretations.** The Engineering Division shall provide informal interpretations on ~~code~~~~technical~~ code-related matters either by e-mail, letter or telephone. These informal interpretations may be accepted by the local code enforcement official or party requesting the interpretation. Either party may request a formal interpretation of the ~~code~~~~technical codes~~.

**203.2.1.2 Formal interpretations.** Any person may request in writing a formal interpretation of the ~~code~~~~technical codes~~. The request shall be addressed to the Chief Code Consultant for the Department of Insurance. The request shall be specific and shall reference the ~~code~~~~technical~~ code sections in question. All formal interpretations shall be in writing and include Appendix E as a cover document. A formal interpretation shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. Formal interpretations determined to be of a general nature may be posted on the department web site.

(General Statute 143-140)

**203.2.2 Appeals.** Any person may appeal in writing an order, decision or determination of a code enforcement official pertaining to the ~~code~~~~technical codes~~ or any state building law. The appeal shall be addressed to the Chief Engineer for the Department of Insurance by filing written notice within 10 ~~calendar~~ days after the order, decision or determination. The appeal shall contain the type and size of the building in question, the location of the building and shall reference the ~~code~~~~technical~~ code sections in question. The decision shall be in writing and shall set forth the facts found. The decision rendered shall be based on the technical provisions of the code, public health and safety and shall be construed liberally to those ends. A decision shall be binding on all parties unless an appeal is submitted to the Building Code Council as specified in Section 202.9.2. A copy of the appeal and written decision shall be furnished to each party. A decision regarding an appeal of alternate material, design, or methods as allowed by Section 105.3 shall be provided in 10 business days or less as required by General Statute 143.140.1.

(General Statute 160D-1127)

**203.2.3 Code Errata.** It shall be the responsibility of the Chief Code Consultant for the Department of Insurance to issue errata to the ~~NC~~~~North Carolina~~ State Building Codes. Before publishing an ~~errata~~~~errata~~, the errata shall be reviewed by the Chair of the ~~NC~~ Building Code Council standing committee for the related ~~code~~~~technical~~ code. The errata shall be published on the Department of Insurance website with the ~~code~~~~technical~~ code amendments.

**203.2.3 Engineering newsletter.** Newsletters will be sent to online subscribers. Archive copies may be found on the Engineering web page located at <https://www.ncosfm.gov/Newsletters>. To subscribe to engineering newsletters go to [https://lists.ncmail.net/mailman/listinfo/ncdoi\\_engineering](https://lists.ncmail.net/mailman/listinfo/ncdoi_engineering).

## SECTION 204 CITY AND COUNTY GOVERNMENT

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(Click on “For Government, Local Government”)

**204.1 General.** The powers, duties and responsibilities of the code enforcement official are generally described in General Statute 160D, Article 11. This section does not apply to properties owned by state and federal government entities unless specifically requested by those entities.

### 204.2 Inspection department.

**204.2.1 General.** The responsibility for administration and enforcement of the code technical codes has been allocated to local code enforcement officials under the supervision of State officials as designated within Section 203.

[General Statute 143-139(b)]

**204.2.2 Jurisdiction.** A municipal inspection department shall have jurisdiction over all areas within the city limits, all extraterritorial areas that the city has jurisdiction pursuant to state laws, and over any areas in which the municipal limits have contracted with another unit of government to perform code enforcement. A county inspection department shall have jurisdiction over all unincorporated areas outside any municipal jurisdiction located within the county, all areas in which a municipality has requested the county to enforce the code technical codes, and within the jurisdiction of another unit of government in which the county has contracted to perform code enforcement. A joint inspection department created by two or more units of government shall have the authority to enforce the code technical codes in all areas of legal jurisdiction of all units of government supporting the joint department.

(General Statutes 160D-1104 and 160D-1107)

**204.2.3 Duties.** Inspection departments shall:

1. Receive applications and supporting data for permits;
2. Issue or deny permits;
3. Make all necessary inspections to ensure technical code compliance;
4. Identify technical provisions found to be inconsistent with the inspection;
5. Issue or deny certificates of compliance and certificates of occupancy;
6. Issue stop work orders or orders to correct violations;
7. Maintain adequate records of permits issued or denied, inspections made, corrections ordered and certifications issued; and
8. Take other actions that may be required to adequately enforce the code technical codes.

(General Statute 160D-1104)

**204.2.4 Code enforcement officials qualifications.** No state or local government employee shall enforce any provision of the North Carolina State Building Codes who does not possess an appropriate valid certificate issued by the North Carolina Code Officials Qualification Board as specified in General Statutes 143-151.13 and 160D-1103.

**204.2.5 Conflict of interest.** Information about conflict of interest for code enforcement officials can be found in General Statute 160D-1108.

**204.2.6 Right of entry.** The code enforcement official shall have the right to enter buildings or premises as described in General Statutes 160D-1113 and 160D-1117.

**204.2.7 Stop work orders.** General Statute 160D-404 authorizes a code enforcement official to issue stop work orders. The statute describes when a stop work order can be issued, and how the stop work order is to be issued. See Section 204.10 for appeal of stop work orders.

**204.2.8 Unsafe building or systems.** A code enforcement official’s authority to condemn an unsafe building is found in General Statute 160D-1119.

### 204.3 Fire prevention department code enforcement.

**204.3.1 General.** The responsibility for administration and enforcement of the North Carolina Fire Prevention Code has also been allocated to county fire marshals and city and town fire chiefs under the supervision of State officials as designated within Section 203.

(General Statutes 160A-292, 160A-291, and 160A-292)

**204.3.2 Jurisdiction.** A municipal city or town fire department chief shall have jurisdiction over all areas within the city or town limits, all extraterritorial areas that the city or town has jurisdiction pursuant to state laws, and over any areas in which the municipal city or town limits have contracted with another unit of government to perform code

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~~enforcement-enforcement of the North Carolina Fire Prevention Code.~~ The county fire marshal and ~~his or her~~ ~~appointed~~ assistants appointed by the county fire marshal shall have jurisdiction over all unincorporated areas outside any ~~municipality or town~~ jurisdiction located within the county, all areas in which a ~~municipality city or town~~ has requested the county to enforce the ~~code.~~ ~~North Carolina Fire Prevention Code,~~ and within the jurisdiction of another unit of government in which the county has contracted to perform ~~code enforcement-enforcement of the North Carolina Fire Prevention Code.~~ ~~A joint inspection department created by two~~ Two or more units of government shall have the authority to jointly enforce the ~~code~~ ~~North Carolina Fire Prevention Code~~ in all areas of legal jurisdiction of all units of government supporting the joint ~~department.~~ ~~agreement to enforce the North Carolina Fire Prevention Code.~~

(General Statutes 153A-234, 160A-292, 160D-1104 and 160D-1107)

### **204.3.3 Duties.** ~~Fire prevention departments shall:~~

1. Receive applications and supporting data for permits;
2. Issue or deny permits;
3. Make all necessary inspections to ensure ~~code compliance;~~ ~~compliance with the North Carolina Fire Prevention Code;~~
4. Identify technical provisions found to be inconsistent with the inspection;
5. Issue or deny certificates of compliance and certificates of occupancy;
6. Issue stop work orders or orders to correct violations;
7. Maintain adequate records of permits issued or denied, inspections made, corrections ordered and certifications issued;
8. Take ~~other~~ ~~actions that may be required to adequately enforce the code;~~ ~~Code enforcement actions;~~ ~~to enforce the North Carolina Fire Prevention Code;~~
9. Investigate the cause, origin, and circumstances of every fire in which property has been destroyed or damaged;
10. Inspect public school buildings a minimum of two times during a ~~calendar~~ year for removal of hazards, provided that the periodic inspections shall be at least 120 ~~calendar~~ days apart; and
11. Inspect new and existing lodging establishments, including hotels, motels, and tourist homes that provide accommodations for seven or more continuous days (extended-stay establishments), bed and breakfast inns, and bed and breakfast homes for the installation and maintenance of carbon monoxide alarms and detectors annually.

(General Statutes 160D-1104, 58-79-1, 115C-525(b), 130A-247, and 143-138(b)(2))

**204.3.4 Fire code enforcement official's qualifications.** No county fire marshal or ~~municipal city or town~~ fire chief or their appointed assistants shall enforce any provision of the North Carolina State Building Codes who does not possess an appropriate valid certificate issued by the North Carolina Code Official's Qualification Board as specified in General Statutes 143-151.13 and 160D-1103.

**204.3.5 Conflict of interest.** Information about conflict of interest for code enforcement officials can be found in General Statute 160D-1108.

**204.3.6 Right of entry.** The fire code enforcement official shall have the right to enter buildings or premises where it is necessary to make a fire prevention inspection to enforce the provisions of the North Carolina Fire Prevention Code or where otherwise authorized as described in General Statutes 153A-234, 160A-292, 160D-1113 and 160D-1117.

**204.3.7 Administrative Inspection Warrants.** Where the fire code enforcement official has first obtained a proper inspection warrant to secure entry to conduct an inspection, an owner, the owner's authorized agent, or occupant or person having charge, care or control of the building or premises shall not fail or neglect, to permit entry therein by the fire code enforcement official for the purpose of inspection and examination.

(General Statute 15-27.2)

**204.3.8 Identification.** The fire code enforcement official shall carry ~~proper identification~~ ~~official credentials~~ ~~such as a badge or certificate that demonstrates the official's authority~~ when inspecting structures or premises in the performance of duties, and shall present ~~proper~~ ~~official~~ credentials when making inspections.

(General Statute 160D-1117)

**204.3.9 Stop work orders.** General Statute 160D-404 authorizes a fire code enforcement official to issue stop work orders. The statute describes when a stop work order can be issued, and how the stop work order is to be issued. See Section 204.10 for appeal of stop work orders.

**204.3.10 Unsafe building or systems.** A fire code enforcement official's authority to condemn an unsafe building

is found in General Statute 160D-1119.

#### ~~204.3.2~~204.4 Permits.

~~204.3.1~~204.4.1 **General.** No person may commence or proceed with:

1. The construction, reconstruction, alteration, repair, movement to another site, removal or demolition of any building;
2. The installation, extension or general repair of any plumbing system;
3. The installation, extension, alteration or general repair of any heating or cooling equipment system; or
4. The installation, extension, alteration or general repair of any electrical wiring, devices, appliances or equipment without first securing from the Inspection Department inspection department with jurisdiction over the site of the work each permit required by the North Carolina State Building Codes and other State or local law or local ordinance or regulation applicable to the work.

(General Statute 160D-1110)

~~204.3.2~~204.4.2 **Validity/Expiration.** In accordance with General Statute 160D-1111, a permit expires 6 months, or any lesser time fixed by local ordinances, after the date of issuance if the work authorized by the permit has not been commenced. If, after commencement, the work is discontinued for a period of 12 months, the permit immediately expires. No work authorized by a permit that has expired may be performed until a new permit has been issued.

~~204.3.3~~204.4.3 **Changes in work.** Work shall not deviate substantially from that described on the permit documents. After a building permit has been issued, no changes or deviations from the terms of the application, plans and specifications, or the permit, except where changes or deviations are clearly permissible under the North Carolina State Building Code, shall be made until specific written approval of proposed changes or deviations has been obtained from the inspection department.

~~204.3.4~~204.4.4 **Information required.** A permit application shall be filed with the Inspection Department inspection department on a form furnished for that purpose. The Inspection Department inspection department shall make available a list of information which must be submitted with the building permit application, including a complete building code summary (see Appendix B) and a permit application information sheet (see Appendix A).

~~204.3.5~~204.4.5 **Design professional seal required.** Where the General Statutes, North Carolina Board of Architecture and Registered Interior Designers, or the North Carolina Board of Examiners for Engineers and Land Surveyors require, no permit shall be issued unless the construction documents (drawings and specifications) bear the North Carolina seal of a *registered design professional*. *Construction documents* shall include the name and address of the business entity (individual, corporation or partnership) with whom the registered design professional is affiliated. Questions concerning this section should be directed to the North Carolina Board of Architecture and Registered Interior Designers, the North Carolina Board of Examiners for Engineers and Land Surveyors, or the National Institute for Certification Engineering Technologies (NICET) Board of Governors.

(General Statute 83A-10 and 83A-13)

~~204.3.5.1~~204.4.5.1 **Registered design professional.** The registered design professional shall be a registered architect, registered interior designer, licensed professional engineer or NICET Level III sprinkler or fire alarm designer legally registered or licensed under the laws of this state.

~~204.3.6~~204.4.6 **Contractor license required.** When the General Statutes require that general construction, plumbing, mechanical, electrical, fire protection or gas work be performed by an appropriately licensed individual, no permit for such type work shall be issued to an unlicensed person or firm. Additional requirements may be found in General Statutes 87-14, 87-21(e), 87-43.1, 87-58, 153A-134, 160A-194 and 160D-1110.

~~204.3.7~~204.4.7 **Contractor responsibilities.** It shall be the duty of every person who contracts for the installation or repair of a building or service system to comply with State or local rules and regulations concerning licensing. It shall be the contractor's responsibility to conform to the technical codes for all installations or repairs of a building or service system.

#### ~~204.4.2~~204.5 Issuing permits.

~~204.4.1~~204.5.1 **Action on permits.** In accordance with General Statute 160D-1110, the Inspection Department inspection department shall examine each application for a permit to determine if it is in compliance with the requirements of the technical codes and other pertinent laws and ordinances. If the inspection department is satisfied that the work described in the application conforms to the requirements of the technical codes and other pertinent laws and ordinances, it shall issue a permit to the applicant. If the application does not conform to the requirements of the technical codes and other pertinent laws and ordinances, the application shall be returned to the applicant with the reasons for refusal stated.

(General Statute 160D-1104 and 160D-1110)

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~~204.4.2~~**204.5.2 Permits for modular construction.** Permits shall be required for the installation, connection of units, foundations, utility connections or alterations of buildings or components manufactured off the site and labeled by a third-party agency accredited and listed by the Building Code Council.

~~204.4.2.1~~**204.5.2.1 Third-party certification agencies.** Third-party certification agencies shall be accredited and listed by the Building Code Council. Inspection and certification of buildings or components manufactured off the site and labeled by a third-party agency shall be accepted by the inspection department without further inspection. Permits and fees may be required for any installation, connection of units, foundations, utility connections or alterations of such work.

### ~~204.5.1~~**204.6 Conditions of the permit.**

~~204.5.1~~**204.6.1 Contractor responsibilities.** It shall be the duty of every person who contracts for the installation or repair of a building or services system to comply with state or local rules and regulations concerning licensing. It shall be the contractor's responsibility to conform to this code and the technical codes for all installations or repairs of a building or service system. Violations and penalties of these provisions are listed in Sections 204.12 through 204.14 of this code. Additional requirements can be found in General Statutes 87-1 through 87-14.

~~204.5.2~~**204.6.2 Permit intent.** A permit issued shall be construed as permission to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes. Issuance of a permit shall not prevent the inspection department from requiring correction of errors in plans, construction or violations of this code.

(General Statute 160D-1110)

### ~~204.5.3~~**204.6.3 Revocation of permits.**

~~204.5.3.1~~**204.6.3.1 Misrepresentation of application.** The code enforcement official shall ~~revoke, revoke~~ in ~~writing, writing~~, a permit or approval issued under the provisions of this or the technical codes for:

1. Any ~~substantial departure from the approved application, drawings or specifications; changes or deviations from the terms of the application, plans and specifications, or the permit, including a change of contractor or subcontractor.~~

*~~Comment: Change of contractor or subcontractor is considered a substantial departure from the approved application.~~*

2. Refusal or failure to comply with the requirements of any applicable State or local laws; or,
3. Any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.
4. See the North Carolina Fire Prevention Code for other permit revocation requirements.

~~204.5.3.2~~**204.6.3.2 Violation of code provisions.** The code enforcement official may revoke a permit upon determination that the work for which the permit was issued is in violation of, or not in conformity with, the provisions of this or the technical codes.

(General Statute 160D-1115)

### ~~204.6.2~~**204.7 Fees.**

~~204.6.1~~**204.7.1 Fees.** A permit shall not be issued until the fees prescribed by the local governing authority have been paid. No amendment to a permit shall be released until the additional fee, if any, has been paid.

(General Statute 160D-402)

~~204.6.2~~**204.7.2 Work commencing before permit issuance.** If any person commences any work on a building or service systems before obtaining the necessary permit, he or she shall be subject to a penalty as established by the local governing body.

(General Statutes 160D-402)

~~204.7.2~~**204.8 Inspections.** In addition to the inspections required by Section 107, the code enforcement official shall provide inspections as required by Sections 204.8.1 and 204.8.2.

~~204.7.1~~**204.8.1 Periodic inspections for hazardous or unlawful conditions.** The inspection department shall make periodic inspections as specified in General Statute 160D-1117.

~~204.7.2~~**204.8.2 Required public school inspections.** Inspections of schools for fire hazards shall be in accordance with General Statute 115C-525(b).

### ~~204.8.2~~**204.9 Certificate of compliance.**

~~204.8.1~~**204.9.1 Building occupancy.** A new building shall not be occupied or a change made in the occupancy, nature or use of a building or part of a building until after the inspection department has issued a certificate of



compliance. The certificate of compliance shall not be issued until all required service systems have been inspected for compliance with the technical codes and other applicable laws and ordinances and released by the inspection department.

(General Statute 160D-1116)

**~~204.8.2~~204.9.2 Certificate of compliance.** Upon satisfactory completion of a building, plumbing, mechanical, electrical, fire protection or gas system, or portion thereof, a certificate of compliance shall be issued. The certificate of compliance represents that a structure or system is complete and for certain types of permits is permission granted for connection to a utility system. The certificate of compliance shall not be construed to grant authority to occupy a building.

(General Statute 160D-1116)

**~~204.8.3~~204.9.3 Temporary/partial occupancy compliance.** A temporary/partial certificate of compliance may be issued permitting occupancy for a stated period for specific portions of a building or service system that the inspector finds safe for occupancy prior to final completion of the entire building or system.

(General Statute 160D-1116)

## **204.10 Certificate of occupancy.**

**~~204.8.4~~ Issuing certificate of occupancy. 204.10.1 Building occupancy.** A new building shall not be occupied until after the inspection department has issued a certificate of occupancy. Upon satisfactory completion of a building and after the an approved final inspection, the inspection department may shall issue a certificate of occupancy stating the occupancy that may be safely occupied. The certificate of occupancy shall state the occupancy may be safely occupied. See section 204.8.4.1 for application of upfits and shell buildings.

**~~204.8.4.1~~204.10.1.1 Existing buildings.** A certificate of occupancy for any existing building, including upfits and shell buildings, may be obtained by applying to the inspection department and supplying the building and technical information and data necessary requested by the inspection department to determine compliance with the technical codes for the occupancy intended. Where necessary, the code enforcement official may require detailed drawings drawings, specifications, product manufacturer's installation instructions, product listing and labeling information and inspections to determine compliance with the applicable technical codes. When, upon examination and inspection, it is found that the building conforms to the provisions of the technical codes and other applicable laws and ordinances for such occupancy, a certificate of occupancy shall be issued. The certificate shall state the approved occupancy type. This section also applies to a change of occupancy within an existing building.

**204.10.1.2 Temporary/partial occupancy.** A temporary/partial certificate of occupancy may be issued permitting occupancy for a stated period for specific portions of a building that the inspector finds safe for occupancy prior to final completion of the entire building.

## **~~204.9~~204.11 Service utilities.**

**~~204.9.1~~204.11.1 Connection of service utilities.** No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by the technical codes until approved by the inspection department and a certificate of compliance is issued.

(General Statute 143-143.2)

**~~204.9.2~~204.11.2 Temporary connection.** The inspection department may authorize the temporary connection of the building or system to the utility source of energy, fuel or power for the purpose of testing building service systems.

(General Statute 160D-1116)

**~~204.10~~204.12 Appeal of stop work orders.** Whenever a stop order has been issued by an inspection department involving alleged violations of the North Carolina State Building Codes, the owner or builder may appeal in writing to the Commissioner of Insurance, or his or her designee, designee assigned by the Commissioner, within 5 calendar days after the date the order is issued, with a copy of the appeal to the inspection department. No further work may take place in violation of a stop order. The Commissioner, or his or her designee, designee assigned by the Commissioner, shall promptly conduct an investigation. The inspection department and the owner or builder shall be permitted to submit relevant evidence for the investigation. The Commissioner of Insurance, or his or her designee, designee assigned by the Commissioner, shall provide a written statement of the decision setting forth the facts found, the decision reached and the reasons for the decision. In the event of dissatisfaction with the decision, the person affected owner or builder shall have the option of appealing as set forth in Section 203.1.2.

(General Statutes 160D-1114)

## **~~204.11~~204.13 Floor loads and occupant loads.**

**~~204.11.1~~204.13.1 Occupancy.** No building shall be occupied for any purpose that will cause the floors to be loaded beyond their safe capacity. It shall be the responsibility of the owner or occupant of any building, where excessive floor loading is likely to occur, to employ a design professional in computing the safe load capacity. The computations shall be filed as a permanent record of the inspection department. The inspection department may

## ADMINISTRATIVE POLICIES

permit occupancy of a building when the department is satisfied that the capacity will not be exceeded.

**204.11.2204.13.2 Occupant load posted.** When required by the code enforcement official and in all Group A-2 occupancies with a North Carolina alcohol license, signs stating the occupant load determined in accordance with occupant load specified in the technical codes shall be posted by the owner of the building in each assembly room, auditorium or room used for a similar purpose where fixed seats are not installed. The seating capacity shall be determined in accordance with the technical codes and signs posted at locations approved by the code enforcement official. It shall be unlawful to remove or deface such notice or to permit more than this legal number of people within such space. The signs shall read as follows:

“Occupancy by more than \_\_\_\_\_ persons is  
dangerous and unlawful  
  
\_\_\_\_\_, CEO”

**204.12204.14 Violations.** Any person, firm, corporation or agent who violates a provision of this code or the technical codes shall be guilty of a Class 3 misdemeanor. Each person shall be considered guilty of a separate offense for each and every portion thereof during which any violation is committed or continued, for a period of 30 days. Upon conviction of any such violation the person shall be liable to a fine not to exceed \$50.00 for each offense. Any violation incurred more than 1 year after another conviction for violation of the occupancy limits shall be treated as a first offense for the purposes of establishing and imposing penalties.

[General Statute 143-138(h)]

### **204.13204.15 Remedies.**

**204.13.1204.15.1 General.** In case any building or structure is constructed or its purpose altered so that it ~~becomes in violation~~ violates the requirements of the technical codes, or if the occupancy limits established are exceeded, the code enforcement official may institute any appropriate action or proceedings, including civil remedies, to:

1. Prevent the unlawful erection, construction or reconstruction or alteration of purpose, or overcrowding;
2. Restrain, correct or abate the violation; or
3. Prevent the occupancy or use of the building, structure or land until the violation is corrected.

**204.13.2204.15.2 Fire prevention.** Refer to the *North Carolina Fire Code* for summary abatement requirements for fire prevention code violations and penalties.

**204.14204.16 Code enforcement official not fulfilling responsibilities.** When the code enforcement official does not fulfill his responsibilities as specified in Section 204.13, the Commissioner of Insurance or his or her designee designee assigned by the Commissioner may institute any appropriate actions or proceedings available. (General Statutes 14-230, 14-231, 14-232, 160D-1109)

## SECTION 205 OTHER AGENCIES

[www.ncgov.com](http://www.ncgov.com) (Click on NC Agencies)

### **205.1 Administration by the North Carolina Department of Labor.**

**205.1.1 Commissioner of Labor.** The Commissioner of Labor shall have general supervision over the Elevator and Amusement Device Division and the Boiler Pressure Vessel Division.

[General Statute ~~143-139(e)~~143-139(c) and 143-139(d)]

**205.1.2 Elevator and amusement device division.** The Elevator and Amusement Device Division shall enforce the provisions of the North Carolina State Building Code that pertain to the operation of:

1. Elevators;
2. Dumbwaiters;
3. Escalators;
4. Moving walks;
5. Personnel hoists;
6. Chair and wheelchair lifts;
7. Manlifts;

8. Special equipment; and
9. Amusement devices.

**Exceptions:**

1. Devices and equipment located and operated within a single-family residence.
2. Equipment constructed, installed and used exclusively for the movement of materials.
3. Mining equipment covered by either the Federal Mine Safety and Health Act or the Mine Safety and Health Act of North Carolina.
4. Zip lines.

[General Statute 143-139(d)]

**205.1.3 Boiler and pressure vessel division.** The Boiler and Pressure Vessel Division shall enforce the provisions of Chapter 95 of the General Statutes which pertain to boilers and pressure vessels.

**Exception:** The Boiler and Pressure Vessel Division shall not regulate hot water supply boilers equipped with ASME Code and National Board certified safety relief valves, which are fired with oil, gas, or electricity or hot water supply tanks heated by any indirect means which do not exceed any of the following limitations:

1. Heat input of 200,000 Btu/hr;
2. Water temperature of 200°F (93°C);
3. Nominal water capacity of 120 gallons (454 L).

[General Statutes 95-69.10(c), 143-139(c)]

## CHAPTER 3

# **REPRINT OF THE NORTH CAROLINA GENERAL STATUTES PERTAINING TO THE ENFORCEMENT ADMINISTRATION OF THE NORTH CAROLINA STATE BUILDING CODES**

The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other State agencies, occupational licensing boards and commissions. It shall be the responsibility of a permit holder, design professional, contractor or occupational license holder to determine whether any additional requirements exist.

The current language of the General Statutes may be viewed online at [www.ncleg.gov](http://www.ncleg.gov) or by clicking on the referenced statute number below.

The following list, while extensive, may not include all applicable North Carolina General Statutes.

### **Property Owners**

1-539.2	Dismantling portion of building
14-68	Failure of owner of property to comply with orders of public authorities
106-581.1	Agriculture Defined
160D-903	Agricultural Uses (qualifications for bona fide farm status)

### **Misconduct in Public Office** *(NCGS Chapter 14, Article 31)*

<del>14-228-232</del>	<del>Misconduct in public office</del>
<del>14-414</del>	<del>Pyrotechnics defined; exceptions</del>
<del>14-228</del>	<del>Buying and selling offices</del>
<del>14-229</del>	<del>Acting as officer before qualifying as such</del>
<del>14-230</del>	<del>Willfully failing to discharge duties</del>
<del>14-231</del>	<del>Failing to make reports and discharge other duties</del>
<del>14-232</del>	<del>Swearing falsely to official reports</del>

### **Administrative Search and Inspection Warrants**

15-27.2	Warrants to conduct inspections authorized by law
58-2-95	Commissioner to supervise local inspectors
58-31-40	Commissioner to inspect state property; plans submitted
58-79-20	Inspection of premises; dangerous material removed

### **Electrical Materials, Devices, Appliances and Equipment** *(NCGS Chapter 66, Article 4)*

<del>66-23-27</del>	<del>Electrical materials, devices, appliances and equipment</del>
<del>66-23</del>	<del>Sale of electrical goods regulated</del>
<del>66-24</del>	<del>Identification marks required</del>
<del>66-25</del>	<del>Acceptable listings as to safety of goods</del>
<del>66-26</del>	<del>Legal responsibility of proper installations unaffected</del>
<del>66-27</del>	<del>Violation made misdemeanor</del>
<del>66-27.01</del>	<del>Enforcement</del>

## **Safety Features of Hot Water Heaters**

*(NCGS Chapter 66, Article 4A)*

<u>66-27.1</u>	<u>Certain automatic hot water tanks or heaters to have approved relief valves; installation or sale of unapproved relief valves forbidden</u>
<u>66-27.2</u>	<u>Certain hot water supply storage tank or heater baffles, heat traps, etc., to be tested before installation or sale</u>
<u>66-27.3</u>	<u>Violation of Article made misdemeanor</u>
<u>66-27.4</u>	<u>Local regulation of hot water heater safety features</u>

## **Architects**

<u>83A-1-13</u>	<u>Architects</u>
<u>83A-1</u>	<u>Definitions</u>
<u>83A-12</u>	<u>Prohibited practice</u>
<u>83A-13</u>	<u>Exemptions</u>

## **General Contractors**

*(NCGS Chapter 87, Article 1)*

<u>87-1-15</u>	<u>General contractors</u>
<u>87-1</u>	<u>"General contractor" defined; exceptions</u>
<u>87-1.1</u>	<u>Exception for licenses under Article 2 or 4</u>
<u>87-1.2</u>	<u>Exception for specified Department of Transportation contractors</u>
<u>87-14</u>	<u>Regulations as to issue of building permits</u>
<u>87-15.6</u>	<u>Homeowners Recovery Fund</u>

## **Plumbing, Heating, and Fire Sprinkler Contractor**

<u>87-21</u>	<u>Plumbing, heating and fire sprinkler contractor</u>
<u>87-21</u>	<u>Definitions; contractors licensed by Board; examination; posting license, etc.</u>

## **Electrical Contractors**

*(NCGS Chapter 87, Article 4)*

<u>87-43</u>	<u>Electrical contractors</u>
<u>87-43</u>	<u>Electrical contracting defined; licenses</u>
<u>87-43.1</u>	<u>Exceptions</u>
<u>87-43.2</u>	<u>Issuance of license</u>
<u>87-43.3</u>	<u>Classification of licenses</u>

## **Refrigeration Contractors**

<u>87-57-58</u>	<u>Refrigeration contractors</u>
<u>87-57</u>	<u>License required of persons, firms or corporations engaged in the refrigeration trade</u>
<u>87-58</u>	<u>Definitions; contractors licensed by Board; examinations</u>

## **Engineers**

<u>89C-3-23</u>	<u>Engineers</u>
<u>89C-3</u>	<u>Definitions</u>
<u>89C-23</u>	<u>Unlawful to practice engineering or land surveying without licensure; unlawful use of title or terms; penalties; Attorney General to be legal adviser</u>

## **Uniform Boiler and Pressure Vessel Act**

*(NCGS Chapter 95, Article 7A)*

<u>95-69</u>	<u>Uniform boiler and pressure vessel act</u>
<u>95-69.8</u>	<u>Short title</u>
<u>95-69.9</u>	<u>Definitions</u>
<u>95-69.10</u>	<u>Application of Article; exemptions</u>
<u>95-69.11</u>	<u>Powers and duties of commissioner</u>
<u>95-69.16</u>	<u>Inspection certificate required</u>

**Public Schools**

<u>105-130-151</u>	<u>Accessibility tax credit</u>
<u>115C-525</u>	<u>Public schools</u>
<u>115C-525</u>	<u>Fire prevention</u>

**Gasoline and Oil Inspection and Regulation**

*(NCGS Chapter 119, Article 5)*

*(Liquefied petroleum gases)*

<u>119 Article 5</u>	<u>Liquefied petroleum gases</u>
<u>119-54</u>	<u>Purpose: definitions: scope of Article</u>

**Wastewater Systems**

*(NCGS Chapter 130A, Article 10)*

<u>130A-336-339</u>	<u>Wastewater system construction</u>
<u>130A-336</u>	<u>Improvement permit and authorization for wastewater system construction required</u>
<u>130A-337</u>	<u>Inspection; operation permit required</u>
<u>130A-338</u>	<u>Authorization for wastewater system construction required before other permits to be issued</u>
<u>130A-339</u>	<u>Limitation on electrical service</u>

**Public Works**

*(NCGS Chapter 133, Article 1)*

<u>133-1-4</u>	<u>Public works</u>
<u>133-1</u>	<u>Employment of architects, etc., on public works when interested in use of materials prohibited</u>
<u>133-1.1</u>	<u>Certain buildings involving public funds to be designed, etc., by architect or engineer</u>
<u>133-2</u>	<u>Drawing of plans by material furnisher prohibited</u>
<u>133-3</u>	<u>Specifications to carry competitive items; substitution of materials</u>
<u>133-4</u>	<u>Violation of Chapter made misdemeanor</u>

**Inspection of State-Owned Buildings**

<u>143-135.1</u>	<u>Inspection of state owned buildings</u>
<u>143-135.1</u>	<u>State buildings exempt from county and municipal building requirements; consideration of recommendations by counties and municipalities</u>

**Building Code Council and Building Code**

*(NCGS Chapter 130A, Article 9)*

<u>143-136-143</u>	<u>Building Code Council and Building Code</u>
<u>143-136</u>	<u>Building Code Council created; membership</u>

<u>143-137</u>	<u>Organization of Council; rules; meetings; staff; fiscal affairs</u>
<u>143-138</u>	<u>North Carolina State Building Code</u>
<u>143-138.1</u>	<u>Introduction and instruction of the North Carolina Building Code; posting of written commentaries and interpretations on Department of Insurance Web site</u>
<u>143-139</u>	<u>Enforcement of Building Code</u>
<u>143-139.1</u>	<u>Certification of manufactured buildings, structures or components by recognized independent testing laboratory; minimum standards for modular homes</u>
<u>143-139.2</u>	<u>Enforcement of insulation requirements; certificate for occupancy; no electric service without compliance</u>
<u>143-139.3</u>	<u>Inspection of liquified petroleum gas piping systems for residential structures</u>
<u>143-140</u>	<u>Hearings before enforcement agencies as to questions under Building Code</u>
<u>143-141</u>	<u>Appeals to Building Code Council</u>
<u>143-142</u>	<u>Further duties of the Building Code Council</u>
<u>143-143</u>	<u>Effect on certain existing laws</u>
<u>143-143.2</u>	<u>Electric wiring of houses, buildings, and structures</u>
<u>143-143.3</u>	<u>Temporary toilet facilities at construction sites</u>
<u>143-143.4</u>	<u>Door lock exemption for certain businesses</u>
<u>143-143.5</u>	<u>Access to toilets in shopping malls</u>

**Code Officials Qualification Board**  
*(NCGS Chapter 130A, Article 9C)*

<u>143-151.8 21</u>	<u>Code officials qualification board</u>
<u>143-151.8</u>	<u>Definitions</u>
<u>143-151.9</u>	<u>North Carolina Code Officials Qualification Board established; members; terms; vacancies</u>
<u>143-151.10</u>	<u>Compensation</u>
<u>143-151.11</u>	<u>Chairman; vice-chairman; other officers; meetings; reports</u>
<u>143-151.12</u>	<u>Powers</u>
<u>143-151.13</u>	<u>Required standards and certificates for Code-enforcement officials</u>
<u>143-151.13A</u>	<u>Professional development program for officials</u>
<u>143-151.14</u>	<u>Comity</u>
<u>143-151.15</u>	<u>Return of certificate to Board; reissuance by Board</u>
<u>143-151.16</u>	<u>Certification fees; renewal of certificates; examination fees</u>
<u>143-151.17</u>	<u>Grounds for disciplinary actions; investigation; administrative procedures</u>
<u>143-151.18</u>	<u>Violations; penalty; injunction</u>
<u>143-151.19</u>	<u>Administration</u>
<u>143-151.20</u>	<u>Donations and appropriations</u>
<u>143-151.21</u>	<u>Disposition of fees</u>

**Master Electrical and Natural Gas Meters Prohibited**  
*(NCGS Chapter 143, Article 9E)*

<u>143-151.42</u>	<u>Prohibition of master meters for electric and natural gas service</u>
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**North Carolina Home Inspector Licensure Board**  
*(NCGS Chapter 143, Article 9F)*

<u>143-151.43 64</u>	<u>North Carolina home inspector board</u>
<u>143-151.43</u>	<u>Short title</u>

<u>143-151.44</u>	<u>Purpose</u>
<u>143-151.45</u>	<u>Definitions</u>
<u>143-151.46</u>	<u>North Carolina Home Inspector Licensure Board established; members; terms; vacancies</u>
<u>143-151.47</u>	<u>Compensation of Board members</u>
<u>143-151.48</u>	<u>Election of officers; meetings of Board</u>
<u>143-151.49</u>	<u>Powers and responsibilities of Board</u>
<u>143-151.50</u>	<u>License required to perform home inspections for compensation or to claim to be a "licensed home inspector"</u>
<u>143-151.51</u>	<u>Requirements to be licensed as a home inspector</u>
<u>143-151.53</u>	<u>Notification to applicant following evaluation of application</u>
<u>143-151.54</u>	<u>Miscellaneous license provisions</u>
<u>143-151.55</u>	<u>Renewal of license; inactive licenses; lapsed licenses</u>
<u>143-151.56</u>	<u>Suspension, revocation, and refusal to renew license</u>
<u>143-151.57</u>	<u>Fees</u>
<u>143-151.58</u>	<u>Duties of licensed home inspector</u>
<u>143-151.59</u>	<u>Violation is a misdemeanor</u>
<u>143-151.60</u>	<u>Injunctions</u>
<u>143-151.62</u>	<u>Persons and practices not affected</u>
<u>143-151.63</u>	<u>Administration</u>
<u>143-151.64</u>	<u>Continuing education requirements</u>

**Administrative Procedures Act**  
*(NCGS Chapter 150B, Article 2A)*

<u>150B-18-21</u>	<u>Administrative Procedures Act</u>
<u>150B-18</u>	<u>Scope and effect</u>
<u>150B-19</u>	<u>Restrictions on what can be adopted as a rule</u>
<u>150B-19.1</u>	<u>Requirements of agencies in the rule-making process</u>
<u>150B-19.3</u>	<u>Limitations on certain environmental rules</u>
<u>150B-20</u>	<u>Petitioning an agency to adopt a rule</u>
<u>150B-21</u>	<u>Agency must designate rule-making coordinator; duties of coordinator</u>
<u>150B-21.1</u>	<u>Procedure for adopting a temporary rule</u>
<u>150B-21.1A</u>	<u>Adopting an emergency rule</u>
<u>150B-21.2</u>	<u>Procedure for adopting a permanent rule</u>
<u>150B-21.3</u>	<u>Effective date of rules</u>
<u>150B-21.3A</u>	<u>Periodic review and expiration of existing rules</u>
<u>150B-21.4</u>	<u>Fiscal and regulatory impact analysis on rules</u>
<u>150B-21.5</u>	<u>Circumstances when notice and rule-making hearing not required; circumstances when submission to the Commission not required</u>
<u>150B-21.6</u>	<u>Incorporating material in a rule by reference</u>
<u>150B-21.7</u>	<u>Effect of transfer of duties or termination of agency on rules</u>
<u>150B-21.8</u>	<u>Review of rule by Commission</u>
<u>150B-21.9</u>	<u>Standards and timetable for review by Commission</u>
<u>150B-21.10</u>	<u>Commission action on permanent rule</u>
<u>150B-21.11</u>	<u>Procedure when Commission approves permanent rule</u>
<u>150B-21.12</u>	<u>Procedure when Commission objects to a permanent rule</u>



**Cities and Counties**  
*(NCGS Chapter 160D, Article 4)*

<u>160D Article 11</u>	<u>Building Code Enforcement</u>
<u>160D-401</u>	<u>Application</u>
<u>160D-402</u>	<u>Administrative staff</u>
<u>160D-404</u>	<u>Enforcement</u>
<u>160D-405</u>	<u>Appeals of administrative decisions</u>
<u>160D-406</u>	<u>Quasi-judicial procedure</u>
<u>160D-1101</u>	<u>Definitions</u>
<u>160D-1102</u>	<u>Building code administration</u>
<u>160D-1103</u>	<u>Qualification of inspectors</u>
<u>160D-1104</u>	<u>Duties and responsibilities</u>
<u>160D-1104.1</u>	<u>Remote inspection alternative</u>
<u>160D-1105</u>	<u>Other arrangements for inspection</u>
<u>160D-1106</u>	<u>Alternative inspection method for components or element</u>
<u>160D-1107</u>	<u>Mutual aid contracts</u>
<u>160D-1108</u>	<u>Conflicts of interest</u>
<u>160D-1109</u>	<u>Failure to perform duties</u>
<u>160D-1110</u>	<u>Building permits</u>
<u>160D-1111</u>	<u>Expiration of building permits</u>
<u>160D-1112</u>	<u>Changes in work</u>
<u>160D-1113</u>	<u>Inspections of work in progress</u>
<u>160D-1114</u>	<u>Appeals of stop orders</u>
<u>160D-1115</u>	<u>Revocation of building permits</u>
<u>160D-1116</u>	<u>Certificates of compliance; temporary certificates of occupancy</u>
<u>160D-1117</u>	<u>Periodic inspections</u>
<u>160D-1118</u>	<u>Defects in buildings to be corrected</u>
<u>160D-1119</u>	<u>Unsafe buildings condemned</u>
<u>160D-1120</u>	<u>Removing notice from condemned building</u>
<u>160D-1121</u>	<u>Action in event of failure to take corrective action</u>
<u>160D-1122</u>	<u>Orders to take corrective action</u>
<u>160D-1123</u>	<u>Appeal; finality of order if not appealed</u>
<u>160D-1124</u>	<u>Failure to comply with order</u>
<u>160D-1125</u>	<u>Enforcement</u>
<u>160D-1126</u>	<u>Records and reports</u>
<u>160D-1127</u>	<u>Appeals</u>
<u>160D-1128</u>	<u>Fire limits</u>
<u>160D-1129</u>	<u>Regulation authorized as to repair, closing, and demolition of nonresidential buildings or structures; order of public officer</u>
<u>160D-1130</u>	<u>Vacant building receivership*</u>

## APPENDIX A

## PERMIT APPLICATION INFORMATION SHEET

The following information is required on all permit applications. Additional information may be included to ensure that all state and local laws are complied with. This information may be arranged in any order and the following outline is only the minimum information required.

City/County Name \_\_\_\_\_

Inspection Department \_\_\_\_\_

Permit Application \_\_\_\_\_

Applicant Name \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Project Address \_\_\_\_\_

Total Project Cost \_\_\_\_\_ Electrical Cost \_\_\_\_\_

Subdivision \_\_\_\_\_ Block # \_\_\_\_\_ Lot # \_\_\_\_\_

Developer \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Property Owner \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Project Contact \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Description of Proposed Work \_\_\_\_\_

Type of Building:  New  Existing  Addition  N/A

Type of Construction:  IA  IB  IIA  IIB  IIIA  IIIB  
 ~~IV-A~~  IV-B  IV-C  IV-HT  VA  VB

Occupancy:  A-1  A-2  A-3  A-4  A-5  B  E  F-1  F-2  
 H-1  H-2  H-3  H-4  H-5  I-1  I-2  I-3  I-4  
 M  R-1  R-2  R-3  R-4  S-1  S-2  U

Equipment:  New  Existing  Addition  N/A

Property Use:  Detached Single Family  Detached Two Family  Townhouse  
 Apartment  Condominium  
 Other (Library, Office, Etc.)

Building Area: Total Area (sf) \_\_\_\_\_ Area per floor (sf) \_\_\_\_\_

Building Height: Feet \_\_\_\_\_ # of Stories \_\_\_\_\_

### State Agency Approvals:

NC Department of Insurance  Yes  No  N/A

Plan Approval  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Specifications  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

NC Department of Labor  Yes  No  N/A

Elevators \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_ Boilers \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

Plan Approval  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

Specifications  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

**Utilities Approvals:**

Water:  Public  Private  Private Health Dept. Permit # \_\_\_\_\_

Sewer:  Public  Private  Private Health Dept. Permit # \_\_\_\_\_

~~Place X~~ Check each applicable box and complete additional information for each permit type needed.

**General Construction Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Electrical Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Mechanical Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Plumbing Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

Place **X** Check each applicable box and complete additional information for each permit type needed.

**Sprinkler Protection Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other                NICET Level \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Fire Alarm System Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Sign Permit**

Location of Sign \_\_\_\_\_ Address \_\_\_\_\_  
 Off Premises Sign     Wall Sign             Ground Sign             Awning Sign  
 Projection Sign       Special Event Sign     Other  
 Sign/Business Owner \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Accessory Structures Permit**

Accessory Building \_\_\_\_\_ Size \_\_\_\_\_ Sq.Ft.

Solid Fence       Dish Antenna       Swimming Pool       Other (Describe) \_\_\_\_\_

I hereby certify that all information in this application is correct and all work will comply with the State Building Code and all other applicable State and local laws and ordinances and regulations. The Inspection Department will be notified of any changes in the approved plans and specifications for the project permitted herein.

Owner/Agent Signature \_\_\_\_\_

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APPENDIX B

**20182024 BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

(EXCEPT ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: \_\_\_\_\_

Address: \_\_\_\_\_ Zip Code \_\_\_\_\_

Owner/Authorized Agent \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Owned By:  City/County  Private  State

Code Enforcement Jurisdiction:  City  County  State

**CONTACT:** \_\_\_\_\_

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	_____	_____	_____	(____)_____	_____
Civil	_____	_____	_____	(____)_____	_____
Electrical	_____	_____	_____	(____)_____	_____
Fire Alarm	_____	_____	_____	(____)_____	_____
Plumbing	_____	_____	_____	(____)_____	_____
Mechanical	_____	_____	_____	(____)_____	_____
Sprinkler- Standpipe	_____	_____	_____	(____)_____	_____
Structural	_____	_____	_____	(____)_____	_____
Retaining Walls > 5 feet High	_____	_____	_____	(____)_____	_____
Other	_____	_____	_____	(____)_____	_____

("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

**20182024 NC BUILDING CODE:**  New Building  Shell/Core  1<sup>st</sup> Time  
Interior Completions

Addition  Phased Construction—Shell Core

**20182024 NC EXISTING BUILDING CODE:** (check all that apply)

Prescriptive  Alteration Level I  Alteration Level II  Alteration Level III  
 Change of Use  Historic Property  Repair  Chapter 14

**CONSTRUCTED:** (date) \_\_\_\_\_ **CURRENT USE(S)** (Ch. 3): \_\_\_\_\_

**RENOVATED:** (date) \_\_\_\_\_ **PROPOSED USE(S)** (Ch. 3): \_\_\_\_\_

**OCCUPANCY CATEGORY** (Table 1604.5): Current: \_\_\_\_\_ Proposed: \_\_\_\_\_

---

**BASIC BUILDING DATA**

**Construction Type:**  I-A  II-A  III-A  V-A  
(check all that apply)  ~~IV~~IV-A  ~~I-B~~IIV-B  ~~H-B~~IIV-C  ~~III~~IIV-HT  
 ~~V-B~~

**Sprinklers:**  No  Partial  NFPA 13  NFPA13R  NFPA13D

**Standpipes:**  No Class:  I  II  III  Wet  Dry

**Primary Fire District:**  No  Yes

**Flood Hazard Area:**  No  Yes

**Special Inspections Required:**  No  Yes

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**GROSS BUILDING AREA TABLE**

(add or delete lines as necessary)

Floor	Existing (sq ft)	New (sq ft)	Subtotal
3rd Floor	0	0	0
2nd Floor	0	0	0
Mezzanine	0	0	0
1st Floor	0	0	0
Basement	0	0	0
TOTAL			0

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Note to RRC: Page break

**ALLOWABLE AREA**

**Primary Occupancy Classification(s):**

- Assembly  A-1  A-2  A-3  A-4  A-5
- Business
- Educational
- Factory  F-1 (Moderate)  F-2 (Low)
- Hazardous  H-1 (Detonate)  H-2 (Deflagrate)  
 H-3 (Combust)  H-4 (Health)  H-5 (HPM)
- Institutional  I-1  I-2  I-3  I-4  
~~I-1 Condition  1  2~~  
~~I-2 Condition  1  2~~  
~~I-3 Condition  1  2  3  4  5~~  
~~Condition  1  2  3  4~~
- Mercantile
- Residential  R-1  R-2  R-3  R-4
- Storage  S-1 Moderate  S-2 Low  High-piled  
 Parking Garage  Open  Enclosed  Repair Garage
- Utility and Miscellaneous

**Accessory Occupancy Classification(s):** \_\_\_\_\_

**Incidental Uses (Table 509.1):** \_\_\_\_\_

This separation is not exempt as a Nonseparated Use (see exceptions).

**Special Uses (Chapter 4 – List Code Sections):** \_\_\_\_\_

**Special Provisions: (Chapter 5 – List Code Sections):** \_\_\_\_\_

**Mixed Occupancy:**  No  Yes Separation: \_\_\_\_ Hr. Exception: \_\_\_\_\_

(Select one of the following)

Non-separated Use (508.3)

Separated Use (508.4)—See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Select one

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

$$\text{_____} + \text{_____} + \dots = \text{_____} \leq 1.00$$

(add to or delete rows from the following table as necessary to capture all relevant information)

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 <sup>4</sup> AREA	(C) AREA FOR FRONTAGE INCREASE <sup>1, 5</sup>	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>2, 3</sup>

1. Frontage area increases from Section 506.2506.3 are computed thus:

- a. Perimeter which fronts a public way or open space having 20 feet minimum width = \_\_\_\_\_ (F)
- b. Total Building Perimeter = \_\_\_\_\_ (P)
- c. Ratio (F/P) = \_\_\_\_\_ (F/P)
- d. W = Minimum width of public way = \_\_\_\_\_ (W)



2. Unlimited area applicable under conditions of Section 507.
  3. Maximum Building Area = total number of stories in the building  $\times D$  (maximum 3 stories) (506.2).
  4. The maximum area of open parking garages shall comply with Table 406.5.4. ~~The maximum area of traffic control towers must comply with Table 412.3.1.~~
  5. Frontage increase is based on the unsprinklered area value in Table 506.2.
- 

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### ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)			
Building Height in Stories (Table 504.4)			

1. Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

### FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQ'D	PROVIDED (W/ REDUCTION) *				
Structural Frame Including columns, girders, and trusses							
Bearing Walls							
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing walls and partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction Including supporting beams and joists							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures—Exit							
Shaft Enclosures—Other							
Corridor Separation							
Occupancy/Fire Barrier Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

\* Indicate section number permitting reduction

**PERCENTAGE OF WALL OPENING CALCULATIONS**

FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

**LIFE SAFETY SYSTEM REQUIREMENTS**

- Emergency Lighting:  Yes  No
- Exit Signs:  Yes  No
- Fire Alarm:  Yes  No
- Smoke Detection Systems:  Yes  No
- Carbon Monoxide Detection:  Yes  No

**LIFE SAFETY PLAN REQUIREMENTS**

Life Safety Plan Sheet #: \_\_\_\_\_

- Fire and/or smoke rated wall locations (Chapter 7)
- Assumed and real property line locations (if not on the site plan)
- Exterior wall opening area with respect to distance to assumed property lines (705.8)
- Occupancy Use for each area as it relates to occupant load calculation (~~Table 1004.1.2~~)(Table 1004.5)
- Occupant loads for each area
- Exit access travel distances (1017)
- Common path of travel distances [~~Tables 1006.2.1 & 1006.3.2(1)~~](Tables 1006.3.4(1) & 1006.3.4(2))
- Dead end lengths (~~1020.4~~)(1020.5)
- Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (~~1005.3~~)(1005.3.2)
- Actual occupant load for each exit door
- A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- Location of doors with panic hardware (~~1010.1.10~~)(1010.2.9)
- Location of doors with delayed egress locks and the amount of delay (~~1010.1.9.7~~)(1010.2.13)
- Location of doors with electromagnetic egress locks (~~1010.1.9.9~~)(1010.2.11)
- Location of doors equipped with hold-open devices (716.2.6.1)
- Location of emergency escape windows (~~1030~~)(1031)
- The square footage of each fire area (202)
- The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- Note any code exceptions or table notes that may have been utilized regarding the items above



**ACCESSIBLE DWELLING UNITS**  
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

**ACCESSIBLE PARKING**  
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH		
				132" ACCESS AISLE	8' ACCESS AISLE	
TOTAL						

**PLUMBING FIXTURE REQUIREMENTS**  
(TABLE 2902.1)

USE	WATERCLOSETS			URINALS	LAVATORIES			SHOWERS/TUBS	DRINKING FOUNTAINS	
	Male	Female	Unisex		Male	Female	Unisex		Regular	Accessible
SPACE										
EXIST'G										
NEW										
REQ'D										

**SPECIAL APPROVALS**

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

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## ENERGY SUMMARY

### ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design versus the annual energy cost for the proposed design.

**Existing building envelope complies with code:**  (If checked, the remainder of this section is not applicable.)

**Exempt Building:**  (Provide code and applicable code section or statutory reference)

**Climate Zone:**     3A             4A             5A

#### Method of Compliance:

Energy Code:     Performance             Prescriptive

ASHSAE 90.1:     Performance             Prescriptive

Other:             Performance (specify source) \_\_\_\_\_

### THERMAL ENVELOPE: (Prescriptive method only)

#### Roof/ceiling Assembly (each assembly)

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

Skylights in each assembly: \_\_\_\_\_

*U*-Value of skylight: \_\_\_\_\_

total square footage of skylights in each assembly: \_\_\_\_\_

#### Exterior Walls (each assembly)

Description of assembly \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

Openings (windows or doors with glazing)

*U*-Value of assembly: \_\_\_\_\_

    Solar heat gain coefficient: \_\_\_\_\_

    projection factor: \_\_\_\_\_

    Door *R*-Values: \_\_\_\_\_

#### Walls below grade (each assembly)

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

#### Floors over unconditioned space (each assembly)

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

#### Floors slab on grade

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

Horizontal/vertical requirement: \_\_\_\_\_

slab heated: \_\_\_\_\_

**APPENDIX B**  
**20182024 BUILDING CODE SUMMARY**  
**FOR ALL COMMERCIAL PROJECTS**

**STRUCTURAL DESIGN**  
**(PROVIDE ON SHEET 1 OR 2 OF THE STRUCUTRAL SHEETS)**

**DESIGN LOAD:**

**Importance Factors:** Wind ( $I_w$ ) \_\_\_\_\_  
 Snow ( $I_s$ ) \_\_\_\_\_  
 Seismic ( $I_E$ ) \_\_\_\_\_

**Live Loads:** Roof \_\_\_\_\_ psf  
 Mezzanine \_\_\_\_\_ psf  
 Floor \_\_\_\_\_ psf

**Ground Snow Load:** \_\_\_\_\_ psf

**Wind Load:** Basic Wind Speed \_\_\_\_\_ mph (ASCE-7)  
 Exposure Category \_\_\_\_\_

**SEISMIC DESIGN CATEGORY:**

A  B  C  D

Provide the following Seismic Design Parameters:

**Occupancy Category:** (Table 1604.5)  I  II  III  IV

**Spectral Response Acceleration:**  $S_s$  \_\_\_\_\_ %g  $S_1$  \_\_\_\_\_ %g

**Site Classification:** (ASCE 7)  A  B  C  D  E  F

Data Source:  Field Test  Presumptive  Historical Data

**Basic structural system** (check one)

- Bearing Wall  Dual w/Special Moment Frame
- Building Frame  Dual w/Intermediate R/C or Special Steel
- Moment Frame  Inverted Pendulum

**Analysis Procedure:**  Simplified  Equivalent Lateral Force  Dynamic

**Architrcultural, Mechanical, Components anchored?**  Yes  No

**LATERAL DESIGN CONTROL:**  Earthquake  Wind

**SOIL BEARING CAPACITIES:**

Field Test (provide copy of test report) \_\_\_\_\_ psf  
 Presumptive Bearing capacity \_\_\_\_\_ psf  
 Pile size, type, and capacity \_\_\_\_\_

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APPENDIX B

**20182024 BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

MECHANICAL DESIGN  
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)  
MECHANICAL SUMMARY

**MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT**

**Thermal Zone**

winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_

**Interior design conditions**

winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_  
relative humidity: \_\_\_\_\_

**Building heating load:** \_\_\_\_\_

**Building cooling load:** \_\_\_\_\_

**Mechanical Spacing Conditioning System**

Unitary  
description of unit: \_\_\_\_\_  
heating efficiency: \_\_\_\_\_  
cooling efficiency: \_\_\_\_\_  
size category of unit: \_\_\_\_\_

Boiler  
Size category. If oversized, state reason.: \_\_\_\_\_

Chiller  
Size category. If oversized, state reason.: \_\_\_\_\_

**List equipment efficiencies:** \_\_\_\_\_

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APPENDIX B

**20182024 BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

ELECTRICAL DESIGN  
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)  
ELECTRICAL SUMMARY

**ELECTRICAL SYSTEM AND EQUIPMENT**

**Method of Compliance:**

Energy Code:     Prescriptive    Performance  
ASHRAE 90.1:    Prescriptive    Performance

**Lighting schedule** (each fixture type) lamp type required in fixture number of lamps in fixture ballast type used in the fixture number of ballasts in fixture total wattage per fixture total interior wattage specified versus allowed (whole building or space by space) total exterior wattage specified versus allowed

**Additional Prescriptive Compliance**

- 506.2.1 More Efficient Mechanical Equipment
  - 506.2.2 Reduced Lighting Power Density
  - 506.2.3 Energy Recovery Ventilation Systems
  - 506.2.4 Higher Efficiency Service Water Heating
  - 506.2.5 On-Site Supply of Renewable Energy
  - 506.2.6 Automatic Daylighting Control Systems
-



# APPENDIX C CODE CHANGE PROPOSAL NORTH CAROLINA BUILDING CODE COUNCIL

325 North Salisbury Street, Room 5-44  
Raleigh, North Carolina 27603  
(919) 647-0019 (919) 647-0008

barry.gupton@ncdoi.gov david.rittlinger@ncdoi.gov  
Petition for Rule Making

Item Number \_\_\_\_\_

Granted by BCC \_\_\_\_\_ Adopted by BCC \_\_\_\_\_ Approved by RRC \_\_\_\_\_  
Denied by BCC \_\_\_\_\_ Disapproved by BCC \_\_\_\_\_ Objection by RRC \_\_\_\_\_

PROPONENT \_\_\_\_\_ PHONE (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  
REPRESENTING \_\_\_\_\_  
ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
E-MAIL \_\_\_\_\_ FAX (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

North Carolina State Building Code, Volume \_\_\_\_\_ Section \_\_\_\_\_ (select as many codes as apply):

Administrative  Building  Fire  Residential  
 Mechanical  Plumbing  Fuel Gas  Energy

Section(s) \_\_\_\_\_

CHECK ONE:  Revise section to read as follows:  Delete section and substitute the following:  
 Add new section to read as follows:  Delete section without substitution:

~~LINE THROUGH LANGUAGE TO BE DELETED~~      UNDERLINE LANGUAGE TO BE ADDED

Type or print. Continue proposal or reason on plain paper attached to this form. See reverse side for instructions.

Will this proposal change the cost of construction?      Decrease       Increase       No   
Will this proposal increase the cost of a dwelling by \$80 or more?      Yes       No   
Will this proposal affect Local or State funds?      Local       State       No   
Will this proposal cause a substantial economic impact (≥ \$1,000,000)?      Yes       No

- Non-Substantial – Provide an economic analysis including benefit/cost estimates.
- Substantial – The economic analysis must also include two alternatives, time value of money and risk analysis.
- Pursuant to §143-138(a1)(2) a cost-benefit analysis is required for all proposed amendments to the NC Energy Conservation Code and the NC Residential Code, Chapter 11.

REASON:

Signature \_\_\_\_\_

BCC CODE CHANGES

DATE: \_\_\_\_\_ FORM

3/14/17 12/13/22



## INSTRUCTIONS

(This page is not required to be submitted with the proposed code amendment.)

**Each proposed code change request shall comply with the following rules:**

**Rule 1:** The Original, ~~and twenty two (22) copies~~ twenty-one (21) hardcopies, one (1) pdf and one (1) editable softcopy of the proposed Petition for Rule-Making ~~along with~~ including supporting documentation shall be filed with the Building Code Council Secretary. ~~Submit one (1) electronic copy via email.~~ The softcopies can be submitted via email to the Building Code Council Secretary.

**Rule 2:** The filing shall be received by the first day of the month prior to the quarterly scheduled meeting date.

**Rule 3:** Each request shall be typewritten on this form and shall contain the following:

- (1) The proposed rule change must be set forth in full and contain explicit reference to the affected section or sections of the code.
- (2) The request shall state the reasons for the proposed rule change with supporting documentation.
- (3) The proposed rule change shall comply with the standards set forth in GS 143-138(c) and reference to the particular standards shall be set forth in the request for the amendment.
- (4) The proposed rule change shall contain an economic impact analysis as required by GS 143-138(a).

**Rule 4:** When a request is improperly filed or not in accordance with all the rules listed above, the Council Secretary shall reject the submittal and notify the applicant of the proper procedure to follow.

**Rule 5:** Upon the proper filing of a request, the Council Secretary shall forward one copy of said request to each ~~council~~ Council member prior to the scheduled meeting date. Persons filing proposed petitions are hereby notified of the place and time of the scheduled hearings. The Council Secretary shall cause to be published the notice of public hearing as specified in GS 143-138(a).

**Rule 6:** The Council shall either grant or deny the proposed Petition for Rule-making at the meeting following receipt of the proposed rule change. The Council will take no further action on items that are Denied. Granted items may be referred to Committee for review.

**Rule 7:** The Council will hold a public hearing on granted items at the next quarterly scheduled meeting. The Council will take final action on granted items at the next quarterly scheduled meeting after the public hearing.

<b>Timeline Example</b>	
Petition Received:	February 1
Petition Granted:	March BCC meeting
Notice of Hearing Published:	April NC Register
Committee Review:	May - June
Hearing Held:	June BCC meeting
Final Adoption:	September BCC meeting
Rules Review Hearing:	November RRC meeting
Approved:	December 1

**APPENDIX D**  
**AFFIDAVIT OF WORKERS' COMPENSATION COVERAGE**  
**N.C.G.S. §87-14**

The undersigned applicant for Building Permit # \_\_\_\_\_ being the

\_\_\_\_\_ Contractor

\_\_\_\_\_ Owner

\_\_\_\_\_ Officer/Agent of the Contractor or Owner

Do hereby aver under penalties of perjury that the person(s), firm(s) or corporation(s) performing the work set forth in the permit:

\_\_\_\_\_ has/have three (3) or more employees and have obtained workers' compensation insurance to cover them,

\_\_\_\_\_ has/have one or more subcontractor(s) and have obtained workers' compensation insurance to cover them,

\_\_\_\_\_ has/have one or more subcontractor(s) who has/have their own policy of workers' compensation covering themselves,

\_\_\_\_\_ has/have not more than two (2) employees and no subcontractors,

while working on the project for which this permit is sought. It is understood that the Inspection Department issuing the permit may require certificates of coverage of workers, compensation insurance prior to issuance of the permit and at any time during the permitted work from any person, firm or corporation carrying out the work.

Firm name: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



# APPENDIX E APPEALS NORTH CAROLINA BUILDING CODE COUNCIL

325 North Salisbury Street, Room  
5\_44 Raleigh, North Carolina 27603  
(919) 647-0019 (919) 647-0009

APPEAL TO NCDOI/NCBCC

Hearing Date \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

GS 160D-1127

Formal Interpretation by NCDOI \_\_\_\_\_

Appeal of Local Decision to NCDOI \_\_\_\_\_

GS 143-140, GS 143-141

Appeal of Local Decision to NCBCC \_\_\_\_\_

Appeal of NCDOI Decision to NCBCC \_\_\_\_\_

APPELLANT \_\_\_\_\_ PHONE (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ X \_\_\_\_\_.

REPRESENTING \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

E-MAIL \_\_\_\_\_ FAX (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

North Carolina State Building Code, Volume \_\_\_\_\_ Section \_\_\_\_\_ (select as many codes as apply):

- Administrative       Building       Fire       Residential
- Mechanical       Plumbing       Fuel Gas       Energy

Section(s) \_\_\_\_\_

- REQUEST ONE:       Formal Interpretation by NCDOI       Appeal of Local Decision to NCBCC
- Appeal of Local Decision to NCDOI       Appeal of NCDOI Decision to NCBCC

Type or print. Include all background information as required by the referenced General Statutes and the attached policies. Attach additional supporting information.

REASON:

Signature \_\_\_\_\_ DATE: \_\_\_\_\_ APPEAL TO NCDOI/NCBCC NCDOI/NCBCC FORM 3/14/17 12/13/22

**202.9 Appeals.**

**202.9.1 Engineering Division.** A written technical interpretation shall be provided as specified in Section 203.2.1.2. Any person may appeal in writing an order, decision, or determination pertaining to the code or any state building law by filing written notice with the Commissioner of Insurance or his designee within 10 days after the order, decision or determination. A copy of the appeal shall be furnished to each party.

(General Statutes 143-140, 153A-374 and 160A-434)

**203.2.1 Interpretations.**

**203.2.1.1 Informal interpretations.** The Engineering Division shall provide informal interpretations on code related matters either by e-mail, letter or telephone. These informal interpretations may be accepted by the local code enforcement official or party requesting the interpretation. Either party may request a formal interpretation of the code.

**203.2.1.2 Formal interpretations.** Any person may request in writing a formal interpretation of the code. The request shall be addressed to the Chief Code Consultant for the Department of Insurance. The request shall be specific and shall reference the code sections in question. All formal interpretations shall be in writing. A formal interpretation shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. Formal interpretations determined to be of a general nature may be posted on the department web site. (General Statute 143-140)

**203.2.2 Appeals.** Any person may appeal in writing an order, decision or determination of a code enforcement official pertaining to the code or any state building law. The appeal shall be addressed to the Chief Engineer for the Department of Insurance by filing written notice within 10 days after the order, decision or determination. The appeal shall contain the type and size of the building in question, the location of the building, and shall reference the code sections in question. The decision shall be in writing and shall set forth the facts found. The decision rendered shall be based on the technical provisions of the code, public health and safety and shall be construed liberally to those ends. A decision shall be binding on all parties unless an appeal is submitted to the Building Code Council as specified in Section 201.9.2. A copy of the appeal and written decision shall be furnished to each party.

(General Statutes 153A-374 and 160A-434)

**202.9.2 Building Code Council.** The Building Code Council shall hear appeals from the decisions of a state enforcement agencies relating to any matter related to the code. Any person wishing to appeal a decision of a state enforcement agency to the Building Code Council shall give written notice of appeal as follows:

**202.9.2.1** Twenty one copies including an original of the Notice of Appeal shall be filed with the Building Code Council c/o NC Department of Insurance, Engineering Division, 325 North Salisbury Street, Room 5-44, Raleigh, NC 27603 and one copy shall be filed with the State enforcement agency from which the appeal is taken.

**202.9.2.2** The Notice of Appeal shall be received no later than 30 days from the date of the decision of the State enforcement agency.

**202.9.2.3** The Notice of Appeal shall be legibly printed, typewritten or copied and shall contain the following:

- (1) Name, address of the party or parties requesting the appeal.
- (2) The name of the State enforcement agency, the date of the decision from which the appeal is taken, and a copy of the written decision received from the enforcement agency.
- (3) The decision from which the appeal is taken shall be set forth in full in the Notice of Appeal or a copy of the decision shall be attached to all copies of the Notice of Appeal.
- (4) The contentions and allegations of fact must be set forth in full in a clear and concise manner with reference to the sections of the code in controversy.
- (5) The original Notice of Appeal shall be signed by the party or parties filing appeal.
- (6) The Notice of Appeal shall be received by the first day of the month prior to the Building Code Council's quarterly scheduled meeting in order to be placed on the agenda for that meeting. The Chairman may schedule a special meeting to hear an appeal.

**202.9.2.4** Upon the proper filing of the Notice of Appeal, the Building Code Council Secretary shall forward one copy of the Notice of Appeal to each member of the Building Code Council. The Chairman may appoint a Hearing Committee to hear appeals. The Secretary shall send notice in writing to the party or parties requesting an appeal and to the Building Code Council Hearing Committee members at least 15 days prior to the Hearing Committee meeting. A written decision of the Hearing Committee meeting shall be provided to all Building Code Council Members. The actions of the Hearing Committee shall be final, unless appealed to the full Building Code Council in writing within 30 days of the Hearing Committee's action. If a Hearing Committee consists of at least seven council members, it will constitute a quorum of the full council.

## APPENDIX E

Further appeals shall be as specified in Section 202.9.3.

~~202.9.2.5~~ The Building Code Council shall, upon a motion of the State enforcement agency or on its own motion, dismiss appeals for the following reasons:

1. Not pursued by the appellant or withdrawn;
2. Appeal not filed in accordance with these rules; or
3. Lack of jurisdiction.

~~202.9.2.6~~ When the Building Code Council finds that a State enforcement agency was in error in its interpretation of the code, the Building Code Council shall remand the case to the agency with instructions to take such actions as the Building Code Council directs. When the Building Code Council finds on appeal that materials or methods of construction proposed are equivalent to those required by the code, the Building Code Council shall remand the case to the State enforcement agency with instructions to permit the use of such materials or methods of construction. The Building Code Council shall immediately initiate procedures for amending the code to permit the use of such materials or methods of construction.

~~202.9.2.7~~ 202.9.2.7 The Building Code Council shall provide a written decision setting forth the findings of fact and the Building Code Council's conclusions to each party or parties filing the appeal and to the state enforcement agency from which the appeal was taken.

~~202.9.3~~ **Superior court.** Whenever any person desires to appeal a decision of the Building Code Council or a decision of a State or local enforcement agency, he may appeal either to the Wake County Superior Court or the Superior Court of the county in which the proposed building is to be situated in accordance with the provisions of Chapter 150B of the General Statutes.

[General Statute 143-141(d)]



# APPENDIX F

STATE OF NORTH CAROLINA

**OWNER EXEMPTION AFFIDAVIT  
PURSUANT TO G.S. 87-14(a)(1)**

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ Inspections Department

Address and Parcel Identification of Real Property Where Building is to be Constructed or Altered:

\_\_\_\_\_

I, \_\_\_\_\_,

(Print Full Name)

hereby claim an exemption from licensure under G.S. 87-1(b)(2) by initialing the relevant provision in paragraph 1 and initialing paragraphs 2 – 4 below and attesting to the following:

1. \_\_\_\_\_ I certify that I am the owner of the property set forth above on which this building is to be constructed or altered;

OR

\_\_\_\_\_ I am legally authorized to act on behalf of the firm or corporation which is constructing or altering this building on the property owned by the firm or corporation as set forth above (name of firm or corporation:

\_\_\_\_\_);

2. \_\_\_\_\_ I will personally superintend and manage all aspects of the construction or alteration of the building and that duty will not be delegated to any person not duly licensed under the terms of Article 1 of Chapter 87 of the General Statutes of North Carolina;

3. \_\_\_\_\_ I will be personally present for all inspections required by the *North Carolina State Building Code*, unless the plans for the construction or alteration of the building were drawn and sealed by an architect licensed pursuant to Chapter 83A of the General Statutes of North Carolina;

4. \_\_\_\_\_ I understand that a copy of this AFFIDAVIT will be transmitted to the North Carolina Licensing Board for General Contractors for verification that I am validly entitled to claim an exemption under G.S. 87-1(b)(2) for the building construction or alteration specified herein. I further understand that, if the North Carolina Licensing Board for General Contractors determines that I was not entitled to claim this exemption, the building permit issued for the building construction or alteration specified herein shall be revoked pursuant to G.S. ~~153A-362~~ or G.S. ~~160A-422~~ 160D-1115.

\_\_\_\_\_  
(Signature of Affiant)

\_\_\_\_\_  
Date

Sworn to (or affirmed) and Subscribed before me this the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Printed Name of Notary Public

My Commission Expires: \_\_\_\_\_ (Notary Stamp or Seal)

(NOTE: It is a Class F felony to willfully commit perjury in any affidavit taken pursuant to law—G.S. 14-209)

## APPENDIX F

To: All NC Building Code Enforcement Jurisdictions

The North Carolina Licensing Board for General Contractors has implementing procedures to comply with NC General Statute 87-14. For projects costing \$30,000 or more, property owners claiming exemption to the general contractor licensing requirement when applying for a building permit are required, before being entitled to the permit, to execute a verified affidavit attesting:

- a. That the person is the owner of the property on which the building is being constructed or, in the case of a firm or corporation, is legally authorized to act on behalf of the firm or corporation.
- b. That the person will personally superintend and manage all aspects of the construction of the building and that the duty will not be delegated to any other person not duly licensed.
- c. That the person will be personally present for all inspections required by the *North Carolina State Building Code*, unless the plans for the building were drawn and sealed by an architect licensed pursuant to Chapter 83A of the General Statutes.

The statute further requires that a copy of the affidavit be transmitted to the North Carolina Licensing Board for General Contractors for the purpose of verifying the applicant was validly entitled to claim the exemption. If during the permitting process any irregularities are detected that call in to question whether a permit applicant is fully complying with all applicable laws, the person issuing the permit should make note of the circumstances when forwarding information to the Board and provide a copy of the building permit application, including contact information for any subcontractors listed. **Please be aware the new requirements are not intended to delay the issuance of the building permit. When the person applying for the building permit reasonably satisfies the permitting authority that the applicable laws are being complied with, and executes all required documents, the building permit should be issued without delay.** Upon review of the documents, should any irregularities be detected that require further action, the Board's staff will contact the code enforcement authority.

Whenever possible, the most practical method of submitting affidavits to the Board is to scan the documents and transmit them as PDF email attachments to the appropriate Field Investigator serving the various code enforcement jurisdictions throughout the state. Specific email addresses have been set up for this purpose. Alternately, the documents may be faxed or sent via US Mail. ~~Attached to this email are pages with the~~ The assigned territories, email addresses for affidavit transmittal, fax numbers and contact information for the Board's field staff are found on the next page. Please contact the staff member serving your area with any questions you may have. ~~Also attached to this email is a model affidavit developed by the NC Home Builders Association in conjunction with the UNC School of Government. You may use this model affidavit or develop your own, as long as all the required information is provided.~~ Additional information is available on the UNC School of Government website using the following link: <http://www.sog.unc.edu/node/767>.

Thank you for your assistance in this matter. The Board sincerely appreciates your cooperation in implementing these new requirements.

## FIELD INVESTIGATOR REGIONS

### Region 1 — Coastal/SE (14) (Joel Macon 910-458-8899) Email: joelmacon@nclbgc.org

Bladen	Columbus	Duplin	Johnston	New Hanover	Pender
Brunswick	Craven	Harnett	Jones	Onslow	Sampson
Carteret	Cumberland				

### Region 2 — Coastal N/E (27)(28) (Dean Burbage 252-927-3326) Email: deanburbage@nclbgc.org

Beaufort	Dare	Greene	Martin	Perquimans	<u>Warren</u>
Bertie	Edgecombe	Halifax	Nash	Pitt	Wayne
Camden	<u>Franklin</u>	Hertford	Northampton	Tyrrell	Wilson
Chowan	Gates	Hyde	Pamlico	Vance	
Currituck	Granville	Lenoir	Pasquotank	Washington	

### Region 3 — Upper Piedmont (17)(16) (Curtis Huff 919-690-8734) Email: curtishuff@nclbgc.org

Alamance	Durham	Lee	Randolph	Surry	Yadkin
Caswell	Forsyth	Orange	Rockingham	<u>Wake</u>	
Chatham	<del>Franklin</del>	<del>Warren</del>			
Guilford	Person	Stokes	Wilkes		

### Region 4 — Lower Piedmont (15) (Waties Greene 980-210-3627/910-653-5356) Email: watiesgreene@nclbgc.org

Anson	Davidson	Mecklenburg	Richmond	Scotland
Cabarrus	Hoke	Montgomery	Robeson	Stanly
Davie	Iredell	Moore	Rowan	Union

### Region 5 — Western (27) (Ryan Cody 828-689-3388) Email: ryancody@nclbgc.org

Alexander	Burke	Cleveland	Jackson	Mitchell	Watauga
Alleghany	Caldwell	Gaston	Lincoln	Polk	Yancey
Ashe	Catawba	Graham	Macon	Rutherford	
Avery	Cherokee	Haywood	Madison	Swain	
Buncombe	Clay	Henderson	McDowell	Transylvania	

Affidavits transmitted to the Board via IJS Mail should be sent to:

Susan Sullivan, Director of Investigations  
 NC Licensing Board for General Contractors  
 P.O. Box 171875400 Creedmoor Road  
 Raleigh, North Carolina 2761927612  
[www.nclbgc.org](http://www.nclbgc.org) / email: [complaints@nclbgc.org](mailto:complaints@nclbgc.org)

# APPENDIX G

## DESIGN PROFESSIONAL INSPECTION FORM

RECORD OF THE INSPECTION OF A COMPONENT OR ELEMENT BY A NC LICENSED ARCHITECT OR ENGINEER

### Project Information:

Residential Single-Family Project: Y N	Commercial Project: Y N
Code Enforcement Project No:	Permit No:
Project Name:	Owner:
Project Address:	Suite No:
Date Inspected:	Contractor Name:
Component Inspected:	

### Responsible Licensed NC Architect or NC Engineer

Name:	
Firm Name:	
Phone Numbers:	Office: Mobile:
Email Address:	
Mailing Address:	

### APPLICABLE CODE:

2024 NCBC = 2024 NC Building Code; 2024 NCRC = 2024 NC Residential Code

Describe Element/Component/Type of Inspection: \*

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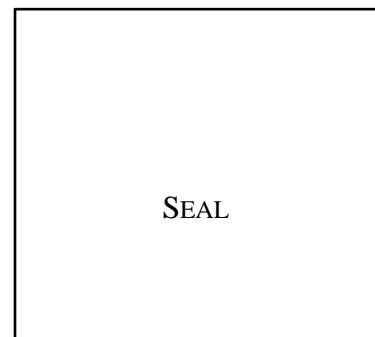
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\*(subgrade form/letter may also be required)

### Attestation/Signature:

By signing below, I certify that the component and/or element of the building as identified on this form has been inspected by me or someone under my direct supervision per G.S. ~~160D-11-6~~160D-1106 and is in compliance with the Code or other proposal of the architect or engineer for the project. This inspection is in compliance with all of the requirements of the above referenced code. Attach any additional documents if needed.

\_\_\_\_\_  
Licensed Architect or Engineer




### Inspection Department disclaimer:

Upon the receipt of a signed written document as required by G.S. ~~160D-11-6~~160D-1106, Code Enforcement shall be discharged and released from any liabilities, duties and responsibilities imposed by this article or in common law from any claim arising out of or attributed to the component or element in the construction of the building for which the signed written document was submitted. Be aware that this inspection will be noted in all inspection records including the Certificate of Occupancy or

DRAFT

# SUBMISSION FOR PERMANENT RULE

<b>1. Rule-Making Agency: NC Building Code Council</b>	
<b>2. Rule citation &amp; name (name not required for repeal):</b> 2024 NC Administrative Code & Policies (221213 Item B-1)	
<b>3. Action:</b> <input type="checkbox"/> ADOPTION <input checked="" type="checkbox"/> AMENDMENT <input type="checkbox"/> REPEAL <input type="checkbox"/> READOPTIOIN <input type="checkbox"/> REPEAL through READOPTIOIN	
<b>4. Rule exempt from RRC review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No	<b>5. Rule automatically subject to legislative review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No
<b>6. Notice for Proposed Rule:</b> <input checked="" type="checkbox"/> <b>Notice Required</b> Notice of Text published on: January 31, 2023 Link to Agency notice: <a href="https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice">https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice</a> Hearing on: March 14, 2023 Adoption by Agency on: June 13, 2023 <input type="checkbox"/> Notice not required under G.S.: Adoption by Agency on:	
<b>7. Rule establishes or increases a fee? (See G.S. 12-3.1)</b> <input type="checkbox"/> Yes Agency submitted request for consultation on: Consultation not required. Cite authority: <input checked="" type="checkbox"/> No	<b>8. Fiscal impact. Check all that apply.</b> <input type="checkbox"/> This Rule was part of a combined analysis. <input type="checkbox"/> State funds affected <input type="checkbox"/> Local funds affected <input type="checkbox"/> Substantial economic impact (≥\$1,000,000) <input type="checkbox"/> Approved by OSBM <input checked="" type="checkbox"/> No fiscal note required
<b>9. REASON FOR ACTION</b>	
<b>9A. What prompted this action? Check all that apply:</b> <input checked="" type="checkbox"/> Agency <input type="checkbox"/> Court order / cite: <input type="checkbox"/> Federal statute / cite: <input type="checkbox"/> Federal regulation / cite: <input type="checkbox"/> Legislation enacted by the General Assembly Cite Session Law: <input checked="" type="checkbox"/> Petition for rule-making <input type="checkbox"/> Other:	
<b>9B. Explain:</b> <u>This amendment The 2018 NC Administrative Code and Policies is amended to create the 2024 Administrative Code and Policies and</u> is proposed to protect the public by establishing standard administrative policies and procedures.  The delayed effective date of this Rule is January 1, 2025. The Statutory authority for Rule-making is G. S. 143-136; 143-138.	
<b>10. Rulemaking Coordinator: David B. Rittlinger</b> David B. Rittlinger Phone: (919)647-0008 E-Mail: david.rittlinger@ncdoi.gov  <b>Additional agency contact, if any:</b> Phone: E-Mail:	<b>11. Signature of Agency Head* or Rule-making Coordinator:</b>    *If this function has been delegated (reassigned) pursuant to G.S. 143B-10(a), submit a copy of the delegation with this form.  Typed Name: David B. Rittlinger Title: Chief Code Consultant
<b>RRC AND OAH USE ONLY</b>	
<b>Action taken:</b> <input type="checkbox"/> RRC extended period of review: <input type="checkbox"/> RRC determined substantial changes: <input type="checkbox"/> Withdrawn by agency <input type="checkbox"/> Subject to Legislative Review <input type="checkbox"/> Other:	

# **SUBMISSION FOR PERMANENT RULE**

Refer to the attachment below.

DRAFT

## Burgos, Alexander N

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**Subject:** FW: 2024 NC Administrative Code Requests for Changes

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**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Sent:** Thursday, January 18, 2024 11:43 PM  
**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Cc:** Childs, Nathan D <nchilds@NCDOJ.GOV>; Burgos, Alexander N <alexander.burgos@oah.nc.gov>  
**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Hi David,

Thanks for getting these back to me. For the most part, things look good. I have a few more follow ups though. See below:

*Also in 202.5.4, what does the sentence “Persons filing proposed petitions are hereby notified of the place and time of the scheduled hearings” mean?*

*DBR response: Proposed amendment petitions are received primarily by email and occasionally by regular mail. Once the secretary acknowledges that the proposed amendment petition using Appendix C is accurate, the secretary will notify the petitioner of the place and time of the scheduled meeting. “Hearings” is changed to “meetings” for clarity.*

I’m not sure the changes address my concern. It sounds like the Code language is providing notice, when what I think you mean is that the Secretary will notify the petitioner after receipt of the petition.

*In the second paragraph of 202.5.5.3, on p.13, define “substantially similar.”*

*DBR response: If a denied proposed amendment petition is tweaked a bit to create a newly-proposed amendment petition but the same denied action is achieved, the Council has the authority to deny the newly-proposed amendment petition for 12 months. Given the NCBCC is made up of appointed people that are not paid for their service, this rule promotes effective time and resources management. No corrections were made.*

I understand why the BCC would want to prevent denied petitions from being re filed, but the issue is that there is nothing to say what “substantially similar” means. From what you’re telling me, I understand the intent, but I think the language needs tweaking for it to express that intent effectively.

*In 202.5.5.4, I think there’s some confusion on the term “adopted”. G.S. 150B-2(1a) defines “adopt” as “to take final action to create, amend, or repeal a rule. Thus, a rule is adopted before it is sent to RRC for review. Here, you say an amendment is not “adopted” until after RRC approves it. Perhaps there is another term you could use, such as “effective”? The only catch there is that often BCC submits rules with delayed effective dates, so I’m not sure that works.*

*DBR response: Corrected to reflect the correct use of the term “adopted”. Not publishing the amendment until RRC approves it regardless of the effective date avoids potential conflicts for the public. Amendments are not approved for use based on the effective date under which the amendment was adopted by the Council until approved by the commission.*

I have a hard time understanding what 202.5.5.4 means as rewritten. Under the APA, an agency publishes a rule, receives public comment, then adopts a rule, sends it RRC for review, and the rule becomes effective on the first day of the next month after RRC approves the rule. When we send rules back to the agency for “further work” (i.e. a request for changes), I don’t believe the agency goes back and adopts language anew, they just make the requested changes and send the final versions back to RRC for approval. In 202.5.5.4, it



sounds like you're publishing *after* RRC approval? Also the term "readoption" has a specialized meaning under the APA (see 150B-21.3A), so I would avoid the use of that term. What is it you're trying to say here?

*In 203.1.1., p.16, number 6, "Natural or liquified petroleum gas systems", this is not in the scope DOI's authority under G.S. 143-139(b).*

*DBR response: Moved the reference to statute below to indicate it applies to 203.1.1.*

I'm not sure this addresses the issue, which is that the citation does not contain authority to regulate natural or liquifies petroleum gas systems. Is there another statute that gives the BCC that authority? If so, please cite it here.

*In 204.3.3, what is a fire prevention department? Is that different from a local fire department?*

*DBR response: A fire prevention department enforces the Nc Fire Code as noted in 204.3.1. No corrections were made.*

204.3.1 states that the Fire Prevention Code is enforced by "county fire marshals and city fire chiefs," which to me sounds like local fire departments. Then, 204.3.2 refers to "municipal fire department[s]" so I continue to wonder what the difference is between a "fire prevention department" and a "fire department".

*In 204.3.3, item 8, what does "other actions" mean?*

*DBR response: Item #8 is corrected to say "Code enforcement actions"*

The idea is good, the grammar is a bit off. Consider "take action to enforce the Code".

*In 204.3.8, define "proper identification" and "proper credentials".*

*DBR response: "Proper identification" is changed to "proper credentials" to reflect 160D-1117.*

What are the "proper credentials"? The statute uses the term, but does not define it. What does the enforcement official have to carry?

*In 204.4.3, p.19, define "substantially".*

*DBR response: A substantial deviation is at the discretion of the code official based on the scope of the work performed under the permit. No corrections were made.*

*In 204.6.3.1, p.20, define "substantial".*

*DBR response: A substantial departure is at the discretion of the code official based on the scope of the work performed under the permit. No corrections were made.*

I understand the code enforcement official has to exercise some discretion, but the question is, how much? Substantial is a completely subjective term, and you're giving no guidance as to where the line between substantial and insubstantial is. This is particularly important because this is a factor in whether a permit is revoked or granted.

*In 204.10.1.1, p.21, what is "the information and data necessary to determine compliance"?*

*DBR response: The information and data necessary to determine code compliance is drawings, manufacturer's installation instructions, product information, product test reports, third-party testing agency reports, etc. No corrections were made.*

Why not include these documents explicitly in the Rule? This provision supposedly tells the applicant what information to put in the application, but doesn't state with specificity what is necessary. Please revise to include what documents the applicant shall provide when submitting a permit application.

*In 204.12, define "promptly".*

*DBR response: The term "promptly" is not defined by 160D-1114. No corrections were made.*

*In 204.12, who is "the person affected"? The owner? The builder? Anyone else?*

*DBR response: The term "person affected" is not defined in 160D-1114. No corrections were made.*

For both of these, I understand that the statute doesn't define the term. That's why I'm asking you to define these terms.

For consideration at the January meeting, please return your responses by January 24. Otherwise, keep in mind that the extension from the December meeting would let you take this to the February meeting.

Thanks,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law N.C.G.S. Chapter 132 and may be disclosed to third parties.

## Burgos, Alexander N

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**Subject:** FW: 2024 NC Administrative Code Requests for Changes  
**Attachments:** D-1 20221213 Item B-1 2024 NCACandP Rev 1. Form\_0400\_for\_Permanent\_Rule\_June\_2023.pdf; D-1 20221213 Item B-1 2024 NCACandP Rev 1. Form\_0400\_for\_Permanent\_Rule\_June\_2023.docx; RRC format D-1 2024 NC Administrative Code and Policies Proposed.pdf; 2024-0116 DBR responses-12.2023 - BCC - Administrative Code Requests for Changes.docx

**Importance:** High

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**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Sent:** Wednesday, January 17, 2024 3:59 PM  
**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Cc:** Childs, Nathan D <nchilds@NCDOJ.GOV>; Burgos, Alexander N <alexander.burgos@oah.nc.gov>  
**Subject:** RE: 2024 NC Administrative Code Requests for Changes  
**Importance:** High

Brian,  
Attached are the responses and the updated documents.  
Let me know if you have any questions or comments.  
Thank you for your work on this.

**David B. Rittlinger, PE, LEED AP**  
**Deputy Commissioner of Engineering**  
**Engineering & Codes Division**



**North Carolina Office of State Fire Marshal**  
1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
919.647.0008

[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)

Link to free view of 2018 NC Codes  
<https://codes.iccsafe.org/codes/north-carolina>

## Request for Changes Pursuant to N.C. Gen. Stat. § 150B-21.10

Staff reviewed these Rules to ensure that each Rule is within the agency's statutory authority, reasonably necessary, clear and unambiguous, and adopted in accordance with Part 2 of the North Carolina Administrative Procedure Act. Following review, staff has issued this document that may request changes pursuant to G.S. 150B-21.10 from your agency or ask clarifying questions.

If the request includes questions, please contact the reviewing attorney to discuss.

In order to properly submit rewritten rules, please refer to the following Rules in the NC Administrative Code:

- Rule 26 NCAC 02C .0108 – The Rule addresses general formatting.
- Rule 26 NCAC 02C .0404 – The Rule addresses changing the introductory statement.
- Rule 26 NCAC 02C .0405 – The Rule addresses properly formatting changes made after publication in the NC Register.

### Note the following general instructions:

1. You must submit the revised rule via email to [oah.rules@oah.nc.gov](mailto:oah.rules@oah.nc.gov). The electronic copy must be saved as the official rule name (XX NCAC XXXX).
2. For rules longer than one page, insert a page number.
3. Use line numbers; if the rule spans more than one page, have the line numbers reset at one for each page.
4. Do not use track changes. Make all changes using manual strikethroughs, underlines and highlighting.
5. You cannot change just one part of a word. For example:
  - Wrong: “~~a~~Association”
  - Right: “~~association~~ Association”
6. Treat punctuation as part of a word. For example:
  - Wrong: “day;; and”
  - Right: “~~day;~~ day; and”
7. Formatting instructions and examples may be found at:  
[www.ncoah.com/rules/examples.html](http://www.ncoah.com/rules/examples.html)

If you have any questions regarding proper formatting of edits after reviewing the rules and examples, please contact the reviewing attorney.

REQUEST FOR CHANGES PURSUANT TO G.S. 150B-21.10

AGENCY: Building Code Council

RULE CITATION: N.C. Administrative Code, Chapter 1

DEADLINE FOR RECEIPT: TBD

***PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.***

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may email the reviewing attorney to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following changes be made:

Section 101

*In 101.3.2, are there known conflicts between the scope provided in the technical codes and the scope provisions here? Or is this in the event that there are future changes?*

*DBR response: Section 101.3.2 establishes the ten technical codes applicable to North Carolina. The description of each of the ten technical codes listed in this section is to provide the reader general guidance as to applicability and scope of each code. There are no known conflicts as the descriptions listed here are general in nature and do not go into the same level detail that each code volume does in describing applicability and scope. Just because it is not mentioned here, does not mean it negates something listed in each of the ten technical codes. No corrections were made.*

*On p.2, in the commentary following 101.3.2.9, correct the citation to G.S. 143-138(b) to just 143-138, and make sure you have a closing parentheses around the citation.*

*DBR response: Corrected.*

*In the second commentary on p.2, the definition of "farm building" appears to contradict the definition found in 143-138(b4)(1)(b), which explicitly contemplates farm buildings being open to the public. Similarly, the last sentence in this commentary, regarding education and research, is also contradicted by G.S. 160D-903(a). Please revise or delete accordingly.*

*DBR response: The second commentary is in conflict with 143-138(b4)(1)(b) and G.S. 160D-903(a). Given the reference to statute provided in the first commentary above, the second commentary is deleted in its entirety.*

Section 103

*In 103.2.2, p.4, what kind of "other pleadings" are contemplated? What filings may or may not be made to the BCC?*

*DBR response: "Other pleadings" has been changed to "supporting information" in 103.2 and 103.2.2 to narrow the meaning to the procedures associated with an appeal filed with the NCBCCC using Appendix E. Written supporting information associated with an appeal is attached to the Appendix E. In lieu of submission in writing, supporting information concerning the appeal may be made on the record during the course of the appeals hearing.*

Brian Liebman  
Commission Counsel

Date submitted to agency: December 21, 2023

What is the statutory authority for the modification procedures in 103.6? Is it 143-141(c)? Is there a difference between a “variation” and a “modification”?

*DBR response: In the context of an appeal, a “modification” and a “variation” are one in the same. All the technical codes make reference to “modifications” so changing the term will create confusion. A reference to 143-141 has been added to 103.6 to clarify.*

#### Section 104

In 104.1.2, p.5, who attests that the jurisdiction is capable of performing required inspections? The sentence as amended doesn't make grammatical sense.

*DBR response: The sentence in question has been deleted and split into two actions to clarify the requirements inspections departments are required to meet to be approved by the NCBCC to perform local plan review.*

#### Section 105

In 105.1, does “the codes” refer to the technical codes?

*DBR response: Yes. To clarify the meaning further and be consistent with the purpose outlined in 101.2, “technical” has been added to the sentence in 105.1.*

In the commentary following 105.2.2 on p. 6, in the definition of “performance method”, there are two grammatical errors. In the first sentence, it says a pier could be designed to a lesser size “if the performance requirements of the NC Residential Code.” The sentence appears to be incomplete. In the second sentence, it says “An example could be that the dead and/or load of the structure...” I think “dead and/or load” is potentially missing some words? Please correct if true.

*DBR response: The statements are modified to create complete sentences.*

#### Section 106

In 106.2.1, p. 7, should “inspection department” be capitalized? I believe it is capitalized elsewhere.

*DBR response: Capitalization of the “inspection department” is not intended. Instances in 106.3.1, 203.1.1.3, 204.4.1, 204.4.4, 204.5.1 have been changed to lowercase.*

Also in 106.2.1, what is the “inspection department”? Is this the local department, or is this part of DOI?

*DBR response: An “inspection department” is the local department. No corrections were made.*

In Exception 2 to 106.2.1, please delete “paragraph” from the citation to N.C. Gen. Stat. 160D-1110. It should just say NCGS 160D-1110(b).

*DBR response: Corrected.*

In 106.4, p.8, what is the “911 site address”?

*DBR response: The “911 site address” is the address that first responders have a record of as the official address of a building, structure or property in the event that an emergency response is necessary. The sentence is modified to add “emergency” to clarify further the intent of the site address signage requirements for displaying permits.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Brian Liebman  
Commission Counsel

Date submitted to agency: December 21, 2023

REQUEST FOR CHANGES PURSUANT TO G.S. 150B-21.10

AGENCY: Building Code Council

RULE CITATION: N.C. Administrative Code, Chapter 2

DEADLINE FOR RECEIPT: TBD

***PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.***

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may email the reviewing attorney to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following changes be made:

Section 201

*What does it mean that Chapter 2 is “commentary” on the General Statutes?*

*DBR response: Chapter 2 is intended to provide general guidance and not commentary on the General Statutes. The second sentence is deleted.*

Section 202

*In 202.1, p.11, isn't one of the duties of the Council to interpret the Code? See G.S. 143-141.*

*DBR response: The NCBCCC interprets the technical codes during appeals to the NCBCCC only. All other interpretations of the technical codes are performed by the Engineering and Codes Division per 203.2.1. No corrections were made.*

*In 202.4, p. 12, does the 15-day notice requirement apply to special meetings as well as regular meetings?*

*DBR response: No. The 15-day notice to the public in 202.4 is intended for regular meetings with public hearings noticed in the NC Register per 150B-21.2, which are typically quarterly in March, June, September, and December. The 7-day notice in 143-137 is for the council members only and applies to all meetings, including special meetings. It is intended that special meetings, so long as they don't have public hearings fall under the 7-day notice for both the public and the council members. The section is modified to reflect this intent.*

*Consider adding 143-138 to the citation at the end of 202.4.*

*DBR response: A citation to 143-138 is added.*

*In 202.5.2, you require that submissions be made the first day of the month prior to the next scheduled council meeting. However, 202.4 only requires 15 days of notice prior to each meeting. I understand that in most cases you'd give more than 15 days' notice, but by the letter of these provisions, the Council could forbid any submissions by simply not sending out notice until 15 days prior to the meeting. Please consider revising 202.4 accordingly.*

*DBR response: 202.4 is revised to place a 60-day requirement to notice the public of the time and place of regular NCBCCC meetings. Like the RRC, the schedule of regular meetings for the following year is voted on in December and then staff posts the*

Brian Liebman

Commission Counsel

Date submitted to agency: December 21, 2023

*schedule of the meetings on the agency website within a few days and before the holiday break. The date of the next NCBCC meeting is also announced as a reminder to the Council members and the public at the previous NCBCC meeting. The 60-day notice seems reasonable to allow proposed amendments to be submitted per 202.5.2.*

*In 202.5.4, a “request” for what?*

*DBR response: A “request” is a “proposed amendment”. Corrected.*

*Also in 202.5.4, what does the sentence “Persons filing proposed petitions are hereby notified of the place and time of the scheduled hearings” mean?*

*DBR response: Proposed amendment petitions are received primarily by email and occasionally by regular mail. Once the secretary acknowledges that the proposed amendment petition using Appendix C is accurate, the secretary will notify the petitioner of the place and time of the scheduled meeting. “Hearings” is changed to “meetings” for clarity.*

*Throughout 202.5.5, make sure “Council Chair” and “Council” are capitalized, as they are elsewhere.*

*DBR response: Corrected throughout the document.*

*Does 202.5.5.1 comply with 150B-20, particularly with the requirement that the Council grant or deny a petition within 120 days?*

*DBR response: Yes. Corrected to 202.5 in its entirety to clearly explain the process. Granted petitions as B-items in 202.5.5.1.3 start the rule making proceedings per 150B-20(c).*

*In the second paragraph of 202.5.5.3, on p.13, define “substantially similar.”*

*DBR response: If a denied proposed amendment petition is tweaked a bit to create a newly-proposed amendment petition but the same denied action is achieved, the Council has the authority to deny the newly-proposed amendment petition for 12 months. Given the NCBCC is made up of appointed people that are not paid for their service, this rule promotes effective time and resources management. No corrections were made.*

*In 202.5.5.4, I think there’s some confusion on the term “adopted”. G.S. 150B-2(1a) defines “adopt” as “to take final action to create, amend, or repeal a rule. Thus, a rule is adopted before it is sent to RRC for review. Here, you say an amendment is not “adopted” until after RRC approves it. Perhaps there is another term you could use, such as “effective”? The only catch there is that often BCC submits rules with delayed effective dates, so I’m not sure that works.*

*DBR response: Corrected to reflect the correct use of the term “adopted”. Not publishing the amendment until RRC approves it regardless of the effective date avoids potential conflicts for the public. Amendments are not approved for use based on the effective date under which the amendment was adopted by the Council until approved by the commission.*

*Similarly, in Table 202.5.5, consider replacing “approved” with “effective”. Technically, 150B-21.3 states a permanent rule not subject to a delayed effective date becomes effective on the first day of the month following the month the rule is approved by the Commission.*

*DBR response: Replaced “Approved” with “Effective” and the associated language.*

*In 202.6.1, the publication requirement in 143-138(g) states that the BCC “shall cause [the Code] to be printed. . . .” Is there other statutory authority for not printing amendments? Otherwise I don’t think you have the statutory authority to make this statement.*

Brian Liebman  
Commission Counsel

Date submitted to agency: December 21, 2023



*DBR response: Deleted the second sentence and modified the third sentence to inform the public that amendments, meeting and public hearing notices and minutes are available at no charge on the agency website.*

*In 202.6.1, what are “Agency Rules”? What does this refer to?*

*DBR response: Deleted the reference to “Agency Rules” as the content is available for free on the agency website.*

*In the commentary on p.14, under 202.8.3, I have several questions:*

*In 1, who is “asking” the Ad Hoc committee to approach its review in this way?*

*If it is BCC, can the Council do this? DBR response: The BCC is “asking”.*

*Corrected #1 and #3 to clarify guidelines.*

*In 2, I think “base line” should be one word. DBR response: Corrected.*

*In 4, “thought to be” in whose opinion? What does it mean to be “controversial” in this context? DBR response: Removed ambiguity and corrected sentence to recommend that complex code changes be handled as separate code change items to avoid adoption delays of entire code volumes.*

*In 202.9.1, are “interpretation” and “determination” the same thing?*

*DBR response: Changed “determination” to “interpretation”.*

*In 202.9.2.3, p.15, it appears 2 and 3 both require a copy of the decision appealed from. Please revise accordingly.*

*DBR response: #2 is modified to delete the redundancy between #2 and #3.*

*In 202.9.2.4., when is it necessary and not necessary to distribute the appeal?*

*DBR response: Deleted “as necessary” to clarify the Notice of Appeal shall be distributed to each Council member.*

### Section 203

*In 203.1.1., p.16, number 6, “Natural or liquified petroleum gas systems”, this is not in the scope DOI’s authority under G.S. 143-139(b).*

*DBR response: Moved the reference to statute below to indicate it applies to 203.1.1.*

*In 203.1.1.1, G.S. 58-2-95 says that the Commissioner or his “deputy”, not designee, may take steps to enforce the law. Not sure if that’s a distinction with a difference, but I would think that a designee is broader than a deputy, given that I believe there is an office of the deputy commissioner at DOI.*

*DBR response: Changed “designee” to “deputy” to reflect the law.*

*In 203.1.1.3, what is the “Municipal Council”?*

*DBR response: Changed “Municipal Council” to “governing board” to reflect the law.*

*In 203.2.3, p.17, what is the effect of Code Errata? Are they enforceable? Amendments to the Code?*

*DBR response: Errata is an error or omission in printing or writing that does not change the meaning of the code. If an errata is determined by the Chief Code Consultant and/or the Building Code Council to change the meaning of the code, it is considered an amendment and is required to be properly adopted as a permanent rule. General Statute 150B-21.5 is applied in defining errata and amendments. A comma was added to sentence #2 otherwise no changes were made.*

### Section 204

*In 204.1, is there a citation for the assertion that local code enforcement officials have no enforcement power over state and federal government entities?*

*DBR response: Sentence #2 is deleted.*

Brian Liebman  
Commission Counsel

Date submitted to agency: December 21, 2023

In 204.3.1, p.18, there are two citations to 160A-292. Appears to be a typo to me.

*DBR response: The first statute reference is deleted.*

In 204.3.3, what is a fire prevention department? Is that different from a local fire department?

*DBR response: A fire prevention department enforces the Nc Fire Code as noted in 204.3.1. No corrections were made.*

In 204.3.3, item 4, “identify technical provisions” of what? The Fire Prevention Code?

*DBR response: “Identify technical provisions” means fire code violations and/or items that are present that require a permit. No corrections were made as “technical provisions” is an appropriate term.*

In 204.3.3, item 8, what does “other actions” mean?

*DBR response: Item #8 is corrected to say “Code enforcement actions”*

Also in 204.3.3, item 8, what does it mean to “adequately” enforce the Code?

*DBR response: Item #8 is corrected to say “Code enforcement actions”*

In 204.3.3, item 10, does “year” mean a school year or a calendar year?

*DBR response: Corrected to clarify the intent of calendar year inspections.*

In 204.3.8, define “proper identification” and “proper credentials”.

*DBR response: “Proper identification” is changed to “proper credentials” to reflect 160D-1117.*

In 204.4.3, p.19, define “substantially”.

*DBR response: A substantial deviation is at the discretion of the code official based on the scope of the work performed under the permit. No corrections were made.*

In 204.6.3.1, p.20, define “substantial”.

*DBR response: A substantial departure is at the discretion of the code official based on the scope of the work performed under the permit. No corrections were made.*

In 204.10.1.1, p.21, what is “the information and data necessary to determine compliance”?

*DBR response: The information and data necessary to determine code compliance is drawings, manufacturer’s installation instructions, product information, product test reports, third-party testing agency reports, etc. No corrections were made.*

In 204.12, define “promptly”.

*DBR response: The term “promptly” is not defined by 160D-1114. No corrections were made.*

In 204.12, who is “the person affected”? The owner? The builder? Anyone else?

*DBR response: The term “person affected” is not defined in 160D-1114. No corrections were made.*

In 204.13.1, define “safe capacity.” Who determines what the “safe capacity” is?

*DBR response; The term “safe load capacity” is the code required minimum occupancy load capacity for the building or structure. The permit holder, builder, engineer or architect provides the information concerning load capacity to the code official for verification that the building is safe for the number of occupants. No corrections were made.*

In 204.13.1, when is excessive loading “likely” to occur?

*DBR response: Calculating design occupancy load capacity for permits is required to consider periods of time in a building when the maximum occupancy load anticipated is going to occur. No corrections were made.*

## Section 205

Brian Liebman  
Commission Counsel

Date submitted to agency: December 21, 2023

*On p.23, what's the statutory authority for 205.1.1? The Boiler Pressure Vessel Division is in 143-139(c), but not the Elevator and Amusement Device Division. Add the cite.*

*DBR response: Corrected to cite both statutes.*

Appendix A

*On p.30, what is required on the 3<sup>rd</sup> line of the application, which is titled only "Permit Application"?*

*DBR response: Used as an initial descriptor for the permits applied for. No corrections were made.*

*Why is page 32 completely blank? Similarly, most of p.34 is blank.*

*DBR response: Formatting corrected to eliminate blank page.*

Appendix B

*Why is p.38 blank?*

*DBR response: No content is missing. Formatting for RRC has created splits in the middle of pages. Notes are added to indicate page breaks.*

*I have no further questions for the separate change submitted to Appendix B.*

Appendix C

*On p. 44, under the bullet point for "Substantial", the change made appears to change "two" to 2" but also to add a hyphen between "2" and "alternatives", which is incorrect. Please spell out "two" and delete the hyphen.*

*DBR response: The edit is deleted to leave the text as "two"*

Appendix E,

*There appears to be two copies of page 47.*


*DBR response: There is no repeated content. No corrections were made.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Brian Liebman  
Commission Counsel

Date submitted to agency: December 21, 2023

# SUBMISSION FOR PERMANENT RULE


<b>1. Rule-Making Agency: NC Building Code Council</b>	
<b>2. Rule citation &amp; name (name not required for repeal):</b> 2024 NC Administrative Code & Policies (221213 Item B-1)	
<b>3. Action:</b> <input type="checkbox"/> ADOPTION <input checked="" type="checkbox"/> AMENDMENT <input type="checkbox"/> REPEAL <input type="checkbox"/> READOPTIOIN <input type="checkbox"/> REPEAL through READOPTIOIN	
<b>4. Rule exempt from RRC review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No	<b>5. Rule automatically subject to legislative review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No
<b>6. Notice for Proposed Rule:</b> <input checked="" type="checkbox"/> <b>Notice Required</b> Notice of Text published on: January 31, 2023 Link to Agency notice: <a href="https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice">https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice</a> Hearing on: March 14, 2023 Adoption by Agency on: June 13, 2023 <input type="checkbox"/> <b>Notice not required under G.S.:</b> Adoption by Agency on:	
<b>7. Rule establishes or increases a fee? (See G.S. 12-3.1)</b> <input type="checkbox"/> Yes Agency submitted request for consultation on: Consultation not required. Cite authority: <input checked="" type="checkbox"/> No	<b>8. Fiscal impact. Check all that apply.</b> <input type="checkbox"/> This Rule was part of a combined analysis. <input type="checkbox"/> State funds affected <input type="checkbox"/> Local funds affected <input type="checkbox"/> Substantial economic impact (≥\$1,000,000) <input type="checkbox"/> Approved by OSBM <input checked="" type="checkbox"/> No fiscal note required
<b>9. REASON FOR ACTION</b>	
<b>9A. What prompted this action? Check all that apply:</b> <input checked="" type="checkbox"/> <b>Agency</b> <input type="checkbox"/> Court order / cite: <input type="checkbox"/> Federal statute / cite: <input type="checkbox"/> Federal regulation / cite: <input type="checkbox"/> Legislation enacted by the General Assembly Cite Session Law: <input checked="" type="checkbox"/> <b>Petition for rule-making</b> <input type="checkbox"/> Other:	
<b>9B. Explain:</b> <u>This amendment</u> <u>The 2018 NC Administrative Code and Policies is amended to create the 2024 Administrative Code and Policies and</u> is proposed to protect the public by establishing standard administrative policies and procedures.  The delayed effective date of this Rule is January 1, 2025. The Statutory authority for Rule-making is G. S. 143-136; 143-138.	
<b>10. Rulemaking Coordinator: David B. Rittlinger</b> David B. Rittlinger Phone: (919)647-0008 E-Mail: david.rittlinger@ncdoi.gov  <b>Additional agency contact, if any:</b> Phone: E-Mail:	<b>11. Signature of Agency Head* or Rule-making Coordinator:</b>    *If this function has been delegated (reassigned) pursuant to G.S. 143B-10(a), submit a copy of the delegation with this form.  Typed Name: David B. Rittlinger Title: Chief Code Consultant
<b>RRC AND OAH USE ONLY</b>	
<b>Action taken:</b> <input type="checkbox"/> RRC extended period of review: <input type="checkbox"/> RRC determined substantial changes: <input type="checkbox"/> Withdrawn by agency <input type="checkbox"/> Subject to Legislative Review <input type="checkbox"/> Other:	

# **SUBMISSION FOR PERMANENT RULE**

Refer to the attachment below.

DRAFT

# SUBMISSION FOR PERMANENT RULE

<b>1. Rule-Making Agency: NC Building Code Council</b>	
<b>2. Rule citation &amp; name (name not required for repeal):</b> 2024 NC Administrative Code & Policies (221213 Item B-1)	
<b>3. Action:</b> <input type="checkbox"/> ADOPTION <input checked="" type="checkbox"/> AMENDMENT <input type="checkbox"/> REPEAL <input type="checkbox"/> READOPTIOIN <input type="checkbox"/> REPEAL through READOPTIOIN	
<b>4. Rule exempt from RRC review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No	<b>5. Rule automatically subject to legislative review?</b> <input type="checkbox"/> Yes. Cite authority: <input checked="" type="checkbox"/> No
<b>6. Notice for Proposed Rule:</b> <input checked="" type="checkbox"/> <b>Notice Required</b> Notice of Text published on: January 31, 2023 Link to Agency notice: <a href="https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice">https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice</a> Hearing on: March 14, 2023 Adoption by Agency on: June 13, 2023 <input type="checkbox"/> <b>Notice not required under G.S.:</b> Adoption by Agency on:	
<b>7. Rule establishes or increases a fee? (See G.S. 12-3.1)</b> <input type="checkbox"/> Yes Agency submitted request for consultation on: Consultation not required. Cite authority: <input checked="" type="checkbox"/> No	<b>8. Fiscal impact. Check all that apply.</b> <input type="checkbox"/> This Rule was part of a combined analysis. <input type="checkbox"/> State funds affected <input type="checkbox"/> Local funds affected <input type="checkbox"/> Substantial economic impact (≥\$1,000,000) <input type="checkbox"/> Approved by OSBM <input checked="" type="checkbox"/> No fiscal note required
<b>9. REASON FOR ACTION</b>	
<b>9A. What prompted this action? Check all that apply:</b> <input checked="" type="checkbox"/> Agency <input type="checkbox"/> Court order / cite: <input type="checkbox"/> Federal statute / cite: <input type="checkbox"/> Federal regulation / cite: <input type="checkbox"/> Legislation enacted by the General Assembly Cite Session Law: <input checked="" type="checkbox"/> Petition for rule-making <input type="checkbox"/> Other:	
<b>9B. Explain:</b> <u>This amendment</u> <u>The 2018 NC Administrative Code and Policies is amended to create the 2024 Administrative Code and Policies and</u> is proposed to protect the public by establishing standard administrative policies and procedures.  The delayed effective date of this Rule is January 1, 2025. The Statutory authority for Rule-making is G. S. 143-136; 143-138.	
<b>10. Rulemaking Coordinator: David B. Rittlinger</b> David B. Rittlinger Phone: (919)647-0008 E-Mail: david.rittlinger@ncdoi.gov  <b>Additional agency contact, if any:</b> Phone: E-Mail:	<b>11. Signature of Agency Head* or Rule-making Coordinator:</b>    *If this function has been delegated (reassigned) pursuant to G.S. 143B-10(a), submit a copy of the delegation with this form.  Typed Name: David B. Rittlinger Title: Chief Code Consultant
<b>RRC AND OAH USE ONLY</b>	
<b>Action taken:</b> <input type="checkbox"/> RRC extended period of review: <input type="checkbox"/> RRC determined substantial changes: <input type="checkbox"/> Withdrawn by agency <input type="checkbox"/> Subject to Legislative Review <input type="checkbox"/> Other:	

# **SUBMISSION FOR PERMANENT RULE**

Refer to the attachment below.

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**Notes to RRC: THIS DOCUMENT CONTAINS THE PROPOSED 2024 NORTH CAROLINA ADMINISTRATIVE CODE AND POLICIES.**

**TEXT THAT IS STRUCKTHROUGH IS DELETED FROM THE 2018 EDITION TO CREATE THE 2024 EDITION.**

**TEXT THAT IS UNDERLINED IS NEW TEXT TO CREATE THE 2024 EDITION.**

DRAFT



North Carolina State Building Code: Administrative Code and Policies, ~~2018~~2024 edition

First Printing: ~~June~~January ~~2018~~2024



Notes to RRC: The NC Seal above is added to the 2024 North Carolina Administrative Code and Policies. International Code Council, Inc. copyright statements and information (not shown) will appear here once this code published and made available to the public. Page numbers and Table of Contents will be updated once this code published and made available to the public.

# PREFACE of the ~~2018~~2024 NORTH CAROLINA STATE BUILDING CODES

North Carolina has been a pioneer in the field of Statewide Building Regulations that have been enacted for the protection of the public. The Building Laws passed in 1903 and 1905 created a Building Code for materials and methods of construction in use at that time in the State.

The General Assembly of 1933 created a Building Code Council and authorized it to, in cooperation with the Commissioner of Insurance, prepare and adopt a State Building Code. The first State Building Code was adopted in 1935 and ratified by the 1941 General Assembly.

The 1957 Legislature rewrote the 1933 Act, ratified the 1953 Edition, and reorganized and expanded the membership and responsibility of the Council. The 1953 Edition of the State Building Code was revised in accordance with the 1957 Act and printed as the 1958 Edition.

The 1933 Act of the General Assembly provided that any city or county could adopt any building regulation that was more stringent than the State Building Code regulations. However, after a General Assembly Study Commission Report, the 1957 Legislature provided that any local building regulation that was different from the State regulation would have to be approved by the Building Code Council. The Council adopted a policy to only approve local amendments to the State Code that were absolutely necessary. The policy includes that when the Council sees the need for local amendments, they would be incorporated as a part of the State Building Code in lieu of approving the regulations applying to a specific city or county unless local conditions warranted such specific regulations.

The 1967 Edition of the State Building Code was prepared utilizing the framework of the Standard Building Code, with several chapters taken from the American Insurance Association's National Building Code and the egress chapter taken from the Life Safety Code of NFPA.

The 1978, 1991 and 1996 Editions were prepared by the Building Code Council with the assistance of specially appointed Advisory and Ad-Hoc Committees representing Code Enforcement Officials, Contractors, Designers and others affected by the regulations. These Editions were the latest Standard Building Code with North Carolina amendments.

The 2002, 2006, 2009, 2012, ~~and~~ 2018 and 2024 Editions were prepared by Ad-Hoc Committees representing Code Enforcement Officials, Contractors, Designers and others affected by the regulations. These Editions were the *International Building Code* with North Carolina amendments.

The ~~2018~~2024 North Carolina State Code is presented with the hope that its use will protect the public from dangerous and unsanitary buildings. This Code is intended to provide Code Enforcement Officials, Contractors and Designers a set of minimum standards to follow in design and construction. The Building Code Council has the authority to amend the Code when the wider use of materials and methods comply with the safety standards set forth in the laws.

## **PREFACE of the ~~2018~~2024 NORTH CAROLINA ADMINISTRATIVE CODE and POLICIES**

The purpose of the *North Carolina Administrative Code and Policies* is to serve as a comprehensive document to guide decisions aimed at protecting the public's health, safety and welfare in the built environment. This protection is provided through the enforcement, by state and local governments, of the technical codes incorporated by reference herein.

The *North Carolina Administrative Code* was first adopted by the Building Council in 1991. The 1996 and 2002 Editions were published in conjunction with the subsequent Code Editions. The 2006 *North Carolina Administrative Code and Policies* was a reorganization and rewrite of the 2002 *Administration and Enforcements Code*. The 2009, 2012, ~~and 2018~~ and 2024 Edition of the *North Carolina Administrative Code and Policies* is an administrative update of the 2006 *Administration and Enforcements Code*. Chapter 1, Administrative Code, contains Rules adopted by the Building Code Council and approved by the Rules Review Commission. Chapter 2, Policies, contains generally accepted policies and procedures based on the North Carolina General Statutes. Chapter 3, Referenced Statutes, contains references to many applicable General Statutes. The appendices include representative administrative forms.

### **EDITIONS of the NORTH CAROLINA STATE BUILDING CODES**

Administrative	1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Building	1936, 1953, 1958, 1967, 1978, 1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Residential	1968, 1993, 1997, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Accessibility	1973, 1991, 1999 (Accessibility requirements were part of the Building Code before 9/1/1973 and after 1/1/2009.)
Electrical (NEC)	1931, 1933, 1935, 1937, 1940, 1942, 1943, 1947, 1949, 1951, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1962, 1965, 1968, 1971, 1975, 1978, 1981, 1984, 1987, 1990, 1993, 1996, 1999, 2002, 2005, 2008, 2011, 2014, 2017, <u>2020</u>
Existing Building	2015, 2018, <u>2024</u>
Fire	1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Mechanical	1971, 1980, 1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Energy Conservation	1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Plumbing	1963, 1968, 1980, 1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Fuel Gas	1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>

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By Statute, the Commissioner of Insurance has general supervision of the administration and enforcement of the *North Carolina State Building Code* and the Engineering Division serves as the Staff for the Building Code Council. Officials of the Department of Insurance are:

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# CHAPTER 1

## ADMINISTRATIVE CODE

### SECTION 101 TITLE AND SCOPE

**101.1 Title.** This document is “The North Carolina Administrative Code and Policies,” hereinafter known as “this code.” Any references to International Codes shall refer to North Carolina State Building Codes.

**101.2 Purpose.** The purpose of this code is to provide for the administration and enforcement of the North Carolina State Building Codes as adopted by the Building Code Council and enforced by State and local code enforcement officials. This code is incorporated by reference into the North Carolina Building, Accessibility, Plumbing, Mechanical, Electrical, Fire Prevention, Fuel Gas, Energy Conservation, Existing Buildings, Rehabilitation, and Residential Codes, hereinafter referred to collectively as the “technical codes.” This code is intended to provide for the administrative aspects of each of the technical codes. In this code, the plumbing, mechanical, electrical, fire prevention and gas systems shall be referred to as “service systems.”

#### 101.3 Scope.

**101.3.1 Requirements of other state agencies, occupational licensing boards or commissions.** The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other state agencies, occupational licensing boards or commissions. It shall be the responsibility of a permit holder, design professional, contractor or occupational license holder to determine whether any additional requirements exist.

*Commentary: Many State agencies, occupational licensing boards or commissions have specific design and construction requirements that are not incorporated into the North Carolina State Building Codes and are not enforced by code enforcement officials. Permit holders, design professionals, contractors or occupational license holders should consult with any relevant boards or agencies to determine whether there are any additional construction and design requirements for their projects.*

**101.3.2 Technical Codes.** Where sections 101.3.2.1 through 101.3.2.10 conflict with the applicability and scope as provided in the technical codes the applicability and scope in the technical codes shall apply.

**101.3.2.1 North Carolina Building Code.** The provisions of the Building Code shall apply to the construction, alteration, repair, equipment, use and occupancy, location, movement to another site, removal and demolition, or any appurtenances connected or attached to every building or structure, other than one- or two-family dwellings and townhouses.

~~**101.3.2.2 North Carolina Accessibility Provisions.** The accessibility provisions shall apply to the construction, alteration, repair, replacement, equipment, appliances, fixtures, fittings and appurtenances of all buildings or structures, other than one- and two- family dwellings and townhouses.~~

~~**101.3.2.3**~~ **101.3.2.2 North Carolina Plumbing Code.** The provisions of the Plumbing Code shall apply to every plumbing installation, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances.

~~**101.3.2.4**~~ **101.3.2.3 North Carolina Mechanical Code.** The provisions of the Mechanical Code shall apply to the installation of mechanical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

~~**101.3.2.5**~~ **101.3.2.4 North Carolina Electrical Code.** The provisions of the Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances.

~~101.3.2.6~~**101.3.2.5 North Carolina Fire Prevention Code.** The provisions of the Fire Prevention Code shall apply to the ~~repair, equipment, use, occupancy and maintenance of every existing building or structure, other than one or two family dwellings and townhouses.~~ The provisions of the fire prevention code shall apply to the installation of fire protection systems minimum fire safety requirements to all new and existing buildings, facilities, storage, and processes, except for one- or two-family dwellings and townhouses. The Fire Prevention Code provides a total approach of controlling hazards in all regulated buildings and sites, regardless of the hazard being indoors or outdoors.

~~101.3.2.7~~**101.3.2.6 North Carolina Fuel Gas Code.** The provisions of the Fuel Gas Code shall apply to the installation of gas piping systems extending from the point of delivery to the inlet connections of equipment served, and the installation and operation of residential and commercial gas appliances and related accessories.

~~101.3.2.8~~**101.3.2.7 North Carolina Energy Conservation Code.** The provisions of the Energy Conservation Code shall apply to the thermal envelope of the building and installation of energy systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances, ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

~~101.3.2.9~~**101.3.2.8 North Carolina Existing Buildings Code.** All work on any building that undergoes alterations, repairs, replacement, rehabilitation or change of occupancy shall comply with the Existing Buildings Code or the technical codes for the proposed work.

~~101.3.2.10~~**101.3.2.9 North Carolina Residential Code.** The provisions of the Residential Code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures.

*Commentary: Exceptions to the technical codes. Note that there are statutory exceptions to the applicability of the technical codes. These exceptions can be found in North Carolina General Statutes **(NCGS § 143-138(b))** ~~(NCGS § 143-138)~~. The exceptions include the following as well as other exceptions:*

- (1) farm buildings located outside the jurisdiction of any municipality;*
- (2) equipment for storing, handling, transporting and utilizing liquefied petroleum gases for fuel purposes; and*
- (3) equipment or facilities, other than buildings, of a public utility, as defined in NCGS § 62-3, or of an electric or telephone membership corporation, including poles, towers and other structures supporting electric or communication lines.*

*Commentary: “Farm building” means any building that is not open to the general public and is used primarily for a bona fide farm purpose. “A bona fide farm purpose” includes the production or storage of agricultural products or commodities, including crops, fruits, vegetables, ornamental or flowering plants, dairy, timber, livestock, poultry and all other forms of agricultural products. Farm buildings do not include such buildings used for purposes of education and research.*

**101.3.3 Workmanship.** Workmanship is not within the purview of the technical codes unless specifically stated within the code.

**101.3.4 Appendices.** Provisions in the appendices shall not be enforceable unless specifically ~~incorporated~~adopted or referenced in the technical codes.

*Commentary: Use of appendices. An appendix is part of the technical codes only when the technical code specifically references that appendix in the body of the technical code. Conversely, appendices that are not referenced in the technical codes are not part of the North Carolina Building Codes. These unenforceable appendices are provided solely for the convenience of the reader. Each appendix will indicate under its title whether it is enforceable and required as part of the technical code.*

**101.3.5 Referenced standards.** Standards referenced in the technical codes shall be considered an integral part of the codes. If specific portions of a standard are denoted by code text, only those specific portions of the standard shall be enforced. Where code provisions conflict with a standard, the code provisions shall be enforced. Permissive and advisory provisions in a standard shall not be construed as mandatory.

~~101.3.6 Existing buildings.~~ Additions, alterations, repairs, replacement, rehabilitations or changes of occupancy shall be permitted to any existing structure or service system without requiring the existing systems to comply with all the requirements of the current building codes. All new work shall conform to the requirements of the technical codes for new construction except as modified by either the existing buildings code or the rehabilitation code. For any portion of an existing building or service system that creates a hazard or unsafe condition, the code enforcement official shall determine the extent to which that portion of the existing building or service system is to be upgraded to conform to the requirements of either the Existing Buildings Code, the Rehabilitation Code or the technical codes.

## SECTION 102 RULE-MAKING TO AMEND THE TECHNICAL CODES

### 102.1 Petition for rule-making.

**102.1.1 Petition Filing.** ~~4-~~ Any person wishing to file a petition requesting the adoption, amendment or repeal of a rule by the Building Code Council shall file a written petition on a form (see Appendix C) provided by the Building Code Council, ~~and 21 copies~~ Twenty-one hardcopies of the petition and supporting documentation shall be sent to with the Building Code Council Secretary or a single pdf and editable softcopy of the petition can be emailed to the Building Code Council Secretary.

**102.1.2 Required information.** ~~2-~~ The petition shall include the following information:

- ~~a. 2-1~~ Name, address and occupation of petitioner;
- ~~b. 2-2~~ A summary of the proposed action (adoption, amendment or repeal of a rule or rules);
- ~~c. 2-3~~ A draft of the proposed rule or other action;
- ~~d. 2-4~~ A complete statement of the reason for the proposed action with supporting documentation;
- ~~e. 2-5~~ An identification of the persons or class of persons most likely to be affected by the proposed action; and
- ~~f. 2-6~~ An economic impact analysis as required by General Statute §143-138(a).
- ~~g.~~ A cost/benefit analysis for North Carolina Energy Code amendments as required by General Statute §143-138(a1)(2).

**102.2 Presiding officer.** The presiding officer at any rule-making hearing shall have control of the proceedings, including: recognition of speakers, time allotments for presentations, the right to question speakers, direction of the discussion and management of the hearing.

**102.3 Record of proceedings.** A record of rule-making proceedings will be available for public inspection during regular office hours at the Building Code Council's office. This record will contain the original petition, if any, the notice, all written memoranda and information submitted, and a record or summary of oral presentations, if any, and, in any case where a proposal was rejected, the reason therefore.

**102.4 Effective date of rules.** Any rules that are adopted by the Building Code Council and approved by the Rules Review Commission shall be effective when the next edition of the relevant technical code is effective as provided in Rule 102.6 unless specified otherwise by the Building Code Council.

**102.5 Interim use of approved rules.** Any rules that are adopted by the Building Code Council and approved by the Rules Review Commission shall be accepted by the Code Enforcement Official as an approved alternate method of construction prior to the effective date if requested by the owner or his agent.

**102.6 Effective date of code editions.** The provisions of any code edition which have been approved by both the Building Code Council and the Rules Review Commission shall become effective the first day of January of the following year unless specified otherwise by the Building Code Council.

## SECTION 103 APPEALS

**103.1 General.** The following are appeals addressed by this code:

- (a) Appeal by a permit holder to local code enforcement management regarding a code determination made by a local code official for a specific job site.
- (b) Appeal by a permit holder to the NC Department of Insurance, Engineering Division regarding a determination

or interpretation by local code enforcement.

(c) Appeal by an inspection department or permit holder to the NC Building Code Council regarding an appeal decision issued by the NC Department of Insurance, Engineering Division.

(d) Appeal by a permit holder, designer, general public, or local code enforcement to the NC Building Code Council regarding a formal code interpretation issued by NC Department of Insurance, Engineering Division.

**103.1103.2 Form of complaints and other pleadings, supporting information.**

**103.2.1 Complaints.** ~~1-~~ There shall be no specific form required for complaints. To be sufficient, a complaint shall be in writing, identify the parties and shall reasonably apprise the Building Code Council of the facts that form the basis of the complaint.

**103.2.2 Other pleadings, Supporting information.** ~~2-~~ There shall be no specific form. Appendix E shall be required for answers, motions or other pleadings, supporting information relating to appeals before the Building Code Council, except they shall be in writing. To be sufficient, the document The pleadings, supporting information shall identify the case to which it refers and reasonably apprise the Building Code Council of the matters it alleges, answers or requests. In lieu of submission in writing, motions, requests and other pleadings, supporting information may be made on the record during the course of the hearing before the Building Code Council.

**103.2103.3 Governing provisions.** Hearings before the Building Code Council shall be governed by the provisions of General Statutes 150B, Article 3A.

**103.3103.4 Presiding officer.** The Building Code Council may designate any of its members to preside over the hearing in a case on appeal. When no designation is made, the ~~chairman~~ Chair of the Building Code Council shall preside, or, in his absence, the ~~vice chairman~~ Vice Chair shall preside. The presiding officer shall rule on motions or other requests made in an appeal case prior to the hearing in that case, except when the ruling on the motion would be dispositive of the case. When the ruling on a motion or request would be dispositive of the case, the presiding officer shall make no ruling and the motion or request shall be determined by a majority of the Building Code Council.

**103.4103.5 Continuances.** The Building Code Council's ~~Secretary~~ Chair may grant the ~~first request~~ requests for a continuance of a hearing for good cause. ~~Any subsequent requests for continuance may be granted by the chairman of the board.~~ The granting of a continuance is wholly discretionary.

**103.5103.6 Modifications.** Whenever there are practical difficulties involved in carrying out the provisions of the technical codes, the Building Code Council shall have the authority to grant modifications for individual cases, after the Building Code Council finds on appeal that (1) special individual reasons, conditions, and/or circumstances exist that make the strict letter of the technical codes impractical, (2) the modification is in compliance with the intent and purpose of the technical codes, and (3) the modification does not lessen health, accessibility, life, fire-safety or structural requirements.

**(General Statute 143-141)**

*Commentary: Limitation on what constitutes "practical difficulties." This section is not intended to permit setting aside or ignoring a code provision; rather, it is intended to provide for the acceptance of equivalent protection. Such modifications do not, however, extend to actions that are necessary to correct violations of the code. In other words, a code violation or the expense of correcting a code violation does not necessarily constitute a practical difficulty.*

**SECTION 104  
ADMINISTRATION**

**104.1 North Carolina Department of Insurance, Engineering Division.**

**104.1.1 Document approval.** Construction specifications and drawings, including Appendix B of this code, for buildings specified in Table 104.1 shall be submitted to the Engineering Division of the North Carolina Department of Insurance. The Engineering Division shall grant document approval before a permit is issued on any building listed in Table 104.1.

**TABLE 104.1  
NORTH CAROLINA DEPARTMENT OF INSURANCE, ENGINEERING DIVISION  
DOCUMENT APPROVAL FOR NEW CONSTRUCTION AND ADDITIONS**

OCCUPANCY GROUP	BUILDING PLANS TO BE APPROVED
-----------------	-------------------------------

Section 403 – High Rise <sup>1</sup>	All buildings
Section 402 – Covered Mall Buildings <sup>1</sup>	All buildings
City/county owned	All buildings 20,000 sq. ft. or greater as required by G.S. §58-31-40
Group A <sup>1,2</sup>	Occupant load over 1,000
Group E <sup>1</sup>	Over 2 stories or over 20,000 sq. ft./story
Group H <sup>1</sup>	Occupant load over 100
Group I <sup>1</sup>	Over 3 stories or over 10,000 sq. ft./story
Group R <sup>1</sup>	Over 4 stories or over 100 units/building

For SI: 1 square foot = 0.0929 m<sup>2</sup>.

- Plans and specifications are not required to be reviewed or approved by the Engineering Division ~~on~~ for buildings, ~~except city/county owned~~, that are located in a city or county inspection jurisdiction approved to perform plans review by the NC Building Code Council, ~~except city/county owned buildings are not exempt.~~
- Except temporary bleachers.

*Commentary: The square footage listed above refers to the footprint of a new building or building addition.*

*The occupant loads refer to a new building or building addition area only.*

*For the purpose of this table only, the occupant load for a church is based on the occupant load of the Occupant Group A-3 main meeting area. If the A-3 area is over 1,000 occupants, then DOI plan review is required unless exception 2 applies.*

*General Statute 58-31-40 indicates that such city/county owned buildings must be greater than 20,000 square feet (1858 m<sup>2</sup>) of new or additional building footprint to require DOI review. The 20,000 square feet (1858 m<sup>2</sup>) applies to individual structures on the site and not the sum of the structures.*

**104.1.2 Local plan review approval.** ~~1. A local~~ inspection department may make a written request to the Building Code Council to review plans and specifications on buildings listed in Table 104.1. This authority ~~shall~~ may be granted provided that the following is met:

- The inspection department is adequately staffed by code enforcement officials with Standard Level III Certificates issued by the North Carolina Code Officials Qualification Board in all areas and attest that the for Building, Electrical, Fire, Mechanical and Plumbing.
- The jurisdiction attests it is capable of performing required inspections within 2 business days of request for inspection as required by NCGS 143-139.4.

**104.1.3 List of approved local jurisdictions.** ~~2.~~ Local inspection departments approved under this section shall be listed on the Department of Insurance web page, or a list shall be provided by the Building Code Council Secretary. [www.ncdoi.com/osfm](http://www.ncdoi.com/osfm).

## SECTION 105 ALTERNATE MATERIAL, DESIGN OR METHODS

**105.1 Approval General.** The provisions of this code ~~the~~ technical codes are intended to allow the use of any alternate material, design or method of construction, provided that the alternate has been approved by the code enforcement official. An alternative material, design or method of construction shall be approved where the code enforcement official finds that the proposed alternative material, design or method of construction complies with ~~the intent and provisions of the technical codes~~ Section 105.2.

*Commentary: The technical codes are not intended to inhibit innovative ideas or technological advances. A comprehensive regulatory document, such as the North Carolina Building Codes, cannot envision and then address all future innovations in the industry. As a result, a performance code must be applicable to and provide a basis for the approval of an increasing number of newly developed, innovative materials, systems and methods for which no code text or referenced standards yet exist. The fact that a material, product or method of construction is not addressed in the technical codes is not an indication that such material, product or method is intended to be prohibited. The code enforcement official is expected to apply sound technical judgment in accepting materials, systems or methods that, while not anticipated by the drafters of the current code text, can be demonstrated to offer equivalent performance. By virtue of its text, the code regulates new and innovative construction practices while addressing the relative safety of building occupants. The code enforcement official is responsible for determining if a requested alternative provides the equivalent level of protection of public health, safety and welfare as required by the code.*

**105.2 Approval process.** The two paths for approval are a prescriptive method and a performance method as required in Sections 105.2.1 and 105.2.2.

**105.2.1 Prescriptive method.** The alternate method shall demonstrate equal or safer characteristics as required prescriptively by the technical codes.

**105.2.2 Performance method.** The alternate method shall demonstrate equal or safer performance as required by the technical codes.

*Commentary: "Prescriptive method" refers to sections of the technical codes that indicate a specific material or method. An example would be from the NC Residential Code the requirement that a pier footing for a 1-story house be 1'-4"x2'-0"x8". That would be the minimum footing size if the footing is designed prescriptively.*

*"Performance method" refers to sections of the technical codes that indicate minimum design value. The footing for the same pier as described above could be designed to a lesser size if the performance requirements of the NC Residential Code are met. An example could be that the dead and/or load loads of the structure supported by the pier are less than expected by the code or the soil capacity is greater than 2,000 psf. Any of these factors could reduce the size of the footing to less than that required prescriptively in the NC Residential Code.*

**105.2.3 Tests or analysis.** Whenever there is insufficient evidence of compliance with the provisions of the technical codes, or evidence that a material, design or method does not conform to the requirements of the technical codes, or in order to substantiate claims for an alternative material, design or method, the code enforcement official shall have the authority to require tests as evidence of compliance to be made at no expense to the authority having jurisdiction. Test methods shall be as specified in the technical codes or by other recognized test standards. In the absence of recognized and accepted test methods, the code enforcement official shall ~~approve the~~ have authority to review and approve or disapprove proposed testing procedures. The following are accepted testing agencies:

- a. A certified testing lab approved by the International Accreditation Service (IAS) for the specific standard that the alternate material or method is required by the code to comply.
- b. International Code Council approved testing agencies.
- c. Other testing agencies as approved by the local inspection jurisdiction.
- d. North Carolina registered design professionals providing sealed reports or evaluation letters in their area of expertise.
- e. Mechanical and electrical 3<sup>rd</sup> party testing agencies approved by the NC Office of State Fire Marshal in accordance with N.C.G.S. § 66-25 and § 143-139.1 and listed on their website at: [Third Party Testing Agencies | OSFM \(ncosfm.gov\)](https://www.ncosfm.gov).

### **105.3 Appeals.**

**105.3.1 Local government.** The local building safety agency and fire marshal shall establish documented procedures to address requests for acceptance of a proposed alternate method. The procedure shall be published and made available to the general public upon request. The procedure shall include a requirement for a written response by the local government to the requesting party for a properly submitted request for appeal. The procedure shall require an acceptance or denial response be issued by the local government in 10 business days or less from the date of receipt of the request by the local government. The response shall include the evidence and codes considered in the decision as well as conclusions drawn from the evidence and codes.



**105.3.2 Decision of local government.** Appeal a of local jurisdiction decision is directed to the NC Department of Insurance in accordance with Section 203.2.2.

**105.3.3 Decision of North Carolina Department of Insurance, Engineering Division.** Appeal of a NC Department of Insurance, Engineering Division decision is directed to the North Carolina Building Code Council in accordance with Section 202.9.

## SECTION 106 PERMITS

**106.1 Permit required.** A current permit is required for all work described in the technical codes unless specifically exempted by the North Carolina General Statutes or the technical codes.

*Commentary: Reference North Carolina General Statute 160D-1110 for exemptions.*

### 106.2 Drawings and specifications.

**106.2.1 Requirements.** Drawings and specifications, as required by the inspection department, shall be drawn to scale with sufficient clarity and detail to indicate the nature and character of the work and shall accompany the application for a permit. All information, drawings, specifications and accompanying data shall bear the name, address and signature of the person responsible for the design.

**Exception**~~Exceptions:~~

1. Projects using the Building Information Modeling-Integrated Project Delivery (BIM-IPD) process, see Section 106.2.3.1.
2. Residential buildings exempted by **NCCGS 160D-1110, paragraph (b).NCCGS 160D-1110(b).**

**106.2.2 Additional data.** The inspection department may require details, computations, stress diagrams or documentation sealed by a registered design professional and other data necessary to describe the construction or installation of a system.

**Exception:** Projects using the BIM-IPD process, see Section 106.2.3.1.

**106.2.3 Review and approval.** When the inspection department issues a permit, it shall approve, in writing or by stamp, all sets of drawings and specifications “Reviewed for Code Compliance.”

**Exception:** Nothing in this section shall require the review and approval of one- and two-family dwelling plans.

*Commentary: Drawings and specifications shall be kept in a manner prescribed by North Carolina General Statute 160D-1126.*

**106.2.3.1 Building Information Modeling—Integrated Project Delivery Process.** When proposed by the permit applicant and when acceptable to the authority having jurisdiction, the BIM-IPD process may be utilized, replacing the requirements of Section 106.2.3, with the following permitting and inspection steps.

1. At the project start, the owner’s project team (Architect, Engineer, contractor, et al.) shall meet with the Code Enforcement Official (CEO) to determine the prevailing code compliance strategy for the full scope of the project, to be documented in an electronic Appendix B format or an equivalent format, acceptable to the CEO.
2. The CEO may issue a single project master permit, based on the initial project description and code compliance strategy agreement.

*Commentary: The CEO should work collaboratively to review building components or details as scheduled by the owner’s project team.*

3. The CEO shall inspect built work, as described in Section 107 of this code.
  - 3.1 Concurrence on compliance with the code, with respect to both the model and built product, shall be gained before inspections are approved.
4. The owner’s project team shall submit a validation document, at project substantial completion, documenting the building as constructed and compliance with the *North Carolina State Building Code*, for

records retention by the Authority Having Jurisdiction. Validation document: may be a three dimensional model, two dimensional electronic drawings and records, or a combination of both, accurately reflecting the completed building as approved by the code official in the field, and verified with respect to same.

- Where the validation document varies from the approved virtual model regarding building code compliance, the related Architect/ Engineer must approve the change.
- Receipt of the validation document shall be a condition on issuance of Certificate of Occupancy.

#### 106.2.3.2 Definitions.

**BIM:** Model-based technology linked with a data base of project information, using three-dimensional, real time dynamic modeling software, to plan all building construction. The model encompasses building geometry, spatial relationships, geographic information, and quantities and properties of building components.

**IPD:** A project delivery method that integrates key participants (owner, Architect, Engineer, contractor, code official, et al.), systems, business structures and practices into a process that collaboratively plans and constructs facilities. The collaborative process begins in early design and continues through all phases of design, fabrication and construction.

*Commentary: This applies to any project delivery method employing three-dimensional modeling software, to virtually construct all building components, by a collaborative team based process from design start to construction completion.*

#### 106.3 Permit application.

**Note to RRC:** Below text was submitted to RRC in error on 11/20/23 as this amendment (210608 Item B-2) was not carried forward by the NCBCCC during its approval process.

**106.3.1 Information required.** A permit application shall be filed with the Inspection Department on a form (see Appendix A) furnished for that purpose. The Inspection Department shall make available a list of information which that must be submitted with the building permit application, including a complete Building Code Summary (see Appendix B) complying with 106.3.2.

**Exception:** A Building Code Summary is not required if the AHJ (Authority Having Jurisdiction) determines plan review can be performed without the Building Code Summary.

**106.3.2 Building Code Summary.** The Building Code Summary used by an AHJ shall be in the exact format as, and contain only the information in, Appendix B of the Administrative Code and Policies. An AHJ shall only modify the Building Code Summary as set forth in section 103.5 103.6 Modifications, or as necessary to reflect any changes by the Office of State Fire Marshal to Appendix B which that have been approved of by the Building Code Council.

**Note to RRC:** Above text was submitted to RRC in error on 11/20/23 as this amendment (210608 Item B-2) was not carried forward by the NCBCCC during its approval process.

**Note to RRC:** The text below was approved by the NCBCCC on 6/13/23 and was unchanged.

**106.3.1 Information required.** A permit application shall be filed with the ~~Inspection Department~~ inspection department on a form furnished for that purpose. The ~~Inspection Department~~ inspection department shall make available a list of information that must be submitted with the building permit application, including a complete building code summary (see Appendix A of the Administrative Code and Policies). The ~~Inspection Department's~~ inspection department's building code summary shall be in the exact format as, and contain only the information in, Appendix B of the Administrative Code and Policies. The ~~Inspection Department~~ inspection department shall only modify its building code summary as set forth in section\_103.5 Modifications, or as necessary to reflect any changes by the Office of State Fire Marshal to Appendix B that have been approved by the Building Code Council.

**Note to RRC:** The text above was approved by the NCBCCC on 6/13/23 and was unchanged.

**106.4 Site address signage.** It is the responsibility of the permit applicant or designee to post the 911 **emergency** site address on an active jobsite at the commencement of work regulated by the NC Building Codes. The signage shall be temporary or permanent per 106.4.1 or 106.4.3.

**106.4.1 Temporary signage.** Signage to identify a construction site location can be temporary. Acceptable temporary signage may include such items as a permit placard, an address written on job box, yard signage or other

approved temporary street name markers shall be required if permanent street signs are not in place for new developments or subdivisions.

**106.4.2 Temporary Signage Location.** Address signage shall be placed such that it is legible from the street or road that fronts the property at all times during construction.

**106.4.3 Permanent signage.** Address signage meeting the requirements of the *International Residential Code* Section R319 for One- and Two-family Dwellings, *International Building Code* Section 501.2 or *International Fire Code* Section 505.1 for commercial buildings shall be deemed as meeting the requirements of this section.

## **SECTION 107 CONSTRUCTION INSPECTIONS**

**107.1 General.** The inspection department shall perform the following inspections:

1. Footing inspection – 107.1.1;
2. Under slab inspection, as appropriate – 107.1.2;
3. Foundation inspection – 107.1.3;
4. ~~Rough-in inspection~~ Building framing – 107.1.4;
5. ~~Building framing inspection~~ Rough-in – 107.1.5;
6. Insulation inspection – 107.1.6;
7. Fire protection inspection – 107.1.7; and
8. Final inspection – 107.1.8.

*Commentary: The code enforcement official makes these inspections during certain phases of construction and is not on site at all times when construction is in progress. The code official verifies code compliance and/or code defects visible and subject to discovery during the above listed inspections and spot checks numerous similar items.*

*Nothing in any of Sections 107.1.1 through 107.1.8 requirements is intended to prevent partial inspections of the inspection types listed in Section 107.1 “General” as requested by the permit holder as allowed by the local inspection department. Cumulative partial inspections approved by the code official shall satisfy the same degree of readiness for inspection for viewing as described in Sections 107.1.1 through 107.1.8.*

*Not all items, such as, but not limited to, nailing of roof or other sheathing material, are always visible at framing inspection, but remain the responsibility of the permit holder to comply with the code.*

*Temporary electrical service poles may be inspected at any phase of construction as requested by the permit holder. Temporary utility (TU) applications deemed safe by the AHJ or as otherwise permitted by the code shall be allowed.*

**107.1.1 Footing inspection.** Footing inspections shall be made after the trenches are excavated, all grade stakes are installed, all reinforcing steel and supports are in place and tied, and all necessary forms are in place and braced before any concrete is placed.

**107.1.2 Under-slab inspection.** Under-slab inspections, as appropriate, shall be made after all materials and equipment to be concealed by the concrete slab are completed.

**107.1.3 Foundation inspection, crawl space.** Foundation and crawl space inspections shall be made after all foundation supports are installed.

*Commentary: Foundation inspections are conducted to verify correct installation and proper bearing support. Poured concrete and masonry walls that have reinforcement steel should be inspected prior to concrete placement. Crawl space leveling, ground clearances, positive drainage and waterproofing/dampproofing, when required, may be inspected at future inspections prior to concealment.*

~~107.1.5~~ **107.1.4 Building framing inspection.** Framing inspections shall be made after the roof (excluding permanent roof covering), wall ceiling, and floor framing is complete with appropriate blocking, bracing, and firestopping in place. The following items shall be in place and visible for inspection:

1. Pipes;
2. Chimneys and vents;

3. Flashing for roofs and chimneys;
4. Insulation baffles; and
5. All lintels that are required to be bolted to the framing for support shall not be covered by any exterior or interior wall or ceiling finish material before approval. Work may continue without approval for lintels supported on masonry or concrete.

**107.1.4**~~107.1.5~~ **Rough-in inspection.** Rough-in inspections shall be made when all building framing and parts of the electrical, plumbing, fire protection, or heating-ventilation or cooling system that will be hidden from view in the finished building have been placed, but before any wall, ceiling finish, or building insulation is installed.

*Commentary: Plumbing, mechanical, and electrical components installed underground should be considered as rough-in inspections and may be inspected at any point during construction prior to covering.*

**107.1.6 Insulation inspection.** Insulation inspections shall be made after an approved building framing and rough-in inspection and after the permanent roof covering is installed, with all insulation and vapor retarders in place, but before any wall or ceiling covering is applied.

*Commentary: Insulation baffles that cannot be seen at this inspection, such as vaulted ceilings with concealed rafter cavities, should have baffles installed at framing inspection for verification.*  
*It is acceptable that wall cavity insulation enclosed by an air barrier material behind tubs, showers, and fireplace units installed on exterior walls may not be observable by the code official.*

**107.1.6 Fire protection inspection.** Fire protection inspections shall be made in all buildings where any material is used for fire protection purposes. The permit holder or his agent shall notify the inspection department after all fire protection materials are in place. Fire protection materials shall not be concealed until inspected and approved by the code enforcement official.

*Commentary: Fire protection inspection is typically performed in commercial building structures and is required in addition to any special inspection as listed in Chapter 17 of the North Carolina Building Code.*

**107.1.8 Final inspection.** Final inspections shall be made for each trade after completion of the work authorized under the technical codes.

*Commentary: Each trade shall complete a final inspection giving approval to permitted work. Work required by the technical codes shall be complete before being requested. Temporary power and temporary certificate of occupancy (TCO) requests are allowed prior to final inspection.*

**107.2 Inspection requests.** It shall be the duty of the permit holder or his or her agent to notify the code enforcement official when work is ready for inspection and to provide access to and means for inspection of the work for any inspections that are required by this code.

**107.3 Approval required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code enforcement official. The code enforcement official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder that the work fails to comply with the technical codes. The code enforcement official shall identify code violations and when requested shall identify the specific sections of the technical codes that is violated. Any work that does not comply shall be corrected and shall not be covered or concealed until authorized by the code enforcement official.

**107.4 Independent inspections authorized by the code enforcement official.** The code enforcement official may authorize a North Carolina registered design professional to inspect the following structural elements, components and systems:

1. The excavation of soil and/or forming of footings with the associated placement of reinforcing steel prior to pouring concrete; and
2. The forming of floors, columns, beams and other structural members, including the placement of reinforcing steel prior to pouring concrete.

To utilize this procedure, the permit holder must continue to schedule all inspections normally required for this work by the inspection department. The registered design professional shall provide weekly reports bearing his seal to the inspection department indicating that the placement of the related construction elements, components and systems either complies or does not comply with the approved permit documents. Any change from the permit documents shall be approved by the code enforcement official prior to its implementation. The permit holder shall immediately inform the code enforcement official if he or she terminates his or her relationship with the registered design professional.

**107.5 Special inspections.** Special inspections required by the building code or the building inspector shall be performed by a North Carolina registered design professional or an inspector under his responsible charge.

**107.6 Inspections of component or element.** Acceptance of inspection of a component or element by a NC registered architect or engineer will require completion of the “Design Professional Inspection Form” found in Appendix G.

DRAFT

## CHAPTER 2

# ADMINISTRATIVE POLICIES

### SECTION 201 SCOPE

**201.1 Scope.** Chapter 2 is provided as procedural policies. ~~Items discussed in this chapter are intended as commentary to the General Statutes.~~

### SECTION 202 BUILDING CODE COUNCIL

www.ncbuildingcodes.com

**202.1 Duties.** The Building Code Council has the following duties:

- 1 Prepare and adopt the North Carolina State Building Code;
2. Revise or amend the ~~code~~ North Carolina State Building Code;
3. Hear appeals from decisions of state code enforcement agencies as to any matter related to the code;
4. Make a thorough and continuing study of the manner of enforcement of the code and building laws;
5. Make recommendations to State agencies about any changes in administrative practices which could improve the enforcement of the code or building laws; and
6. Recommend to the General Assembly statutory changes to simplify and improve the building laws.

(General Statutes 143-138, 143-140 and 143-142)

**202.2 Composition.** The Building Code Council shall consist of 17 members appointed by the governor as follows:

- ~~1 and~~ 2. Two registered architects;
- ~~3~~ 2. One licensed general contractor;
- ~~4~~ 3. One licensed general contractor specializing in residential construction;
- ~~5~~ 4. One licensed general contractor specializing in coastal residential construction;
- ~~6~~ 5. One licensed engineer practicing structural engineering;
- ~~7~~ 6. One licensed engineer practicing mechanical engineering;
- ~~8~~ 7. One licensed engineer practicing electrical engineering;
- ~~9~~ 8. One licensed plumbing and heating contractor;
- ~~10~~ 9. One municipal or county building inspector;
- ~~11~~ 10. One representative of the public who is not a member of the building construction industry;
- ~~12~~ 11. One licensed electrical contractor;
- ~~13~~ 12. One licensed engineer on the engineering staff of a State agency charged with approval of plans of State-owned buildings;
- ~~14~~ 13. One representative of the fire services;
- ~~15~~ 14. One licensed liquid petroleum gas dealer/contractor involved in the design of natural and liquified petroleum gas systems who has expertise and experience in natural and liquid petroleum gas piping, venting and appliances;
- ~~16~~ 15. One municipal elected official or city manager; and
- ~~17~~ 16. One county commissioner or county manager.

(General Statute 143-136)

**202.3 Officers and committees.** The Building Code Council shall elect a ~~chairman~~Chair and ~~vice-chairman~~Vice Chair from its appointed members. The officers shall serve for a period of two years from the date of election or until their successors are elected. The ~~Building Code Council~~NC Department of Insurance shall appoint a person from the Engineering Division to serve as secretary to the Building Code Council ~~from the Engineering Division of the Department of Insurance.~~

(General Statute 143-137)

**202.4 Meetings.** The Building Code Council shall meet regularly at least every 6 months. Special meetings may be called by the ~~chairman~~Chair. Any seven members of the Building Code Council shall constitute a quorum. Information concerning the exact time and place of all regular meetings and regular public hearings shall be made available to the public by the Engineering Division of the Department of Insurance 60 calendar days prior to each such meeting or public hearing. Information concerning the exact time and place of ~~each~~all ~~meetings~~special meetings with public hearings required to be noticed in the NC Register shall be made available ~~from~~to the public by the Engineering Division of the Department of Insurance 15 calendar days prior to each such meeting. Information concerning the exact time and place of all special meetings that do not have public hearings required to be noticed in the NC Register shall be made available to the public by the Engineering Division of the Department of Insurance 7 calendar days prior to each such meeting. Agenda items, other than proposed amendments, must be submitted to the Building Code Council Secretary 21 calendar days prior to the scheduled meeting.

(General ~~Statute 143-137~~Statutes143-137 and 143-138)

**202.5 Proposed amendments.** The Building Code Council may revise or amend the code, either on its own motion or upon application from any person, state agency or political subdivision of the state. Each request to amend the code shall comply with the following policies ~~of the Building Code Council:~~

**202.5.1 Filings.** Twenty-one ~~copies~~hardcopies or a single pdf with an editable softcopy of the proposed amendment with supporting documentation shall be filed with the Building Code Council Secretary.

**202.5.1.1 Improper filings.** When a request proposed amendment is improperly filed or not in accordance with ~~all the rules listed above~~Sections 202.5.1 through 202.5.3, the Building Code Council Secretary shall reject the submittal and notify the applicant of the proper procedure to follow.

**202.5.2 Submission date.** The proper filing shall be received by the first day of the month prior to the ~~quarterly~~next scheduled ~~council~~Council regular meeting date.

**202.5.3 Filing format and required information.** Each request proposed amendment shall be legibly printed, typed or copied on a form (see Appendix C) available from the North Carolina Department of Insurance, Building Code Council section and shall at a minimum contain the following:

1. The proposed amendment must be set forth in full and contain an explicit reference to the affected section or sections of the code;
2. The request shall state the reasons for the proposed amendment with supporting documentation;
3. The proposed amendment shall comply with the standards set forth in General Statute 143-138(c) and reference to the particular standards shall be set forth in the request for the amendment; and
4. The proposed amendment shall contain an economic impact analysis as required by General Statute 143-138(a1).

**202.5.4 Secretary duties.** Upon the proper filing of a request proposed amendment, the Building Code Council Secretary shall forward one copy of said request proposed amendment to each ~~council~~Council member prior to the scheduled meeting date. Persons filing proposed amendment petitions are hereby notified of the place and time of the scheduled ~~hearings-meetings~~hearings-meetings. The Building Code Council Secretary shall cause agendas to be published for all meetings and public hearings. The Building Code Council Secretary shall cause to be published the notice of public hearing as specified in North Carolina General Statutes 143-138(a).

**202.5.5 Actions taken.** This section addresses actions taken by the North Carolina Building Code Council for properly filed petitions for rulemaking (code amendments).

**202.5.5.1 New petitions for ~~rulemaking~~rulemaking (B-items).** Prior to the next scheduled ~~council~~Council meeting:

**202.5.5.1.1 Council ~~chair~~Chair.** The ~~council chair~~Council Chair shall assign each proposed amendment to the appropriate standing committee chair(s).

**202.5.5.1.2. Standing committee.** The standing committee(s) shall review the proposed amendment and the chair(s) of the committee(s) shall then, based on the committee review, recommend to the ~~council~~Council:

- a. denial;
- b. acceptance;
- c. acceptance with committee modifications; or,

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d. tabling the proposed amendment to the next scheduled council meeting pending further review by the committee(s) or an ad-hoc committee appointed by the council chair.

**202.5.5.1.3 Council.** The council will determine whether the proposed amendment or committee modified proposed amendment will be accepted, denied or tabled for further review by the standing committee or an ad-hoc committee. For proposed amendments that are sent to a committee or ad-hoc committee for review, the council shall set a date for the committee to issue its findings to the council.

The council will take no further action on items that are denied. Granted items may be referred to committee for review (General Statute 150B-20(d)). The Secretary to the council shall inform the proponent of the proposed amendment in writing of the reason for the denial (General Statute 150B-20(c)).

**202.5.5.2 Notice of rulemaking proceedings and public hearing (C-items).** AmendmentsProposed amendments that are approved by the council in Section 202.5.5.1.3 shall be:

- a. included in the agenda for the following council meeting;public hearing;
- b. advertised by the North Carolina Office of Administrative Hearings for public hearing as required by General Statute 150B-21.2; and,
- c. advertised on the North Carolina Department of Insurance website a minimum of 15 calendar days prior to the public hearing date.

**202.5.5.3 Final adoption (D-items).** The Building Code Council shall either grant or deny properly submitted proposed petitions for rulemaking amendments at the meeting following the public hearing required by Section 202.5.5.2. Granted proposed amendments shall be published on the North Carolina Department of Insurance website within 30 days after the adopted amendment is reviewed and approved by the North Carolina Rules Review Commission and in accordance with Section 202.6.1.

The council will take no further action on items proposed amendments that are denied. AmendmentsProposed amendments that are substantially similar to a denied proposed amendment cannot be resubmitted for consideration by the council for a minimum of 12 months from the date of the denial.

**202.5.5.4 North Carolina Rules Review Commission.** A proposed amendment that is granted by the council is not adopted or but is not published as adopted until it has been approved by the Rules Review Commission. If the commission sends an adopted amendment back to the council for further work, the revised proposed amendment shall be readoptedis not considered adopted and will not be published as adoptedreadopted until it is resubmitted to the commission and the commission approves the adopted amendment. Amendments are not approved for use based on the effective date under which the amendment was adopted by the Council until approved by the commission.

**202.5.6** The Building Code Council shall either grant or deny the proposed petition for rule making at the meeting following receipt of the proposed rule change. The council will take no further action on items that are denied. Granted items may be referred to committee for review.

**202.5.7** The Building Code Council may hold a public hearing on granted items at the next quarterly scheduled meeting. The council may take final action on granted items at the next quarterly scheduled meeting after the public hearing.

**Table 202.5.5  
Typical Timeline Example for Adopted Rules**

Rule Petition Received:	February 1
Standing Committee First Review:	February – March
Rule Petition Granted for Public Hearing:	March BCC meeting
Notice of Hearing Published:	April NC Register
Committee Review:	April – May
Hearing Held:	June BCC meetingpublic hearing
Standing Committee Final Review:	June – September
Final Rule Adoption:	September BCC meeting
Rules Review Meeting:	November RRC meeting
Approved:Effective:	December – First day of the month following the month the adopted rule is approved by RRC or a delayed effective



date approved by the BCC.

## 202.6 Publications.

**202.6.1 Amendments.** The Building Code Council shall print all amendments to the codes, and the amendments shall be available for distribution in accordance with General Statute 143-138(g). Publication of adopted amendments on the Building Code Council website is deemed to meet the publication requirement of General Statute 143-138(g). Amendments, Notices meeting and public hearing notices and minutes are available either at no charge on the Council web page or for a fee as prescribed by Agency Rules page.

**202.6.2 Council webpage.** The minutes and agenda of the Building Code Council may be found on the Council web page located at <http://www.ncbuildingcodes.com> <https://www.ncosfm.gov/codes/building-code-council-bcc/meeting-dates>. Click on the desired information topic.

**202.6.3 Engineering newsletter.** Newsletters will be sent to online subscribers. Archive copies may be found on the Engineering web page located at <http://www.ncdoi.com/osfm>. Click on Building Codes to subscribe.

**202.7 Approval of local ordinances.** The Building Code Council may approve local regulations governing the Fire Prevention Code. All regulations shall be approved by the Building Code Council in order to be legally effective. Regulations approved by the local governing body, which are found to be more stringent than the fire prevention code and, which are found to regulate activities and conditions in buildings, structures, and premises that pose dangers of fire, explosion or related hazards, and are not in conflict with the North Carolina Building Code, shall be approved once reviewed and filed by the Building Code Council. The rules listed in Section 202.5 shall apply for filing a proposed local deviation to the Fire Prevention Code along with the following:

1. Twenty-one copies hardcopies or a single pdf and editable soft copy of the resolution adopted by the governing body requesting the proposed deviation to the fire prevention code.
2. After approval by the Building Code Council, the Building Code Council Secretary shall advise the local governing body and shall retain a copy in the Building Code Council's file as a permanent record.

[General Statute 143-138(e)]

## 202.8 Committees.

**202.8.1 Super committees.** There are two supercommittees designated by N.C.G.S. 143-136, commercial committee and residential committee. The duties of those committees are to, in their respective areas of authority, approve or deny proposed code amendments prior to the amendment being addressed by the full council Council and make recommendations to the full council Council regarding appeals before the council Council.

**202.8.2 Standing committees.** The standing committees shall consist of members of the Building Code Council. The Chairman Chair of the Building Code Council shall appoint the chairmen and members of each committee.

**202.8.3 Ad hoc committees.** For each code edition, the Chairman Chair shall establish and appoint ad hoc code revision committees and appoint the chairmen. The ad hoc committees shall consider and prepare revisions and amendments to the code volumes. Each ad hoc committee shall consist of members of the Building Code Council, Department of Insurance staff, licensed contractors, and design professionals most affected by the code volume for which the ad hoc committee is responsible and members of the public.

### Guidelines for Ad Hoc Committees:

1. Ad Hoc committee is asked to approach its Approach code review with the idea of producing a newly amended code with as few changes from the 2009 ICC model codes as the committee deems practicable.
2. Current Code shall be considered base line baseline for code comparison.
3. Ad Hoc committee is asked to provide Provide a list of major changes to the Standing Committee and Council for review.
4. If code changes are thought to be controversial, it is suggested that the Ad Hoc committee consider Consider handling such complex code change-items as separate standalone code changes changes to avoid adoption delays of code volumes.
5. Ad Hoc committees shall submit its report to the appropriate Standing Committee for review.
6. After its review, the Standing Committee is asked to make a recommendation to the Building Code Council for adoption.

**202.8.4 Hearing committee.** The chairman Chair may appoint a hearing committee to hear an appeal.

## 202.9 Appeals. [General Statute 143-141(d)]

**202.9.1 Engineering division.** A written technical interpretation shall be provided as specified in Section 203.2.1.2.

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Any person may appeal in writing an order, decision or ~~determination~~interpretation pertaining to the code or any state building law by filing written notice with the Commissioner of Insurance or his designee within 10 calendar days after the order, decision or ~~determination~~interpretation. A copy of the appeal shall be furnished to each party. (General Statutes 143-140 and 160D-1127)

**202.9.2 Building Code Council.** The Building Code Council shall hear appeals from the decisions of state enforcement agencies relating to any matter related to the code. Any person wishing to appeal a decision of a state enforcement agency to the Building Code Council shall give written notice of appeal as follows:

**202.9.2.1 Filing.** Twenty-one ~~copies~~hardcopies including an original of the Notice of Appeal or a single pdf and editable softcopy shall be filed with the Building Code Council c/o North Carolina Department of Insurance, Engineering Division, 325 North Salisbury Street, Room ~~5-44542~~, Raleigh, North Carolina 27603, and one copy shall be filed with the state enforcement agency from which the appeal is taken.

**202.9.2.2 Submission date.** The Notice of Appeal shall be received no later than 30 days from the date of the decision of the State enforcement agency. (General Statute 143-141).

**202.9.2.3 Filing format and required information.** The Notice of Appeal shall be legibly printed, typewritten or copied and shall contain the following (See Appendix E):

1. Name, address of the party or parties requesting the appeal.
2. The name of the state enforcement ~~agency~~and the date of the decision from which the appeal is ~~taken, and a copy of the written decision received from the enforcement agency taken.~~
3. The decision from which the appeal is taken shall be set forth in full in the Notice of Appeal or a copy of the decision shall be attached to all copies of the Notice of Appeal.
4. The contentions and allegations of fact must be set forth in full in a clear and concise manner with reference to the sections of the code in controversy.
5. The original Notice of Appeal shall be signed by the party or parties filing appeal.
6. The Notice of Appeal shall be received by the first day of the month prior to the Building Code Council's quarterly scheduled meeting in order to be placed on the agenda for that meeting. The ~~Chairman~~Chair may schedule a special meeting to hear an appeal.

**202.9.2.4 Secretary duties.** Upon the proper filing of the Notice of Appeal, the Building Code Council Secretary shall forward one copy of the Notice of Appeal to ~~each member of the attorney for the Building Code Council and the council's~~Council's attorney shall distribute the appeal ~~as necessary~~ to each ~~council~~Council member.

**202.9.2.5 Hearing Committee.** The ~~chairman~~Chair may appoint a Hearing Committee to hear appeals. The Secretary shall send notice in writing to the party or parties requesting an appeal and to the Building Code Council Hearing Committee members at least 15 days prior to the Hearing Committee meeting. A written decision of the Hearing Committee meeting shall be provided to all Building Code Council Members. The actions of the Hearing Committee shall be final, unless appealed to the full Building Code Council in writing within 30 days of the Hearing Committee's action. If a Hearing Committee consists of at least seven ~~council~~Council members, it will constitute a quorum of the full ~~council~~Council. Further appeals shall be as specified in Section 202.9.3.

**202.9.2.6 Dismissal.** The Building Code Council shall, upon a motion of the State enforcement agency or on its own motion, dismiss appeals for the following reasons:

1. Not pursued by the appellant or withdrawn;
2. Appeal not filed in accordance with these rules; or
3. Lack of jurisdiction by the Building Code Council.

**202.9.2.7 Findings.** When the Building Code Council finds that a State enforcement agency was in error in its interpretation of the code, the Building Code Council shall remand the case to the agency with instructions to take such actions as the Building Code Council directs. When the Building Code Council finds on appeal that materials or methods of construction proposed are equivalent to those required by the code, the Building Code Council shall remand the case to the state enforcement agency with instructions to permit the use of such materials or methods of construction. The Building Code Council shall immediately initiate procedures for amending the code to permit the use of such materials or methods of construction.

**202.9.2.8 Decision.** The Building Code Council shall provide a written decision setting forth the findings of fact and the Building Code Council's conclusions to each party or parties filing the appeal and to the State enforcement agency from which the appeal was taken.

**202.9.3 Superior court.** Whenever any person desires to appeal a decision of the Building Code Council or a decision of a State or local enforcement agency, he may appeal either to the Wake County Superior Court or the superior court of the county in which the proposed building is to be situated in accordance with the provisions of

Chapter 150B of the General Statutes.

~~[General Statute 143-141(d)]~~

**SECTION 203  
NORTH CAROLINA DEPARTMENT OF INSURANCE**

www.ncdoi.com/osfm

**203.1 Administration.**

**203.1.1 Commissioner of Insurance.** The Commissioner of Insurance through the Engineering Division shall have general supervision of the administration and enforcement of the North Carolina State Building Code. This includes all sections of the code pertaining to:

1. General building restrictions and regulations;
2. Plumbing;
3. Heating and air conditioning;
4. Electrical systems;
5. Fire protection; and
6. Natural or liquified petroleum gas systems. ~~[General Statute 143-139(b)]~~

~~(General Statute 143-139(b))~~

**203.1.1.1 Investigation of fires.** Whenever the Commissioner of Insurance has reason to believe that investigators of fire or fire prevention inspectors are not fulfilling their responsibilities, he or his ~~designee~~ deputy shall take proper steps to have all provisions of the law enforced.

(General Statute 58-2-95)

**203.1.1.2 Investigation of premises for dangerous materials.** The Commissioner of Insurance or his or her designee shall hear appeals from orders issued by the code enforcement official to remove or remedy combustible materials or inflammable conditions dangerous to any building or premises. The appeal shall be made within 24 hours of issue, not counting weekends or holidays. The commissioner shall cause the complaint to be investigated immediately. The Commissioner or his or her designee may make inspections of the complaint alone or in the company of the code enforcement official. Unless the Commissioner by his or her authority revokes the order of the code enforcement official, the order remains in force and must be complied with by the owner or occupant.

(General Statute 58-79-20)

**203.1.1.3 Buildings within primary fire limits.** The Commissioner of Insurance or his or her designee shall review all permits to erect, alter, repair or move any wood-frame building or structure within the primary fire district of a municipality. Such permits shall be received and approved by the ~~Inspection Department~~ inspection department and approved by the ~~Municipal Council~~ governing board prior to the Commissioner or his or her designee's approval.

(General Statute 160D-1128)

**203.2 Engineering Division.** The Engineering Division of the Department of Insurance shall serve as staff for the Building Code Council and the Code Official's Qualification Board. The Engineering Division shall work in cooperation with code enforcement officials and provide general supervision in the administration and interpretation of the codes. The staff shall handle correspondence and maintain an accurate and complete record of:

1. All meetings or hearings,
2. Laboratory studies, and
3. Technical work performed by or for the Building Code Council.

All records shall be available for public inspection during regular office hours. All funds for the operation of the Building Code Council shall be appropriated to the Department of Insurance. The Department of Insurance may hire additional staff as may be necessary to handle the work of the Building Code Council with the approval of the ~~council~~ Council.

[General Statute 143-137(c)]

**203.2.1 Interpretations.**

**203.2.1.1 Informal interpretations.** The Engineering Division shall provide informal interpretations on code-related matters either by e-mail, letter or telephone. These informal interpretations may be accepted by the local code enforcement official or party requesting the interpretation. Either party may request a formal interpretation

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of the code.

**203.2.1.2 Formal interpretations.** Any person may request in writing a formal interpretation of the code. The request shall be addressed to the Chief Code Consultant for the Department of Insurance. The request shall be specific and shall reference the code sections in question. All formal interpretations shall be in writing and include Appendix E as a cover document. A formal interpretation shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. Formal interpretations determined to be of a general nature may be posted on the department web site.

(General Statute 143-140)

**203.2.2 Appeals.** Any person may appeal in writing an order, decision or determination of a code enforcement official pertaining to the code or any state building law. The appeal shall be addressed to the Chief Engineer for the Department of Insurance by filing written notice within 10 days after the order, decision or determination. The appeal shall contain the type and size of the building in question, the location of the building and shall reference the code sections in question. The decision shall be in writing and shall set forth the facts found. The decision rendered shall be based on the technical provisions of the code, public health and safety and shall be construed liberally to those ends. A decision shall be binding on all parties unless an appeal is submitted to the Building Code Council as specified in Section 202.9.2. A copy of the appeal and written decision shall be furnished to each party. A decision regarding an appeal of alternate material, design, or methods as allowed by Section 105.3 shall be provided in 10 business days or less as required by General Statute 143.140.1.

(General Statute 160D-1127)

**203.2.3 Code Errata.** It shall be the responsibility of the Chief Code Consultant for the Department of Insurance to issue errata to the NC State Building Codes. Before publishing an errataerrata, the errata shall be reviewed by the Chair of the NC Building Code Council standing committee for the related code. The errata shall be published on the Department of Insurance website with the code amendments.

**203.2.3 Engineering newsletter.** Newsletters will be sent to online subscribers. Archive copies may be found on the Engineering web page located at <https://www.ncosfm.gov/Newsletters>. To subscribe to engineering newsletters go to [https://lists.ncmail.net/mailman/listinfo/ncdoi\\_engineering](https://lists.ncmail.net/mailman/listinfo/ncdoi_engineering).

## SECTION 204 CITY AND COUNTY GOVERNMENT

[www.ncgov.com](http://www.ncgov.com)

(Click on "For Government, Local Government")

**204.1 General.** The powers, duties and responsibilities of the code enforcement official are generally described in General Statute 160D, Article 11. This section does not apply to properties owned by state and federal government entities unless specifically requested by those entities.

### 204.2 Inspection department.

**204.2.1 General.** The responsibility for administration and enforcement of the code has been allocated to local code enforcement officials under the supervision of State officials as designated within Section 203.  
[General Statute 143-139(b)]

**204.2.2 Jurisdiction.** A municipal inspection department shall have jurisdiction over all areas within the city limits, all extraterritorial areas that the city has jurisdiction pursuant to state laws, and over any areas in which the municipal limits have contracted with another unit of government to perform code enforcement. A county inspection department shall have jurisdiction over all unincorporated areas outside any municipal jurisdiction located within the county, all areas in which a municipality has requested the county to enforce the code, and within the jurisdiction of another unit of government in which the county has contracted to perform code enforcement. A joint inspection department created by two or more units of government shall have the authority to enforce the code in all areas of legal jurisdiction of all units of government supporting the joint department.  
(General Statutes 160D-1104 and 160D-1107)

**204.2.3 Duties.** Inspection departments shall:

1. Receive applications and supporting data for permits;
2. Issue or deny permits;
3. Make all necessary inspections to ensure code compliance;
4. Identify technical provisions found to be inconsistent with the inspection;
5. Issue or deny certificates of compliance and certificates of occupancy;
6. Issue stop work orders or orders to correct violations;

7. Maintain adequate records of permits issued or denied, inspections made, corrections ordered and certifications issued; and
8. Take other actions that may be required to adequately enforce the code.

(General Statute 160D-1104)

**204.2.4 Code enforcement officials qualifications.** No state or local government employee shall enforce any provision of the North Carolina State Building Codes who does not possess an appropriate valid certificate issued by the North Carolina Code Officials Qualification Board as specified in General Statutes 143-151.13 and 160D-1103.

**204.2.5 Conflict of interest.** Information about conflict of interest for code enforcement officials can be found in General Statute 160D-1108.

**204.2.6 Right of entry.** The code enforcement official shall have the right to enter buildings or premises as described in General Statutes 160D-1113 and 160D-1117.

**204.2.7 Stop work orders.** General Statute 160D-404 authorizes a code enforcement official to issue stop work orders. The statute describes when a stop work order can be issued, and how the stop work order is to be issued. See Section 204.10 for appeal of stop work orders.

**204.2.8 Unsafe building or systems.** A code enforcement official's authority to condemn an unsafe building is found in General Statute 160D-1119.

**204.3 Fire prevention department.**

**204.3.1 General.** The responsibility for administration and enforcement of the North Carolina Fire Prevention Code has also been allocated to county fire marshals and city fire chiefs under the supervision of State officials as designated within Section 203.

(General Statutes ~~160A-292~~, 160A-291, and 160A-292)

**204.3.2 Jurisdiction.** A municipal fire department shall have jurisdiction over all areas within the city limits, all extraterritorial areas that the city has jurisdiction pursuant to state laws, and over any areas in which the municipal limits have contracted with another unit of government to perform code enforcement. The county fire marshal and his or her appointed assistants shall have jurisdiction over all unincorporated areas outside any municipal jurisdiction located within the county, all areas in which a municipality has requested the county to enforce the code, and within the jurisdiction of another unit of government in which the county has contracted to perform code enforcement. A joint inspection department created by two or more units of government shall have the authority to enforce the code in all areas of legal jurisdiction of all units of government supporting the joint department.

(General Statutes 153A-234, 160A-292, 160D-1104 and 160D-1107)

**204.3.3 Duties.** Fire prevention departments shall:

1. Receive applications and supporting data for permits;
2. Issue or deny permits;
3. Make all necessary inspections to ensure code compliance;
4. Identify technical provisions found to be inconsistent with the inspection;
5. Issue or deny certificates of compliance and certificates of occupancy;
6. Issue stop work orders or orders to correct violations;
7. Maintain adequate records of permits issued or denied, inspections made, corrections ordered and certifications issued;
8. Take other actions that may be required to adequately enforce the code; Code enforcement actions;
9. Investigate the cause, origin, and circumstances of every fire in which property has been destroyed or damaged;
10. Inspect public school buildings a minimum of two times during a calendar year for removal of hazards, provided that the periodic inspections shall be at least 120 days apart; and
11. Inspect new and existing lodging establishments, including hotels, motels, and tourist homes that provide accommodations for seven or more continuous days (extended-stay establishments), bed and breakfast inns, and bed and breakfast homes for the installation and maintenance of carbon monoxide alarms and detectors annually.

(General Statutes 160D-1104, 58-79-1, 115C-525(b), 130A-247, and 143-138(b)(2))

**204.3.4 Fire code enforcement official's qualifications.** No county fire marshal or municipal fire chief or their appointed assistants shall enforce any provision of the North Carolina State Building Codes who does not possess an appropriate valid certificate issued by the North Carolina Code Official's Qualification Board as specified in General Statutes 143-151.13 and 160D-1103.

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**204.3.5 Conflict of interest.** Information about conflict of interest for code enforcement officials can be found in General Statute 160D-1108.

**204.3.6 Right of entry.** The fire code enforcement official shall have the right to enter buildings or premises where it is necessary to make a fire prevention inspection to enforce the provisions of the North Carolina Fire Prevention Code or where otherwise authorized as described in General Statutes 153A-234, 160A-292, 160D-1113 and 160D-1117.

**204.3.7 Administrative Inspection Warrants.** Where the fire code enforcement official has first obtained a proper inspection warrant to secure entry to conduct an inspection, an owner, the owner's authorized agent, or occupant or person having charge, care or control of the building or premises shall not fail or neglect, to permit entry therein by the fire code enforcement official for the purpose of inspection and examination.

(General Statute 15-27.2)

**204.3.8 Identification.** The fire code enforcement official shall carry proper identification credentials when inspecting structures or premises in the performance of duties, and shall present proper credentials when making inspections.

(General Statute 160D-1117)

**204.3.9 Stop work orders.** General Statute 160D-404 authorizes a fire code enforcement official to issue stop work orders. The statute describes when a stop work order can be issued, and how the stop work order is to be issued. See Section 204.10 for appeal of stop work orders.

**204.3.10 Unsafe building or systems.** A fire code enforcement official's authority to condemn an unsafe building is found in General Statute 160D-1119.

### ~~204.3~~204.4 Permits.

~~204.3.1~~204.4.1 **General.** No person may commence or proceed with:

1. The construction, reconstruction, alteration, repair, movement to another site, removal or demolition of any building;
2. The installation, extension or general repair of any plumbing system;
3. The installation, extension, alteration or general repair of any heating or cooling equipment system; or
4. The installation, extension, alteration or general repair of any electrical wiring, devices, appliances or equipment without first securing from the Inspection Department inspection department with jurisdiction over the site of the work each permit required by the North Carolina State Building Codes and other State or local law or local ordinance or regulation applicable to the work.

(General Statute 160D-1110)

~~204.3.2~~204.4.2 **Validity Expiration.** In accordance with General Statute 160D-1111, a permit expires 6 months, or any lesser time fixed by local ordinances, after the date of issuance if the work authorized by the permit has not been commenced. If, after commencement, the work is discontinued for a period of 12 months, the permit immediately expires. No work authorized by a permit that has expired may be performed until a new permit has been issued.

~~204.3.3~~204.4.3 **Changes in work.** Work shall not deviate substantially from that described on the permit documents.

~~204.3.4~~204.4.4 **Information required.** A permit application shall be filed with the Inspection Department inspection department on a form furnished for that purpose. The Inspection Department inspection department shall make available a list of information which must be submitted with the building permit application, including a complete building code summary (see Appendix B) and a permit application information sheet (see Appendix A).

~~204.3.5~~204.4.5 **Design professional seal required.** Where the General Statutes, North Carolina Board of Architecture and Registered Interior Designers, or the North Carolina Board of Examiners for Engineers and Land Surveyors require, no permit shall be issued unless the construction documents (drawings and specifications) bear the North Carolina seal of a registered design professional. Construction documents shall include the name and address of the business entity (individual, corporation or partnership) with whom the registered design professional is affiliated. Questions concerning this section should be directed to the North Carolina Board of Architecture and Registered Interior Designers, the North Carolina Board of Examiners for Engineers and Land Surveyors, or the National Institute for Certification Engineering Technologies (NICET) Board of Governors.

(General Statute 83A-10 and 83A-13)

~~204.3.5.1~~204.4.5.1 **Registered design professional.** The registered design professional shall be a registered architect, registered interior designer, licensed professional engineer or NICET Level III sprinkler or fire alarm designer legally registered or licensed under the laws of this state.

~~204.3.6~~204.4.6 **Contractor license required.** When the General Statutes require that general construction,

plumbing, mechanical, electrical, fire protection or gas work be performed by an appropriately licensed individual, no permit for such type work shall be issued to an unlicensed person or firm. Additional requirements may be found in General Statutes 87-14, 87-21(e), 87-43.1, 87-58, 153A-134, 160A-194 and 160D-1110.

**204.3.7204.4.7 Contractor responsibilities.** It shall be the duty of every person who contracts for the installation or repair of a building or service system to comply with State or local rules and regulations concerning licensing. It shall be the contractor’s responsibility to conform to the technical codes for all installations or repairs of a building or service system.

**204.4204.5 Issuing permits.**

**204.4.1204.5.1 Action on permits.** In accordance with General Statute 160D-1110, the **Inspection Department inspection department** shall examine each application for a permit to determine if it is in compliance with the requirements of the technical codes and other pertinent laws and ordinances. If the inspection department is satisfied that the work described in the application conforms to the requirements of the technical codes and other pertinent laws and ordinances, it shall issue a permit to the applicant. If the application does not conform to the requirements of the technical codes and other pertinent laws and ordinances, the application shall be returned to the applicant with the reasons for refusal stated.  
(General Statute 160D-1104 and 160D-1110)

**204.4.2204.5.2 Permits for modular construction.** Permits shall be required for the installation, connection of units, foundations, utility connections or alterations of buildings or components manufactured off the site and labeled by a third-party agency accredited and listed by the Building Code Council.

**204.4.2.1204.5.2.1 Third-party certification agencies.** Third-party certification agencies shall be accredited and listed by the Building Code Council. Inspection and certification of buildings or components manufactured off the site and labeled by a third-party agency shall be accepted by the inspection department without further inspection. Permits and fees may be required for any installation, connection of units, foundations, utility connections or alterations of such work.

**204.5204.6 Conditions of the permit.**

**204.5.1204.6.1 Contractor responsibilities.** It shall be the duty of every person who contracts for the installation or repair of a building or services system to comply with state or local rules and regulations concerning licensing. It shall be the contractor’s responsibility to conform to this code and the technical codes for all installations or repairs of a building or service system. Violations and penalties of these provisions are listed in Sections 204.12 through 204.14 of this code. Additional requirements can be found in General Statutes 87-1 through 87-14.

**204.5.2204.6.2 Permit intent.** A permit issued shall be construed as permission to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes. Issuance of a permit shall not prevent the inspection department from requiring correction of errors in plans, construction or violations of this code.  
(General Statute 160D-1110)

**204.5.3204.6.3 Revocation of permits.**

**204.5.3.1204.6.3.1 Misrepresentation of application.** The code enforcement official shall revoke, in writing, a permit or approval issued under the provisions of this or the technical codes for:

1. Any substantial departure from the approved application, drawings or specifications;

*Comment: Change of contractor or subcontractor is considered a substantial departure from the approved application.*

2. Refusal or failure to comply with the requirements of any applicable State or local laws; or,
3. Any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.
4. See the North Carolina Fire Prevention Code for other permit revocation requirements.

**204.5.3.2204.6.3.2 Violation of code provisions.** The code enforcement official may revoke a permit upon determination that the work for which the permit was issued is in violation of, or not in conformity with, the provisions of this or the technical codes.  
(General Statute 160D-1115)

**204.6204.7 Fees.**

**204.6.1204.7.1 Fees.** A permit shall not be issued until the fees prescribed by the local governing authority have been paid. No amendment to a permit shall be released until the additional fee, if any, has been paid.  
(General Statute 160D-402)

## ADMINISTRATIVE POLICIES

~~204.6.2~~**204.7.2 Work commencing before permit issuance.** If any person commences any work on a building or service systems before obtaining the necessary permit, he or she shall be subject to a penalty as established by the local governing body.  
(General Statutes 160D-402)

~~204.7.2~~**204.8 Inspections.** In addition to the inspections required by Section 107, the code enforcement official shall provide inspections as required by Sections 204.8.1 and 204.8.2.

~~204.7.1~~**204.8.1 Periodic inspections for hazardous or unlawful conditions.** The inspection department shall make periodic inspections as specified in General Statute 160D-1117.

~~204.7.2~~**204.8.2 Required public school inspections.** Inspections of schools for fire hazards shall be in accordance with General Statute 115C-525(b).

~~204.8.2~~**204.9 Certificate of compliance.**

~~204.8.1~~**204.9.1 Building occupancy.** A new building shall not be occupied or a change made in the occupancy, nature or use of a building or part of a building until after the inspection department has issued a certificate of compliance. The certificate of compliance shall not be issued until all required service systems have been inspected for compliance with the technical codes and other applicable laws and ordinances and released by the inspection department.  
(General Statute 160D-1116)

~~204.8.2~~**204.9.2 Certificate of compliance.** Upon satisfactory completion of a building, plumbing, mechanical, electrical, fire protection or gas system, or portion thereof, a certificate of compliance shall be issued. The certificate of compliance represents that a structure or system is complete and for certain types of permits is permission granted for connection to a utility system. The certificate of compliance shall not be construed to grant authority to occupy a building.  
(General Statute 160D-1116)

~~204.8.3~~**204.9.3 Temporary/partial occupancy compliance.** A temporary/partial certificate of compliance may be issued permitting occupancy for a stated period for specific portions of a building or service system that the inspector finds safe for occupancy prior to final completion of the entire building or system.  
(General Statute 160D-1116)

**204.10 Certificate of occupancy.**

~~204.8.4 Issuing certificate of occupancy.~~**204.10.1 Building occupancy.** A new building shall not be occupied until after the inspection department has issued a certificate of occupancy. Upon satisfactory completion of a building and after ~~the an~~ approved final inspection, the inspection department ~~may~~ shall issue a certificate of occupancy stating the occupancy that may be safely occupied. ~~The certificate of occupancy shall state the occupancy may be safely occupied.~~ See section 204.8.4.1 for application of upfits and shell buildings.

~~204.8.4.1~~**204.10.1.1 Existing buildings.** A certificate of occupancy for any existing building, including upfits and shell buildings, may be obtained by applying to the inspection department and supplying the information and data necessary to determine compliance with the technical codes for the occupancy intended. Where necessary, the code enforcement official may require detailed drawings and inspections to determine compliance with the applicable codes. When, upon examination and inspection, it is found that the building conforms to the provisions of the technical codes and other applicable laws and ordinances for such occupancy, a certificate of occupancy shall be issued. The certificate shall state the approved occupancy type. This section also applies to a change of occupancy within an existing building.

**204.10.1.2 Temporary/partial occupancy.** A temporary/partial certificate of occupancy may be issued permitting occupancy for a stated period for specific portions of a building that the inspector finds safe for occupancy prior to final completion of the entire building.

~~204.9.2~~**204.11 Service utilities.**

~~204.9.1~~**204.11.1 Connection of service utilities.** No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by the technical codes until approved by the inspection department and a certificate of compliance is issued.  
(General Statute 143-143.2)

~~204.9.2~~**204.11.2 Temporary connection.** The inspection department may authorize the temporary connection of the building or system to the utility source of energy, fuel or power for the purpose of testing building service systems.  
(General Statute 160D-1116)

~~204.10~~**204.12 Appeal of stop work orders.** Whenever a stop order has been issued by an inspection department involving alleged violations of the State Building Codes, the owner or builder may appeal in writing to the Commissioner of Insurance, or his or her designee, within 5 days after the date the order is issued, with a copy of the



appeal to the inspection department. No further work may take place in violation of a stop order. The Commissioner, or his or her designee, shall promptly conduct an investigation. The inspection department and the owner or builder shall be permitted to submit relevant evidence for the investigation. The Commissioner of Insurance, or his or her designee, shall provide a written statement of the decision setting forth the facts found, the decision reached and the reasons for the decision. In the event of dissatisfaction with the decision, the person affected shall have the option of appealing as set forth in Section 203.1.2.

(General Statutes 160D-1114)

**~~204.11.1~~204.13 Floor loads and occupant loads.**

**~~204.11.1~~204.13.1 Occupancy.** No building shall be occupied for any purpose that will cause the floors to be loaded beyond their safe capacity. It shall be the responsibility of the owner or occupant of any building, where excessive floor loading is likely to occur, to employ a design professional in computing the safe load capacity. The computations shall be filed as a permanent record of the inspection department. The inspection department may permit occupancy of a building when the department is satisfied that the capacity will not be exceeded.

**~~204.11.2~~204.13.2 Occupant load posted.** When required by the code enforcement official and in all Group A-2 occupancies with a North Carolina alcohol license, signs stating the occupant load determined in accordance with occupant load specified in the technical codes shall be posted by the owner of the building in each assembly room, auditorium or room used for a similar purpose where fixed seats are not installed. The seating capacity shall be determined in accordance with the technical codes and signs posted at locations approved by the code enforcement official. It shall be unlawful to remove or deface such notice or to permit more than this legal number of people within such space. The signs shall read as follows:

“Occupancy by more than \_\_\_\_\_ persons is  
dangerous and unlawful

\_\_\_\_\_, CEO”

**~~204.12~~204.14 Violations.** Any person, firm, corporation or agent who violates a provision of this code or the technical codes shall be guilty of a Class 3 misdemeanor. Each person shall be considered guilty of a separate offense for each and every portion thereof during which any violation is committed or continued, for a period of 30 days. Upon conviction of any such violation the person shall be liable to a fine not to exceed \$50.00 for each offense. Any violation incurred more than 1 year after another conviction for violation of the occupancy limits shall be treated as a first offense for the purposes of establishing and imposing penalties.

[General Statute 143-138(h)]

**~~204.13~~204.15 Remedies.**

**~~204.13.1~~204.15.1 General.** In case any building or structure is constructed or its purpose altered so that it ~~becomes in violation~~ violates the requirements of the technical codes, or if the occupancy limits established are exceeded, the code enforcement official may institute any appropriate action or proceedings, including civil remedies, to:

1. Prevent the unlawful erection, construction or reconstruction or alteration of purpose, or overcrowding;
2. Restrain, correct or abate the violation; or
3. Prevent the occupancy or use of the building, structure or land until the violation is corrected.

**~~204.13.2~~204.15.2 Fire prevention.** Refer to the *North Carolina Fire Code* for summary abatement requirements for fire prevention code violations and penalties.

**~~204.14~~204.16 Code enforcement official not fulfilling responsibilities.** When the code enforcement official does not fulfill his responsibilities as specified in Section 204.13, the Commissioner of Insurance or his or her designee may institute any appropriate actions or proceedings available.

(General Statutes 14-230, 14-231, 14-232, 160D-1109)

**SECTION 205  
OTHER AGENCIES**

www.ncgov.com (Click on NC Agencies)

**205.1 Administration by the North Carolina Department of Labor.**

**205.1.1 Commissioner of Labor.** The Commissioner of Labor shall have general supervision over the Elevator and Amusement Device Division and the Boiler Pressure Vessel Division.

[General Statute ~~143-139(e)~~143-139(c) and 143-139(d)]

## ADMINISTRATIVE POLICIES

**205.1.2 Elevator and amusement device division.** The Elevator and Amusement Device Division shall enforce the provisions of the North Carolina State Building Code that pertain to the operation of:

1. Elevators;
2. Dumbwaiters;
3. Escalators;
4. Moving walks;
5. Personnel hoists;
6. Chair and wheelchair lifts;
7. Manlifts;
8. Special equipment; and
9. Amusement devices.

**Exceptions:**

1. Devices and equipment located and operated within a single-family residence.
2. Equipment constructed, installed and used exclusively for the movement of materials.
3. Mining equipment covered by either the Federal Mine Safety and Health Act or the Mine Safety and Health Act of North Carolina.
4. Zip lines.

[General Statute 143-139(d)]

**205.1.3 Boiler and pressure vessel division.** The Boiler and Pressure Vessel Division shall enforce the provisions of Chapter 95 of the General Statutes which pertain to boilers and pressure vessels.

**Exception:** The Boiler and Pressure Vessel Division shall not regulate hot water supply boilers equipped with ASME Code and National Board certified safety relief valves, which are fired with oil, gas, or electricity or hot water supply tanks heated by any indirect means which do not exceed any of the following limitations:

1. Heat input of 200,000 Btu/hr;
2. Water temperature of 200°F (93°C);
3. Nominal water capacity of 120 gallons (454 L).

[General Statutes 95-69.10(c), 143-139(c)]

## CHAPTER 3

# **REPRINT OF THE NORTH CAROLINA GENERAL STATUTES PERTAINING TO THE ENFORCEMENT ADMINISTRATION OF THE NORTH CAROLINA STATE BUILDING CODES**

The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other State agencies, occupational licensing boards and commissions. It shall be the responsibility of a permit holder, design professional, contractor or occupational license holder to determine whether any additional requirements exist.

The current language of the General Statutes may be viewed online at [www.ncleg.gov](http://www.ncleg.gov) or by clicking on the referenced statute number below.

The following list, while extensive, may not include all applicable North Carolina General Statutes.

### **Property Owners**

1-539.2	Dismantling portion of building
14-68	Failure of owner of property to comply with orders of public authorities
106-581.1	Agriculture Defined
160D-903	Agricultural Uses (qualifications for bona fide farm status)

### **Misconduct in Public Office** *(NCGS Chapter 14, Article 31)*

<del>14-228-232</del>	<del>Misconduct in public office</del>
<del>14-414</del>	<del>Pyrotechnics defined; exceptions</del>
<del>14-228</del>	<del>Buying and selling offices</del>
<del>14-229</del>	<del>Acting as officer before qualifying as such</del>
<del>14-230</del>	<del>Willfully failing to discharge duties</del>
<del>14-231</del>	<del>Failing to make reports and discharge other duties</del>
<del>14-232</del>	<del>Swearing falsely to official reports</del>

### **Administrative Search and Inspection Warrants**

15-27.2	Warrants to conduct inspections authorized by law
58-2-95	Commissioner to supervise local inspectors
58-31-40	Commissioner to inspect state property; plans submitted
58-79-20	Inspection of premises; dangerous material removed

### **Electrical Materials, Devices, Appliances and Equipment** *(NCGS Chapter 66, Article 4)*

<del>66-23-27</del>	<del>Electrical materials, devices, appliances and equipment</del>
<del>66-23</del>	<del>Sale of electrical goods regulated</del>
<del>66-24</del>	<del>Identification marks required</del>
<del>66-25</del>	<del>Acceptable listings as to safety of goods</del>
<del>66-26</del>	<del>Legal responsibility of proper installations unaffected</del>
<del>66-27</del>	<del>Violation made misdemeanor</del>
<del>66-27.01</del>	<del>Enforcement</del>

## **Safety Features of Hot Water Heaters**

*(NCGS Chapter 66, Article 4A)*

<u>66-27.1</u>	<u>Certain automatic hot water tanks or heaters to have approved relief valves; installation or sale of unapproved relief valves forbidden</u>
<u>66-27.2</u>	<u>Certain hot water supply storage tank or heater baffles, heat traps, etc., to be tested before installation or sale</u>
<u>66-27.3</u>	<u>Violation of Article made misdemeanor</u>
<u>66-27.4</u>	<u>Local regulation of hot water heater safety features</u>

## **Architects**

<u>83A-1-13</u>	<u>Architects</u>
<u>83A-1</u>	<u>Definitions</u>
<u>83A-12</u>	<u>Prohibited practice</u>
<u>83A-13</u>	<u>Exemptions</u>

## **General Contractors**

*(NCGS Chapter 87, Article 1)*

<u>87-1-15</u>	<u>General contractors</u>
<u>87-1</u>	<u>"General contractor" defined; exceptions</u>
<u>87-1.1</u>	<u>Exception for licenses under Article 2 or 4</u>
<u>87-1.2</u>	<u>Exception for specified Department of Transportation contractors</u>
<u>87-14</u>	<u>Regulations as to issue of building permits</u>
<u>87-15.6</u>	<u>Homeowners Recovery Fund</u>

## **Plumbing, Heating, and Fire Sprinkler Contractor**

<u>87-21</u>	<u>Plumbing, heating and fire sprinkler contractor</u>
<u>87-21</u>	<u>Definitions; contractors licensed by Board; examination; posting license, etc.</u>

## **Electrical Contractors**

*(NCGS Chapter 87, Article 4)*

<u>87-43</u>	<u>Electrical contractors</u>
<u>87-43</u>	<u>Electrical contracting defined; licenses</u>
<u>87-43.1</u>	<u>Exceptions</u>
<u>87-43.2</u>	<u>Issuance of license</u>
<u>87-43.3</u>	<u>Classification of licenses</u>

## **Refrigeration Contractors**

<u>87-57-58</u>	<u>Refrigeration contractors</u>
<u>87-57</u>	<u>License required of persons, firms or corporations engaged in the refrigeration trade</u>
<u>87-58</u>	<u>Definitions; contractors licensed by Board; examinations</u>

## **Engineers**

<u>89C-3-23</u>	<u>Engineers</u>
<u>89C-3</u>	<u>Definitions</u>
<u>89C-23</u>	<u>Unlawful to practice engineering or land surveying without licensure; unlawful use of title or terms; penalties; Attorney General to be legal adviser</u>

## **Uniform Boiler and Pressure Vessel Act**

*(NCGS Chapter 95, Article 7A)*

<u>95-69</u>	<u>Uniform boiler and pressure vessel act</u>
<u>95-69.8</u>	<u>Short title</u>
<u>95-69.9</u>	<u>Definitions</u>
<u>95-69.10</u>	<u>Application of Article; exemptions</u>
<u>95-69.11</u>	<u>Powers and duties of commissioner</u>
<u>95-69.16</u>	<u>Inspection certificate required</u>

**Public Schools**

<u>105-130-151</u>	<u>Accessibility tax credit</u>
<u>115C-525</u>	<u>Public schools</u>
<u>115C-525</u>	<u>Fire prevention</u>

**Gasoline and Oil Inspection and Regulation**

*(NCGS Chapter 119, Article 5)*

*(Liquefied petroleum gases)*

<u>119 Article 5</u>	<u>Liquefied petroleum gases</u>
<u>119-54</u>	<u>Purpose: definitions: scope of Article</u>

**Wastewater Systems**

*(NCGS Chapter 130A, Article 10)*

<u>130A-336-339</u>	<u>Wastewater system construction</u>
<u>130A-336</u>	<u>Improvement permit and authorization for wastewater system construction required</u>
<u>130A-337</u>	<u>Inspection; operation permit required</u>
<u>130A-338</u>	<u>Authorization for wastewater system construction required before other permits to be issued</u>
<u>130A-339</u>	<u>Limitation on electrical service</u>

**Public Works**

*(NCGS Chapter 133, Article 1)*

<u>133-1-4</u>	<u>Public works</u>
<u>133-1</u>	<u>Employment of architects, etc., on public works when interested in use of materials prohibited</u>
<u>133-1.1</u>	<u>Certain buildings involving public funds to be designed, etc., by architect or engineer</u>
<u>133-2</u>	<u>Drawing of plans by material furnisher prohibited</u>
<u>133-3</u>	<u>Specifications to carry competitive items; substitution of materials</u>
<u>133-4</u>	<u>Violation of Chapter made misdemeanor</u>

**Inspection of State-Owned Buildings**

<u>143-135.1</u>	<u>Inspection of state-owned buildings</u>
<u>143-135.1</u>	<u>State buildings exempt from county and municipal building requirements; consideration of recommendations by counties and municipalities</u>

**Building Code Council and Building Code**

*(NCGS Chapter 130A, Article 9)*

<u>143-136-143</u>	<u>Building Code Council and Building Code</u>
<u>143-136</u>	<u>Building Code Council created; membership</u>

<u>143-137</u>	<u>Organization of Council; rules; meetings; staff; fiscal affairs</u>
<u>143-138</u>	<u>North Carolina State Building Code</u>
<u>143-138.1</u>	<u>Introduction and instruction of the North Carolina Building Code; posting of written commentaries and interpretations on Department of Insurance Web site</u>
<u>143-139</u>	<u>Enforcement of Building Code</u>
<u>143-139.1</u>	<u>Certification of manufactured buildings, structures or components by recognized independent testing laboratory; minimum standards for modular homes</u>
<u>143-139.2</u>	<u>Enforcement of insulation requirements; certificate for occupancy; no electric service without compliance</u>
<u>143-139.3</u>	<u>Inspection of liquified petroleum gas piping systems for residential structures</u>
<u>143-140</u>	<u>Hearings before enforcement agencies as to questions under Building Code</u>
<u>143-141</u>	<u>Appeals to Building Code Council</u>
<u>143-142</u>	<u>Further duties of the Building Code Council</u>
<u>143-143</u>	<u>Effect on certain existing laws</u>
<u>143-143.2</u>	<u>Electric wiring of houses, buildings, and structures</u>
<u>143-143.3</u>	<u>Temporary toilet facilities at construction sites</u>
<u>143-143.4</u>	<u>Door lock exemption for certain businesses</u>
<u>143-143.5</u>	<u>Access to toilets in shopping malls</u>

**Code Officials Qualification Board**  
*(NCGS Chapter 130A, Article 9C)*

<u>143-151.8-21</u>	<u>Code officials qualification board</u>
<u>143-151.8</u>	<u>Definitions</u>
<u>143-151.9</u>	<u>North Carolina Code Officials Qualification Board established; members; terms; vacancies</u>
<u>143-151.10</u>	<u>Compensation</u>
<u>143-151.11</u>	<u>Chairman; vice-chairman; other officers; meetings; reports</u>
<u>143-151.12</u>	<u>Powers</u>
<u>143-151.13</u>	<u>Required standards and certificates for Code-enforcement officials</u>
<u>143-151.13A</u>	<u>Professional development program for officials</u>
<u>143-151.14</u>	<u>Comity</u>
<u>143-151.15</u>	<u>Return of certificate to Board; reissuance by Board</u>
<u>143-151.16</u>	<u>Certification fees; renewal of certificates; examination fees</u>
<u>143-151.17</u>	<u>Grounds for disciplinary actions; investigation; administrative procedures</u>
<u>143-151.18</u>	<u>Violations; penalty; injunction</u>
<u>143-151.19</u>	<u>Administration</u>
<u>143-151.20</u>	<u>Donations and appropriations</u>
<u>143-151.21</u>	<u>Disposition of fees</u>

**Master Electrical and Natural Gas Meters Prohibited**  
*(NCGS Chapter 143, Article 9E)*

<u>143-151.42</u>	<u>Prohibition of master meters for electric and natural gas service</u>
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**North Carolina Home Inspector Licensure Board**  
*(NCGS Chapter 143, Article 9F)*

<u>143-151.43-64</u>	<u>North Carolina home inspector board</u>
<u>143-151.43</u>	<u>Short title</u>

<u>143-151.44</u>	<u>Purpose</u>
<u>143-151.45</u>	<u>Definitions</u>
<u>143-151.46</u>	<u>North Carolina Home Inspector Licensure Board established; members; terms; vacancies</u>
<u>143-151.47</u>	<u>Compensation of Board members</u>
<u>143-151.48</u>	<u>Election of officers; meetings of Board</u>
<u>143-151.49</u>	<u>Powers and responsibilities of Board</u>
<u>143-151.50</u>	<u>License required to perform home inspections for compensation or to claim to be a "licensed home inspector"</u>
<u>143-151.51</u>	<u>Requirements to be licensed as a home inspector</u>
<u>143-151.53</u>	<u>Notification to applicant following evaluation of application</u>
<u>143-151.54</u>	<u>Miscellaneous license provisions</u>
<u>143-151.55</u>	<u>Renewal of license; inactive licenses; lapsed licenses</u>
<u>143-151.56</u>	<u>Suspension, revocation, and refusal to renew license</u>
<u>143-151.57</u>	<u>Fees</u>
<u>143-151.58</u>	<u>Duties of licensed home inspector</u>
<u>143-151.59</u>	<u>Violation is a misdemeanor</u>
<u>143-151.60</u>	<u>Injunctions</u>
<u>143-151.62</u>	<u>Persons and practices not affected</u>
<u>143-151.63</u>	<u>Administration</u>
<u>143-151.64</u>	<u>Continuing education requirements</u>

**Administrative Procedures Act**  
**(NCGS Chapter 150B, Article 2A)**

<u>150B-18-21</u>	<u>Administrative Procedures Act</u>
<u>150B-18</u>	<u>Scope and effect</u>
<u>150B-19</u>	<u>Restrictions on what can be adopted as a rule</u>
<u>150B-19.1</u>	<u>Requirements of agencies in the rule-making process</u>
<u>150B-19.3</u>	<u>Limitations on certain environmental rules</u>
<u>150B-20</u>	<u>Petitioning an agency to adopt a rule</u>
<u>150B-21</u>	<u>Agency must designate rule-making coordinator; duties of coordinator</u>
<u>150B-21.1</u>	<u>Procedure for adopting a temporary rule</u>
<u>150B-21.1A</u>	<u>Adopting an emergency rule</u>
<u>150B-21.2</u>	<u>Procedure for adopting a permanent rule</u>
<u>150B-21.3</u>	<u>Effective date of rules</u>
<u>150B-21.3A</u>	<u>Periodic review and expiration of existing rules</u>
<u>150B-21.4</u>	<u>Fiscal and regulatory impact analysis on rules</u>
<u>150B-21.5</u>	<u>Circumstances when notice and rule-making hearing not required; circumstances when submission to the Commission not required</u>
<u>150B-21.6</u>	<u>Incorporating material in a rule by reference</u>
<u>150B-21.7</u>	<u>Effect of transfer of duties or termination of agency on rules</u>
<u>150B-21.8</u>	<u>Review of rule by Commission</u>
<u>150B-21.9</u>	<u>Standards and timetable for review by Commission</u>
<u>150B-21.10</u>	<u>Commission action on permanent rule</u>
<u>150B-21.11</u>	<u>Procedure when Commission approves permanent rule</u>
<u>150B-21.12</u>	<u>Procedure when Commission objects to a permanent rule</u>

**Cities and Counties**  
*(NCGS Chapter 160D, Article 4)*

<u>160D Article 11</u>	<u>Building Code Enforcement</u>
<u>160D-401</u>	<u>Application</u>
<u>160D-402</u>	<u>Administrative staff</u>
<u>160D-404</u>	<u>Enforcement</u>
<u>160D-405</u>	<u>Appeals of administrative decisions</u>
<u>160D-406</u>	<u>Quasi-judicial procedure</u>
<u>160D-1101</u>	<u>Definitions</u>
<u>160D-1102</u>	<u>Building code administration</u>
<u>160D-1103</u>	<u>Qualification of inspectors</u>
<u>160D-1104</u>	<u>Duties and responsibilities</u>
<u>160D-1104.1</u>	<u>Remote inspection alternative</u>
<u>160D-1105</u>	<u>Other arrangements for inspection</u>
<u>160D-1106</u>	<u>Alternative inspection method for components or element</u>
<u>160D-1107</u>	<u>Mutual aid contracts</u>
<u>160D-1108</u>	<u>Conflicts of interest</u>
<u>160D-1109</u>	<u>Failure to perform duties</u>
<u>160D-1110</u>	<u>Building permits</u>
<u>160D-1111</u>	<u>Expiration of building permits</u>
<u>160D-1112</u>	<u>Changes in work</u>
<u>160D-1113</u>	<u>Inspections of work in progress</u>
<u>160D-1114</u>	<u>Appeals of stop orders</u>
<u>160D-1115</u>	<u>Revocation of building permits</u>
<u>160D-1116</u>	<u>Certificates of compliance; temporary certificates of occupancy</u>
<u>160D-1117</u>	<u>Periodic inspections</u>
<u>160D-1118</u>	<u>Defects in buildings to be corrected</u>
<u>160D-1119</u>	<u>Unsafe buildings condemned</u>
<u>160D-1120</u>	<u>Removing notice from condemned building</u>
<u>160D-1121</u>	<u>Action in event of failure to take corrective action</u>
<u>160D-1122</u>	<u>Orders to take corrective action</u>
<u>160D-1123</u>	<u>Appeal; finality of order if not appealed</u>
<u>160D-1124</u>	<u>Failure to comply with order</u>
<u>160D-1125</u>	<u>Enforcement</u>
<u>160D-1126</u>	<u>Records and reports</u>
<u>160D-1127</u>	<u>Appeals</u>
<u>160D-1128</u>	<u>Fire limits</u>
<u>160D-1129</u>	<u>Regulation authorized as to repair, closing, and demolition of nonresidential buildings or structures; order of public officer</u>
<u>160D-1130</u>	<u>Vacant building receivership*</u>



APPENDIX A

PERMIT APPLICATION INFORMATION SHEET

The following information is required on all permit applications. Additional information may be included to ensure that all state and local laws are complied with. This information may be arranged in any order and the following outline is only the minimum information required.

City/County Name \_\_\_\_\_

Inspection Department \_\_\_\_\_

Permit Application \_\_\_\_\_

Applicant Name \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Project Address \_\_\_\_\_

Total Project Cost \_\_\_\_\_ Electrical Cost \_\_\_\_\_

Subdivision \_\_\_\_\_ Block # \_\_\_\_\_ Lot # \_\_\_\_\_

Developer \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Property Owner \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Project Contact \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Description of Proposed Work \_\_\_\_\_

Type of Building:  New  Existing  Addition  N/A

Type of Construction:  IA  IB  IIA  IIB  IIIA  IIIB  
 ~~IV-A~~  IV-B  IV-C  IV-HT  VA  VB

Occupancy:  A-1  A-2  A-3  A-4  A-5  B  E  F-1  F-2  
 H-1  H-2  H-3  H-4  H-5  I-1  I-2  I-3  I-4  
 M  R-1  R-2  R-3  R-4  S-1  S-2  U

Equipment:  New  Existing  Addition  N/A

Property Use:  Detached Single Family  Detached Two Family  Townhouse  
 Apartment  Condominium  
 Other (Library, Office, Etc.)

Building Area: Total Area (sf) \_\_\_\_\_ Area per floor (sf) \_\_\_\_\_

Building Height: Feet \_\_\_\_\_ # of Stories \_\_\_\_\_

State Agency Approvals:

NC Department of Insurance  Yes  No  N/A

Plan Approval  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Specifications  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

NC Department of Labor  Yes  No  N/A

Elevators \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_ Boilers \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

Plan Approval  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

Specifications  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

**Utilities Approvals:**

Water:  Public  Private  Private Health Dept. Permit # \_\_\_\_\_

Sewer:  Public  Private  Private Health Dept. Permit # \_\_\_\_\_

Place ~~X~~ Check each applicable box and complete additional information for each permit type needed.

**General Construction Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Electrical Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Mechanical Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Plumbing Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

Place ~~X~~ Check each applicable box and complete additional information for each permit type needed.

**Sprinkler Protection Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other                NICET Level \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Fire Alarm System Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Sign Permit**

Location of Sign \_\_\_\_\_ Address \_\_\_\_\_  
 Off Premises Sign     Wall Sign             Ground Sign             Awning Sign  
 Projection Sign       Special Event Sign     Other  
 Sign/Business Owner \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Accessory Structures Permit**

Accessory Building \_\_\_\_\_ Size \_\_\_\_\_ Sq.Ft.

Solid Fence       Dish Antenna       Swimming Pool       Other (Describe) \_\_\_\_\_

I hereby certify that all information in this application is correct and all work will comply with the State Building Code and all other applicable State and local laws and ordinances and regulations. The Inspection Department will be notified of any changes in the approved plans and specifications for the project permitted herein.

Owner/Agent Signature \_\_\_\_\_

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**APPENDIX B**

**20182024 BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

(EXCEPT ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: \_\_\_\_\_

Address: \_\_\_\_\_ Zip Code \_\_\_\_\_

Owner/Authorized Agent \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Owned By:  City/County  Private  State

Code Enforcement Jurisdiction:  City  County  State

**CONTACT:** \_\_\_\_\_

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	_____	_____	_____	(____)_____	_____
Civil	_____	_____	_____	(____)_____	_____
Electrical	_____	_____	_____	(____)_____	_____
Fire Alarm	_____	_____	_____	(____)_____	_____
Plumbing	_____	_____	_____	(____)_____	_____
Mechanical	_____	_____	_____	(____)_____	_____
Sprinkler- Standpipe	_____	_____	_____	(____)_____	_____
Structural	_____	_____	_____	(____)_____	_____
Retaining Walls > 5 feet High	_____	_____	_____	(____)_____	_____
Other	_____	_____	_____	(____)_____	_____

("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

**20182024 NC BUILDING CODE:**  New Building  Shell/Core  1<sup>st</sup> Time  
Interior Completions

Addition  Phased Construction—Shell Core

**20182024 NC EXISTING BUILDING CODE:** (check all that apply)

Prescriptive  Alteration Level I  Alteration Level II  Alteration Level III  
 Change of Use  Historic Property  Repair  Chapter 14

**CONSTRUCTED:** (date) \_\_\_\_\_ **CURRENT USE(S)** (Ch. 3): \_\_\_\_\_

**RENOVATED:** (date) \_\_\_\_\_ **PROPOSED USE(S)** (Ch. 3): \_\_\_\_\_

**OCCUPANCY CATEGORY** (Table 1604.5): Current: \_\_\_\_\_ Proposed: \_\_\_\_\_

**BASIC BUILDING DATA**

**Construction Type:**     I-A             II-A             III-A             V-A  
 (check all that apply)    ~~IV~~IV-A     ~~I~~BIV-B     ~~H~~BIV-C     ~~III~~BIV-HT  
 ~~V~~B  
**Sprinklers:**         No     Partial         NFPA 13         NFPA13R         NFPA13D  
**Standpipes:**         No            Class:     I         II         III             Wet     Dry  
**Primary Fire District:**     No     Yes  
**Flood Hazard Area:**         No     Yes  
**Special Inspections Required:**  No     Yes

**GROSS BUILDING AREA TABLE**

(add or delete lines as necessary)

Floor	Existing (sq ft)	New (sq ft)	Subtotal
3rd Floor	0	0	0
2nd Floor	0	0	0
Mezzanine	0	0	0
1st Floor	0	0	0
Basement	0	0	0
<b>TOTAL</b>			0

Note to RRC: Page break





**ALLOWABLE AREA**

**Primary Occupancy Classification(s):**

- Assembly  A-1  A-2  A-3  A-4  A-5
- Business
- Educational
- Factory  F-1 (Moderate)  F-2 (Low)
- Hazardous  H-1 (Detonate)  H-2 (Deflagrate)  
 H-3 (Combust)  H-4 (Health)  H-5 (HPM)
- Institutional  I-1  I-2  I-3  I-4  
~~I-1 Condition  1  2~~  
~~I-2 Condition  1  2~~  
~~I-3 Condition  1  2  3  4  5~~  
~~Condition  1  2  3  4~~
- Mercantile
- Residential  R-1  R-2  R-3  R-4
- Storage  S-1 Moderate  S-2 Low  High-piled  
 Parking Garage  Open  Enclosed  Repair Garage
- Utility and Miscellaneous

**Accessory Occupancy Classification(s):** \_\_\_\_\_

**Incidental Uses (Table 509.1):** \_\_\_\_\_

This separation is not exempt as a Nonseparated Use (see exceptions).

**Special Uses (Chapter 4 – List Code Sections):** \_\_\_\_\_

**Special Provisions: (Chapter 5 – List Code Sections):** \_\_\_\_\_

**Mixed Occupancy:**  No  Yes Separation: \_\_\_\_ Hr. Exception: \_\_\_\_\_

(Select one of the following)

Non-separated Use (508.3)

Separated Use (508.4)—See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Select one

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

$$\text{_____} + \text{_____} + \dots = \text{_____} \leq 1.00$$

(add to or delete rows from the following table as necessary to capture all relevant information)

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 <sup>4</sup> AREA	(C) AREA FOR FRONTAGE INCREASE <sup>1, 5</sup>	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>2, 3</sup>

1. Frontage area increases from Section 506.2506.3 are computed thus:

- a. Perimeter which fronts a public way or open space having 20 feet minimum width = \_\_\_\_\_ (F)
- b. Total Building Perimeter = \_\_\_\_\_ (P)
- c. Ratio (F/P) = \_\_\_\_\_ (F/P)
- d. W = Minimum width of public way = \_\_\_\_\_ (W)



2. Unlimited area applicable under conditions of Section 507.
  3. Maximum Building Area = total number of stories in the building  $\times D$  (maximum 3 stories) (506.2).
  4. The maximum area of open parking garages shall comply with Table 406.5.4. ~~The maximum area of traffic control towers must comply with Table 412.3.1.~~
  5. Frontage increase is based on the unsprinklered area value in Table 506.2.
- 

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### ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)			
Building Height in Stories (Table 504.4)			

1. Provide code reference if the “Shown on Plans” quantity is not based on Table 504.3 or 504.4.

### FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQ'D	PROVIDED (W/ REDUCTION) *				
Structural Frame Including columns, girders, and trusses							
Bearing Walls							
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing walls and partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction Including supporting beams and joists							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures—Exit							
Shaft Enclosures—Other							
Corridor Separation							
Occupancy/Fire Barrier Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

\* Indicate section number permitting reduction

**PERCENTAGE OF WALL OPENING CALCULATIONS**

FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

**LIFE SAFETY SYSTEM REQUIREMENTS**

- Emergency Lighting:  Yes  No
- Exit Signs:  Yes  No
- Fire Alarm:  Yes  No
- Smoke Detection Systems:  Yes  No
- Carbon Monoxide Detection:  Yes  No

**LIFE SAFETY PLAN REQUIREMENTS**

Life Safety Plan Sheet #: \_\_\_\_\_

- Fire and/or smoke rated wall locations (Chapter 7)
- Assumed and real property line locations (if not on the site plan)
- Exterior wall opening area with respect to distance to assumed property lines (705.8)
- Occupancy Use for each area as it relates to occupant load calculation (~~Table 1004.1.2~~)(Table 1004.5)
- Occupant loads for each area
- Exit access travel distances (1017)
- Common path of travel distances [~~Tables 1006.2.1 & 1006.3.2(1)~~](Tables 1006.3.4(1) & 1006.3.4(2))
- Dead end lengths (~~1020.4~~)(1020.5)
- Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (~~1005.3~~)(1005.3.2)
- Actual occupant load for each exit door
- A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- Location of doors with panic hardware (~~1010.1.10~~)(1010.2.9)
- Location of doors with delayed egress locks and the amount of delay (~~1010.1.9.7~~)(1010.2.13)
- Location of doors with electromagnetic egress locks (~~1010.1.9.9~~)(1010.2.11)
- Location of doors equipped with hold-open devices (716.2.6.1)
- Location of emergency escape windows (~~1030~~)(1031)
- The square footage of each fire area (202)
- The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- Note any code exceptions or table notes that may have been utilized regarding the items above



**ACCESSIBLE DWELLING UNITS**  
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

**ACCESSIBLE PARKING**  
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH		
				132" ACCESS AISLE	8' ACCESS AISLE	
TOTAL						

**PLUMBING FIXTURE REQUIREMENTS**  
(TABLE 2902.1)

USE	WATERCLOSETS			URINALS	LAVATORIES			SHOWERS/TUBS	DRINKING FOUNTAINS	
	Male	Female	Unisex		Male	Female	Unisex		Regular	Accessible
SPACE										
EXIST'G										
NEW										
REQ'D										

**SPECIAL APPROVALS**

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

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**ENERGY SUMMARY**
**ENERGY REQUIREMENTS:**

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design versus the annual energy cost for the proposed design.

**Existing building envelope complies with code:**  (If checked, the remainder of this section is not applicable.)

**Exempt Building:**  (Provide code and applicable code section or statutory reference)

**Climate Zone:**  3A  4A  5A

**Method of Compliance:**

Energy Code:  Performance  Prescriptive

ASHSAE 90.1:  Performance  Prescriptive

Other:  Performance (specify source) \_\_\_\_\_

**THERMAL ENVELOPE:** (Prescriptive method only)**Roof/ceiling Assembly** (each assembly)

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

Skylights in each assembly: \_\_\_\_\_

*U*-Value of skylight: \_\_\_\_\_

total square footage of skylights in each assembly: \_\_\_\_\_

**Exterior Walls** (each assembly)

Description of assembly \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

Openings (windows or doors with glazing)

*U*-Value of assembly: \_\_\_\_\_

Solar heat gain coefficient: \_\_\_\_\_

projection factor: \_\_\_\_\_

Door *R*-Values: \_\_\_\_\_

**Walls below grade** (each assembly)

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

**Floors over unconditioned space** (each assembly)

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

**Floors slab on grade**

Description of assembly: \_\_\_\_\_

*U*-Value of total assembly: \_\_\_\_\_

*R*-Value of insulation: \_\_\_\_\_

Horizontal/vertical requirement: \_\_\_\_\_

slab heated: \_\_\_\_\_

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**APPENDIX B**  
**20182024 BUILDING CODE SUMMARY**  
**FOR ALL COMMERCIAL PROJECTS**

**STRUCTURAL DESIGN**  
**(PROVIDE ON SHEET 1 OR 2 OF THE STRUCUTRAL SHEETS)**

**DESIGN LOAD:**

**Importance Factors:** Wind ( $I_w$ ) \_\_\_\_\_  
 Snow ( $I_s$ ) \_\_\_\_\_  
 Seismic ( $I_E$ ) \_\_\_\_\_

**Live Loads:** Roof \_\_\_\_\_ psf  
 Mezzanine \_\_\_\_\_ psf  
 Floor \_\_\_\_\_ psf

**Ground Snow Load:** \_\_\_\_\_ psf

**Wind Load:** Basic Wind Speed \_\_\_\_\_ mph (ASCE-7)  
 Exposure Category \_\_\_\_\_

**SEISMIC DESIGN CATEGORY:**

A  B  C  D

Provide the following Seismic Design Parameters:

**Occupancy Category:** (Table 1604.5)  I  II  III  IV

**Spectral Response Acceleration:**  $S_s$  \_\_\_\_\_ %g  $S_1$  \_\_\_\_\_ %g

**Site Classification:** (ASCE 7)  A  B  C  D  E  F

Data Source:  Field Test  Presumptive  Historical Data

**Basic structural system** (check one)

- Bearing Wall  Dual w/Special Moment Frame
- Building Frame  Dual w/Intermediate R/C or Special Steel
- Moment Frame  Inverted Pendulum

**Analysis Procedure:**  Simplified  Equivalent Lateral Force  Dynamic

**Architrcultural, Mechanical, Components anchored?**  Yes  No

**LATERAL DESIGN CONTROL:**  Earthquake  Wind

**SOIL BEARING CAPACITIES:**

Field Test (provide copy of test report) \_\_\_\_\_ psf  
 Presumptive Bearing capacity \_\_\_\_\_ psf  
 Pile size, type, and capacity \_\_\_\_\_

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APPENDIX B

**2018~~2024~~ BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

MECHANICAL DESIGN  
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)  
MECHANICAL SUMMARY

**MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT**

**Thermal Zone**

winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_

**Interior design conditions**

winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_  
relative humidity: \_\_\_\_\_

**Building heating load:** \_\_\_\_\_

**Building cooling load:** \_\_\_\_\_

**Mechanical Spacing Conditioning System**

Unitary  
description of unit: \_\_\_\_\_  
heating efficiency: \_\_\_\_\_  
cooling efficiency: \_\_\_\_\_  
size category of unit: \_\_\_\_\_

Boiler  
Size category. If oversized, state reason.: \_\_\_\_\_

Chiller  
Size category. If oversized, state reason.: \_\_\_\_\_

**List equipment efficiencies:** \_\_\_\_\_

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APPENDIX B

**20182024 BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

ELECTRICAL DESIGN  
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)  
ELECTRICAL SUMMARY

**ELECTRICAL SYSTEM AND EQUIPMENT**

**Method of Compliance:**

- Energy Code:     Prescriptive     Performance  
ASHRAE 90.1:     Prescriptive     Performance

**Lighting schedule** (each fixture type) lamp type required in fixture number of lamps in fixture ballast type used in the fixture number of ballasts in fixture total wattage per fixture total interior wattage specified versus allowed (whole building or space by space) total exterior wattage specified versus allowed

**Additional Prescriptive Compliance**

- 506.2.1 More Efficient Mechanical Equipment
  - 506.2.2 Reduced Lighting Power Density
  - 506.2.3 Energy Recovery Ventilation Systems
  - 506.2.4 Higher Efficiency Service Water Heating
  - 506.2.5 On-Site Supply of Renewable Energy
  - 506.2.6 Automatic Daylighting Control Systems
-



# APPENDIX C CODE CHANGE PROPOSAL NORTH CAROLINA BUILDING CODE COUNCIL

325 North Salisbury Street, Room 5-44  
Raleigh, North Carolina 27603  
(919) 647-0019 (919) 647-0008

barry.gupton@ncdoi.gov david.rittlinger@ncdoi.gov  
Petition for Rule Making

Item Number \_\_\_\_\_

Granted by BCC \_\_\_\_\_ Adopted by BCC \_\_\_\_\_ Approved by RRC \_\_\_\_\_  
Denied by BCC \_\_\_\_\_ Disapproved by BCC \_\_\_\_\_ Objection by RRC \_\_\_\_\_

PROPONENT \_\_\_\_\_ PHONE (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  
REPRESENTING \_\_\_\_\_  
ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
E-MAIL \_\_\_\_\_ FAX (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

North Carolina State Building Code, Volume \_\_\_\_\_ Section \_\_\_\_\_ (select as many codes as apply):

Administrative  Building  Fire  Residential  
 Mechanical  Plumbing  Fuel Gas  Energy

Section(s) \_\_\_\_\_

CHECK ONE:  Revise section to read as follows:  Delete section and substitute the following:  
 Add new section to read as follows:  Delete section without substitution:

~~LINE THROUGH LANGUAGE TO BE DELETED~~      UNDERLINE LANGUAGE TO BE ADDED

Type or print. Continue proposal or reason on plain paper attached to this form. See reverse side for instructions.

Will this proposal change the cost of construction?      Decrease       Increase       No   
Will this proposal increase the cost of a dwelling by \$80 or more?      Yes       No   
Will this proposal affect Local or State funds?      Local       State       No   
Will this proposal cause a substantial economic impact (≥ \$1,000,000)?      Yes       No

- Non-Substantial – Provide an economic analysis including benefit/cost estimates.
- Substantial – The economic analysis must also include two alternatives, time value of money and risk analysis.
- Pursuant to §143-138(a1)(2) a cost-benefit analysis is required for all proposed amendments to the NC Energy Conservation Code and the NC Residential Code, Chapter 11.

REASON:

Signature \_\_\_\_\_

BCC CODE CHANGES

DATE: \_\_\_\_\_ FORM

3/14/17 12/13/22



## INSTRUCTIONS

(This page is not required to be submitted with the proposed code amendment.)

**Each proposed code change request shall comply with the following rules:**

**Rule 1:** The Original, ~~and twenty two (22) copies~~ twenty-one (21) hardcopies, one (1) pdf and one (1) editable softcopy of the proposed Petition for Rule-Making ~~along with~~ including supporting documentation shall be filed with the Building Code Council Secretary. ~~Submit one (1) electronic copy via email.~~ The softcopies can be submitted via email to the Building Code Council Secretary.

**Rule 2:** The filing shall be received by the first day of the month prior to the quarterly scheduled meeting date.

**Rule 3:** Each request shall be typewritten on this form and shall contain the following:

- (1) The proposed rule change must be set forth in full and contain explicit reference to the affected section or sections of the code.
- (2) The request shall state the reasons for the proposed rule change with supporting documentation.
- (3) The proposed rule change shall comply with the standards set forth in GS 143-138(c) and reference to the particular standards shall be set forth in the request for the amendment.
- (4) The proposed rule change shall contain an economic impact analysis as required by GS 143-138(a).

**Rule 4:** When a request is improperly filed or not in accordance with all the rules listed above, the Council Secretary shall reject the submittal and notify the applicant of the proper procedure to follow.

**Rule 5:** Upon the proper filing of a request, the Council Secretary shall forward one copy of said request to each ~~council~~ Council member prior to the scheduled meeting date. Persons filing proposed petitions are hereby notified of the place and time of the scheduled hearings. The Council Secretary shall cause to be published the notice of public hearing as specified in GS 143-138(a).

**Rule 6:** The Council shall either grant or deny the proposed Petition for Rule-making at the meeting following receipt of the proposed rule change. The Council will take no further action on items that are Denied. Granted items may be referred to Committee for review.

**Rule 7:** The Council will hold a public hearing on granted items at the next quarterly scheduled meeting. The Council will take final action on granted items at the next quarterly scheduled meeting after the public hearing.

<b>Timeline Example</b>	
Petition Received:	February 1
Petition Granted:	March BCC meeting
Notice of Hearing Published:	April NC Register
Committee Review:	May - June
Hearing Held:	June BCC meeting
Final Adoption:	September BCC meeting
Rules Review Hearing:	November RRC meeting
Approved:	December 1

## APPENDIX D

### AFFIDAVIT OF WORKERS' COMPENSATION COVERAGE N.C.G.S. §87-14

The undersigned applicant for Building Permit # \_\_\_\_\_ being the

\_\_\_\_\_ Contractor

\_\_\_\_\_ Owner

\_\_\_\_\_ Officer/Agent of the Contractor or Owner

Do hereby aver under penalties of perjury that the person(s), firm(s) or corporation(s) performing the work set forth in the permit:

\_\_\_\_\_ has/have three (3) or more employees and have obtained workers' compensation insurance to cover them,

\_\_\_\_\_ has/have one or more subcontractor(s) and have obtained workers' compensation insurance to cover them,

\_\_\_\_\_ has/have one or more subcontractor(s) who has/have their own policy of workers' compensation covering themselves,

\_\_\_\_\_ has/have not more than two (2) employees and no subcontractors,

while working on the project for which this permit is sought. It is understood that the Inspection Department issuing the permit may require certificates of coverage of workers, compensation insurance prior to issuance of the permit and at any time during the permitted work from any person, firm or corporation carrying out the work.

Firm name: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



# APPENDIX E APPEALS NORTH CAROLINA BUILDING CODE COUNCIL

325 North Salisbury Street, Room  
5\_44 Raleigh, North Carolina 27603  
(919) 647-0019 (919) 647-0009

APPEAL TO NCDOI/NCBCC

Hearing Date \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

GS 160D-1127

Formal Interpretation by NCDOI \_\_\_\_\_

Appeal of Local Decision to NCDOI \_\_\_\_\_

GS 143-140, GS 143-141

Appeal of Local Decision to NCBCC \_\_\_\_\_

Appeal of NCDOI Decision to NCBCC \_\_\_\_\_

APPELLANT \_\_\_\_\_ PHONE (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ X \_\_\_\_\_.

REPRESENTING \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

E-MAIL \_\_\_\_\_ FAX (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

North Carolina State Building Code, Volume \_\_\_\_\_ Section \_\_\_\_\_ (select as many codes as apply):

- Administrative       Building       Fire       Residential
- Mechanical       Plumbing       Fuel Gas       Energy

Section(s) \_\_\_\_\_

- REQUEST ONE:       Formal Interpretation by NCDOI       Appeal of Local Decision to NCBCC
- Appeal of Local Decision to NCDOI       Appeal of NCDOI Decision to NCBCC

Type or print. Include all background information as required by the referenced General Statutes and the attached policies. Attach additional supporting information.

REASON:

Signature \_\_\_\_\_ DATE: \_\_\_\_\_ APPEAL TO NCDOI/NCBCC NCDOI/NCBCC FORM 3/14/17 12/13/22

**202.9 Appeals.**

**202.9.1 Engineering Division.** A written technical interpretation shall be provided as specified in Section 203.2.1.2. Any person may appeal in writing an order, decision, or determination pertaining to the code or any state building law by filing written notice with the Commissioner of Insurance or his designee within 10 days after the order, decision or determination. A copy of the appeal shall be furnished to each party.

(General Statutes 143-140, 153A-374 and 160A-434)

**203.2.1 Interpretations.**

**203.2.1.1 Informal interpretations.** The Engineering Division shall provide informal interpretations on code related matters either by e-mail, letter or telephone. These informal interpretations may be accepted by the local code enforcement official or party requesting the interpretation. Either party may request a formal interpretation of the code.

**203.2.1.2 Formal interpretations.** Any person may request in writing a formal interpretation of the code. The request shall be addressed to the Chief Code Consultant for the Department of Insurance. The request shall be specific and shall reference the code sections in question. All formal interpretations shall be in writing. A formal interpretation shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. Formal interpretations determined to be of a general nature may be posted on the department web site. (General Statute 143-140)

**203.2.2 Appeals.** Any person may appeal in writing an order, decision or determination of a code enforcement official pertaining to the code or any state building law. The appeal shall be addressed to the Chief Engineer for the Department of Insurance by filing written notice within 10 days after the order, decision or determination. The appeal shall contain the type and size of the building in question, the location of the building, and shall reference the code sections in question. The decision shall be in writing and shall set forth the facts found. The decision rendered shall be based on the technical provisions of the code, public health and safety and shall be construed liberally to those ends. A decision shall be binding on all parties unless an appeal is submitted to the Building Code Council as specified in Section 201.9.2. A copy of the appeal and written decision shall be furnished to each party.

(General Statutes 153A-374 and 160A-434)

**202.9.2 Building Code Council.** The Building Code Council shall hear appeals from the decisions of a state enforcement agencies relating to any matter related to the code. Any person wishing to appeal a decision of a state enforcement agency to the Building Code Council shall give written notice of appeal as follows:

**202.9.2.1** Twenty one copies including an original of the Notice of Appeal shall be filed with the Building Code Council c/o NC Department of Insurance, Engineering Division, 325 North Salisbury Street, Room 544, Raleigh, NC 27603 and one copy shall be filed with the State enforcement agency from which the appeal is taken.

**202.9.2.2** The Notice of Appeal shall be received no later than 30 days from the date of the decision of the State enforcement agency.

**202.9.2.3** The Notice of Appeal shall be legibly printed, typewritten or copied and shall contain the following:

- (1) Name, address of the party or parties requesting the appeal.
- (2) The name of the State enforcement agency, the date of the decision from which the appeal is taken, and a copy of the written decision received from the enforcement agency.
- (3) The decision from which the appeal is taken shall be set forth in full in the Notice of Appeal or a copy of the decision shall be attached to all copies of the Notice of Appeal.
- (4) The contentions and allegations of fact must be set forth in full in a clear and concise manner with reference to the sections of the code in controversy.
- (5) The original Notice of Appeal shall be signed by the party or parties filing appeal.
- (6) The Notice of Appeal shall be received by the first day of the month prior to the Building Code Council's quarterly scheduled meeting in order to be placed on the agenda for that meeting. The Chairman may schedule a special meeting to hear an appeal.

**202.9.2.4** Upon the proper filing of the Notice of Appeal, the Building Code Council Secretary shall forward one copy of the Notice of Appeal to each member of the Building Code Council. The Chairman may appoint a Hearing Committee to hear appeals. The Secretary shall send notice in writing to the party or parties requesting an appeal and to the Building Code Council Hearing Committee members at least 15 days prior to the Hearing Committee meeting. A written decision of the Hearing Committee meeting shall be provided to all Building Code Council Members. The actions of the Hearing Committee shall be final, unless appealed to the full Building Code Council in writing within 30 days of the Hearing Committee's action. If a Hearing Committee consists of at least seven council members, it will constitute a quorum of the full council.

## APPENDIX E

Further appeals shall be as specified in Section 202.9.3.

~~202.9.2.5~~ The Building Code Council shall, upon a motion of the State enforcement agency or on its own motion, dismiss appeals for the following reasons:

1. Not pursued by the appellant or withdrawn;
2. Appeal not filed in accordance with these rules; or
3. Lack of jurisdiction.

~~202.9.2.6~~ When the Building Code Council finds that a State enforcement agency was in error in its interpretation of the code, the Building Code Council shall remand the case to the agency with instructions to take such actions as the Building Code Council directs. When the Building Code Council finds on appeal that materials or methods of construction proposed are equivalent to those required by the code, the Building Code Council shall remand the case to the State enforcement agency with instructions to permit the use of such materials or methods of construction. The Building Code Council shall immediately initiate procedures for amending the code to permit the use of such materials or methods of construction.

~~202.9.2.7~~ 202.9.2.7 The Building Code Council shall provide a written decision setting forth the findings of fact and the Building Code Council's conclusions to each party or parties filing the appeal and to the state enforcement agency from which the appeal was taken.

~~202.9.3~~ **Superior court.** Whenever any person desires to appeal a decision of the Building Code Council or a decision of a State or local enforcement agency, he may appeal either to the Wake County Superior Court or the Superior Court of the county in which the proposed building is to be situated in accordance with the provisions of Chapter 150B of the General Statutes.

[General Statute 143-141(d)]



# APPENDIX F

STATE OF NORTH CAROLINA

**OWNER EXEMPTION AFFIDAVIT  
PURSUANT TO G.S. 87-14(a)(1)**

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ Inspections Department

Address and Parcel Identification of Real Property Where Building is to be Constructed or Altered:

\_\_\_\_\_

I, \_\_\_\_\_,

(Print Full Name)

hereby claim an exemption from licensure under G.S. 87-1(b)(2) by initialing the relevant provision in paragraph 1 and initialing paragraphs 2 – 4 below and attesting to the following:

1. \_\_\_\_\_ I certify that I am the owner of the property set forth above on which this building is to be constructed or altered;

OR

\_\_\_\_\_ I am legally authorized to act on behalf of the firm or corporation which is constructing or altering this building on the property owned by the firm or corporation as set forth above (name of firm or corporation:

\_\_\_\_\_);

2. \_\_\_\_\_ I will personally superintend and manage all aspects of the construction or alteration of the building and that duty will not be delegated to any person not duly licensed under the terms of Article 1 of Chapter 87 of the General Statutes of North Carolina;

3. \_\_\_\_\_ I will be personally present for all inspections required by the *North Carolina State Building Code*, unless the plans for the construction or alteration of the building were drawn and sealed by an architect licensed pursuant to Chapter 83A of the General Statutes of North Carolina;

4. \_\_\_\_\_ I understand that a copy of this AFFIDAVIT will be transmitted to the North Carolina Licensing Board for General Contractors for verification that I am validly entitled to claim an exemption under G.S. 87-1(b)(2) for the building construction or alteration specified herein. I further understand that, if the North Carolina Licensing Board for General Contractors determines that I was not entitled to claim this exemption, the building permit issued for the building construction or alteration specified herein shall be revoked pursuant to G.S. ~~153A-362~~ or G.S. ~~160A-422~~ 160D-1115.

\_\_\_\_\_  
(Signature of Affiant)

\_\_\_\_\_  
Date

Sworn to (or affirmed) and Subscribed before me this the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Printed Name of Notary Public

My Commission Expires: \_\_\_\_\_ (Notary Stamp or Seal)

(NOTE: It is a Class F felony to willfully commit perjury in any affidavit taken pursuant to law—G.S. 14-209)

## APPENDIX F

To: All NC Building Code Enforcement Jurisdictions

The North Carolina Licensing Board for General Contractors has implementing procedures to comply with NC General Statute 87-14. For projects costing \$30,000 or more, property owners claiming exemption to the general contractor licensing requirement when applying for a building permit are required, before being entitled to the permit, to execute a verified affidavit attesting:

- a. That the person is the owner of the property on which the building is being constructed or, in the case of a firm or corporation, is legally authorized to act on behalf of the firm or corporation.
- b. That the person will personally superintend and manage all aspects of the construction of the building and that the duty will not be delegated to any other person not duly licensed.
- c. That the person will be personally present for all inspections required by the *North Carolina State Building Code*, unless the plans for the building were drawn and sealed by an architect licensed pursuant to Chapter 83A of the General Statutes.

The statute further requires that a copy of the affidavit be transmitted to the North Carolina Licensing Board for General Contractors for the purpose of verifying the applicant was validly entitled to claim the exemption. If during the permitting process any irregularities are detected that call in to question whether a permit applicant is fully complying with all applicable laws, the person issuing the permit should make note of the circumstances when forwarding information to the Board and provide a copy of the building permit application, including contact information for any subcontractors listed. **Please be aware the new requirements are not intended to delay the issuance of the building permit. When the person applying for the building permit reasonably satisfies the permitting authority that the applicable laws are being complied with, and executes all required documents, the building permit should be issued without delay.** Upon review of the documents, should any irregularities be detected that require further action, the Board's staff will contact the code enforcement authority.

Whenever possible, the most practical method of submitting affidavits to the Board is to scan the documents and transmit them as PDF email attachments to the appropriate Field Investigator serving the various code enforcement jurisdictions throughout the state. Specific email addresses have been set up for this purpose. Alternately, the documents may be faxed or sent via US Mail. ~~Attached to this email are pages with the~~ The assigned territories, email addresses for affidavit transmittal, fax numbers and contact information for the Board's field staff are found on the next page. Please contact the staff member serving your area with any questions you may have. ~~Also attached to this email is a model affidavit developed by the NC Home Builders Association in conjunction with the UNC School of Government. You may use this model affidavit or develop your own, as long as all the required information is provided.~~ Additional information is available on the UNC School of Government website using the following link: <http://www.sog.unc.edu/node/767>.

Thank you for your assistance in this matter. The Board sincerely appreciates your cooperation in implementing these new requirements.

## FIELD INVESTIGATOR REGIONS

### Region 1 — Coastal/SE (14) (Joel Macon 910-458-8899) Email: joelmacon@nclbgc.org

Bladen	Columbus	Duplin	Johnston	New Hanover	Pender
Brunswick	Craven	Harnett	Jones	Onslow	Sampson
Carteret	Cumberland				

### Region 2 — Coastal N/E (27)(28) (Dean Burbage 252-927-3326) Email: deanburbage@nclbgc.org

Beaufort	Dare	Greene	Martin	Perquimans	<u>Warren</u>
Bertie	Edgecombe	Halifax	Nash	Pitt	Wayne
Camden	<u>Franklin</u>	Hertford	Northampton	Tyrrell	Wilson
Chowan	Gates	Hyde	Pamlico	Vance	
Currituck	Granville	Lenoir	Pasquotank	Washington	

### Region 3 — Upper Piedmont (17)(16) (Curtis Huff 919-690-8734) Email: curtishuff@nclbgc.org

Alamance	Durham	Lee	Randolph	Surry	Yadkin
Caswell	Forsyth	Orange	Rockingham	<u>Wake</u>	
Chatham	<del>Franklin</del>	<del>Warren</del>			
Guilford	Person	Stokes	Wilkes		

### Region 4 — Lower Piedmont (15) (Waties Greene 980-210-3627/910-653-5356) Email: watiesgreene@nclbgc.org

Anson	Davidson	Mecklenburg	Richmond	Scotland
Cabarrus	Hoke	Montgomery	Robeson	Stanly
Davie	Iredell	Moore	Rowan	Union

### Region 5 — Western (27) (Ryan Cody 828-689-3388) Email: ryancody@nclbgc.org

Alexander	Burke	Cleveland	Jackson	Mitchell	Watauga
Alleghany	Caldwell	Gaston	Lincoln	Polk	Yancey
Ashe	Catawba	Graham	Macon	Rutherford	
Avery	Cherokee	Haywood	Madison	Swain	
Buncombe	Clay	Henderson	McDowell	Transylvania	

Affidavits transmitted to the Board via IJS Mail should be sent to:

Susan Sullivan, Director of Investigations  
 NC Licensing Board for General Contractors  
 P.O. Box 171875400 Creedmoor Road  
 Raleigh, North Carolina 2761927612  
[www.nclbgc.org](http://www.nclbgc.org) / email: [complaints@nclbgc.org](mailto:complaints@nclbgc.org)

# APPENDIX G

## DESIGN PROFESSIONAL INSPECTION FORM

RECORD OF THE INSPECTION OF A COMPONENT OR ELEMENT BY A NC LICENSED ARCHITECT OR ENGINEER

### Project Information:

Residential Single-Family Project: Y N	Commercial Project: Y N
Code Enforcement Project No:	Permit No:
Project Name:	Owner:
Project Address:	Suite No:
Date Inspected:	Contractor Name:
Component Inspected:	

### Responsible Licensed NC Architect or NC Engineer

Name:	
Firm Name:	
Phone Numbers:	Office: Mobile:
Email Address:	
Mailing Address:	

### APPLICABLE CODE:

2024 NCBC = 2024 NC Building Code; 2024 NCRC = 2024 NC Residential Code

Describe Element/Component/Type of Inspection: \*

---

---

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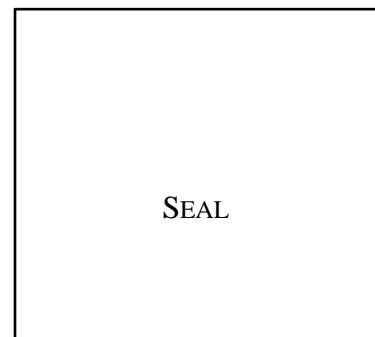
---

\*(subgrade form/letter may also be required)

### Attestation/Signature:

By signing below, I certify that the component and/or element of the building as identified on this form has been inspected by me or someone under my direct supervision per G.S. ~~160D-11-6~~160D-1106 and is in compliance with the Code or other proposal of the architect or engineer for the project. This inspection is in compliance with all of the requirements of the above referenced code. Attach any additional documents if needed.

\_\_\_\_\_  
Licensed Architect or Engineer



### Inspection Department disclaimer:

Upon the receipt of a signed written document as required by G.S. ~~160D-11-6~~160D-1106, Code Enforcement shall be discharged and released from any liabilities, duties and responsibilities imposed by this article or in common law from any claim arising out of or attributed to the component or element in the construction of the building for which the signed written document was submitted. Be aware that this inspection will be noted in all inspection records including the Certificate of Occupancy or

DRAFT

## Burgos, Alexander N

---

**Subject:** FW: 2024 NC Administrative Code Requests for Changes  
**Attachments:** RRC format D-1 2024 NC Administrative Code and Policies Proposed.docx

---

**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Sent:** Wednesday, January 17, 2024 4:02 PM  
**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Cc:** Childs, Nathan D <nchilds@NCDOJ.GOV>; Burgos, Alexander N <alexander.burgos@oah.nc.gov>  
**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Here is the word file that was accidentally omitted from the previous email of a few minutes ago.

**David B. Rittlinger, PE, LEED AP**  
**Deputy Commissioner of Engineering**  
**Engineering & Codes Division**



**North Carolina Office of State Fire Marshal**  
1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
919.647.0008

[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)

Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

**Notes to RRC: THIS DOCUMENT CONTAINS THE PROPOSED 2024 NORTH CAROLINA ADMINISTRATIVE CODE AND POLICIES.**

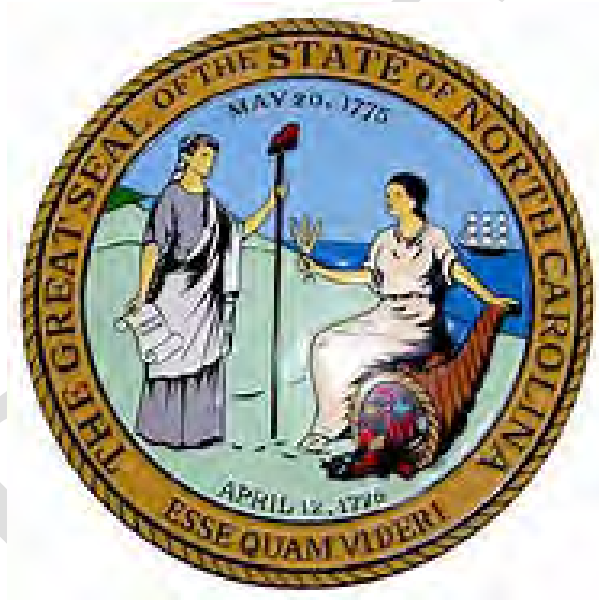
**TEXT THAT IS STRUCKTHROUGH IS DELETED FROM THE 2018 EDITION TO CREATE THE 2024 EDITION.**

**TEXT THAT IS UNDERLINED IS NEW TEXT TO CREATE THE 2024 EDITION.**

DRAFT

North Carolina State Building Code: Administrative Code and Policies, ~~2018~~2024 edition

First Printing: ~~June~~January ~~2018~~2024



Notes to RRC: The NC Seal above is added to the 2024 North Carolina Administrative Code and Policies. International Code Council, Inc. copyright statements and information (not shown) will appear here once this code published and made available to the public. Page numbers and Table of Contents will be updated once this code published and made available to the public.



# PREFACE of the ~~2018~~2024 NORTH CAROLINA STATE BUILDING CODES

North Carolina has been a pioneer in the field of Statewide Building Regulations that have been enacted for the protection of the public. The Building Laws passed in 1903 and 1905 created a Building Code for materials and methods of construction in use at that time in the State.

The General Assembly of 1933 created a Building Code Council and authorized it to, in cooperation with the Commissioner of Insurance, prepare and adopt a State Building Code. The first State Building Code was adopted in 1935 and ratified by the 1941 General Assembly.

The 1957 Legislature rewrote the 1933 Act, ratified the 1953 Edition, and reorganized and expanded the membership and responsibility of the Council. The 1953 Edition of the State Building Code was revised in accordance with the 1957 Act and printed as the 1958 Edition.

The 1933 Act of the General Assembly provided that any city or county could adopt any building regulation that was more stringent than the State Building Code regulations. However, after a General Assembly Study Commission Report, the 1957 Legislature provided that any local building regulation that was different from the State regulation would have to be approved by the Building Code Council. The Council adopted a policy to only approve local amendments to the State Code that were absolutely necessary. The policy includes that when the Council sees the need for local amendments, they would be incorporated as a part of the State Building Code in lieu of approving the regulations applying to a specific city or county unless local conditions warranted such specific regulations.

The 1967 Edition of the State Building Code was prepared utilizing the framework of the Standard Building Code, with several chapters taken from the American Insurance Association's National Building Code and the egress chapter taken from the Life Safety Code of NFPA.

The 1978, 1991 and 1996 Editions were prepared by the Building Code Council with the assistance of specially appointed Advisory and Ad-Hoc Committees representing Code Enforcement Officials, Contractors, Designers and others affected by the regulations. These Editions were the latest Standard Building Code with North Carolina amendments.

The 2002, 2006, 2009, 2012, ~~and~~ 2018 and 2024 Editions were prepared by Ad-Hoc Committees representing Code Enforcement Officials, Contractors, Designers and others affected by the regulations. These Editions were the *International Building Code* with North Carolina amendments.

The ~~2018~~2024 North Carolina State Code is presented with the hope that its use will protect the public from dangerous and unsanitary buildings. This Code is intended to provide Code Enforcement Officials, Contractors and Designers a set of minimum standards to follow in design and construction. The Building Code Council has the authority to amend the Code when the wider use of materials and methods comply with the safety standards set forth in the laws.

## **PREFACE of the ~~2018~~2024 NORTH CAROLINA ADMINISTRATIVE CODE and POLICIES**

The purpose of the *North Carolina Administrative Code and Policies* is to serve as a comprehensive document to guide decisions aimed at protecting the public's health, safety and welfare in the built environment. This protection is provided through the enforcement, by state and local governments, of the technical codes incorporated by reference herein.

The *North Carolina Administrative Code* was first adopted by the Building Council in 1991. The 1996 and 2002 Editions were published in conjunction with the subsequent Code Editions. The 2006 *North Carolina Administrative Code and Policies* was a reorganization and rewrite of the 2002 *Administration and Enforcements Code*. The 2009, 2012, ~~and 2018~~ and 2024 Edition of the *North Carolina Administrative Code and Policies* is an administrative update of the 2006 *Administration and Enforcements Code*. Chapter 1, Administrative Code, contains Rules adopted by the Building Code Council and approved by the Rules Review Commission. Chapter 2, Policies, contains generally accepted policies and procedures based on the North Carolina General Statutes. Chapter 3, Referenced Statutes, contains references to many applicable General Statutes. The appendices include representative administrative forms.

### **EDITIONS of the NORTH CAROLINA STATE BUILDING CODES**

Administrative	1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Building	1936, 1953, 1958, 1967, 1978, 1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Residential	1968, 1993, 1997, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Accessibility	1973, 1991, 1999 (Accessibility requirements were part of the Building Code before 9/1/1973 and after 1/1/2009.)
Electrical (NEC)	1931, 1933, 1935, 1937, 1940, 1942, 1943, 1947, 1949, 1951, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1962, 1965, 1968, 1971, 1975, 1978, 1981, 1984, 1987, 1990, 1993, 1996, 1999, 2002, 2005, 2008, 2011, 2014, 2017, <u>2020</u>
Existing Building	2015, 2018, <u>2024</u>
Fire	1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Mechanical	1971, 1980, 1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Energy Conservation	1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Plumbing	1963, 1968, 1980, 1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>
Fuel Gas	1991, 1996, 2002, 2006, 2009, 2012, 2018, <u>2024</u>

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DRAFT

# NORTH CAROLINA DEPARTMENT OF INSURANCE

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919-647-0000

By Statute, the Commissioner of Insurance has general supervision of the administration and enforcement of the *North Carolina State Building Code* and the Engineering Division serves as the Staff for the Building Code Council. Officials of the Department of Insurance are:

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# CHAPTER 1

## ADMINISTRATIVE CODE

### SECTION 101 TITLE AND SCOPE

**101.1 Title.** This document is “The North Carolina Administrative Code and Policies,” hereinafter known as “this code.” Any references to International Codes shall refer to North Carolina State Building Codes.

**101.2 Purpose.** The purpose of this code is to provide for the administration and enforcement of the North Carolina State Building Codes as adopted by the Building Code Council and enforced by State and local code enforcement officials. This code is incorporated by reference into the North Carolina Building, Accessibility, Plumbing, Mechanical, Electrical, Fire Prevention, Fuel Gas, Energy Conservation, Existing Buildings, Rehabilitation, and Residential Codes, hereinafter referred to collectively as the “technical codes.” This code is intended to provide for the administrative aspects of each of the technical codes. In this code, the plumbing, mechanical, electrical, fire prevention and gas systems shall be referred to as “service systems.”

#### 101.3 Scope.

**101.3.1 Requirements of other state agencies, occupational licensing boards or commissions.** The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other state agencies, occupational licensing boards or commissions. It shall be the responsibility of a permit holder, design professional, contractor or occupational license holder to determine whether any additional requirements exist.

*Commentary: Many State agencies, occupational licensing boards or commissions have specific design and construction requirements that are not incorporated into the North Carolina State Building Codes and are not enforced by code enforcement officials. Permit holders, design professionals, contractors or occupational license holders should consult with any relevant boards or agencies to determine whether there are any additional construction and design requirements for their projects.*

**101.3.2 Technical Codes.** Where sections 101.3.2.1 through 101.3.2.10 conflict with the applicability and scope as provided in the technical codes the applicability and scope in the technical codes shall apply.

**101.3.2.1 North Carolina Building Code.** The provisions of the Building Code shall apply to the construction, alteration, repair, equipment, use and occupancy, location, movement to another site, removal and demolition, or any appurtenances connected or attached to every building or structure, other than one- or two-family dwellings and townhouses.

~~**101.3.2.2 North Carolina Accessibility Provisions.** The accessibility provisions shall apply to the construction, alteration, repair, replacement, equipment, appliances, fixtures, fittings and appurtenances of all buildings or structures, other than one- and two- family dwellings and townhouses.~~

~~**101.3.2.3**~~ **101.3.2.2 North Carolina Plumbing Code.** The provisions of the Plumbing Code shall apply to every plumbing installation, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances.

~~**101.3.2.4**~~ **101.3.2.3 North Carolina Mechanical Code.** The provisions of the Mechanical Code shall apply to the installation of mechanical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

~~**101.3.2.5**~~ **101.3.2.4 North Carolina Electrical Code.** The provisions of the Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances.

~~101.3.2.6~~**101.3.2.5 North Carolina Fire Prevention Code.** The provisions of the Fire Prevention Code shall apply to the ~~repair, equipment, use, occupancy and maintenance of every existing building or structure, other than one or two family dwellings and townhouses.~~ The provisions of the fire prevention code shall apply to the installation of fire protection systems minimum fire safety requirements to all new and existing buildings, facilities, storage, and processes, except for one- or two-family dwellings and townhouses. The Fire Prevention Code provides a total approach of controlling hazards in all regulated buildings and sites, regardless of the hazard being indoors or outdoors.

~~101.3.2.7~~**101.3.2.6 North Carolina Fuel Gas Code.** The provisions of the Fuel Gas Code shall apply to the installation of gas piping systems extending from the point of delivery to the inlet connections of equipment served, and the installation and operation of residential and commercial gas appliances and related accessories.

~~101.3.2.8~~**101.3.2.7 North Carolina Energy Conservation Code.** The provisions of the Energy Conservation Code shall apply to the thermal envelope of the building and installation of energy systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances, ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

~~101.3.2.9~~**101.3.2.8 North Carolina Existing Buildings Code.** All work on any building that undergoes alterations, repairs, replacement, rehabilitation or change of occupancy shall comply with the Existing Buildings Code or the technical codes for the proposed work.

~~101.3.2.10~~**101.3.2.9 North Carolina Residential Code.** The provisions of the Residential Code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures.

*Commentary: Exceptions to the technical codes. Note that there are statutory exceptions to the applicability of the technical codes. These exceptions can be found in North Carolina General Statutes **(NCGS § 143-138(b))** **(NCGS § 143-138)**. The exceptions include the following as well as other exceptions:*

- (1) farm buildings located outside the jurisdiction of any municipality;*
- (2) equipment for storing, handling, transporting and utilizing liquefied petroleum gases for fuel purposes; and*
- (3) equipment or facilities, other than buildings, of a public utility, as defined in NCGS § 62-3, or of an electric or telephone membership corporation, including poles, towers and other structures supporting electric or communication lines.*

*Commentary: “Farm building” means any building that is not open to the general public and is used primarily for a bona fide farm purpose. “A bona fide farm purpose” includes the production or storage of agricultural products or commodities, including crops, fruits, vegetables, ornamental or flowering plants, dairy, timber, livestock, poultry and all other forms of agricultural products. Farm buildings do not include such buildings used for purposes of education and research.*

**101.3.3 Workmanship.** Workmanship is not within the purview of the technical codes unless specifically stated within the code.

**101.3.4 Appendices.** Provisions in the appendices shall not be enforceable unless specifically ~~incorporated~~adopted or referenced in the technical codes.

*Commentary: Use of appendices. An appendix is part of the technical codes only when the technical code specifically references that appendix in the body of the technical code. Conversely, appendices that are not referenced in the technical codes are not part of the North Carolina Building Codes. These unenforceable appendices are provided solely for the convenience of the reader. Each appendix will indicate under its title whether it is enforceable and required as part of the technical code.*

**101.3.5 Referenced standards.** Standards referenced in the technical codes shall be considered an integral part of the codes. If specific portions of a standard are denoted by code text, only those specific portions of the standard shall be enforced. Where code provisions conflict with a standard, the code provisions shall be enforced. Permissive and advisory provisions in a standard shall not be construed as mandatory.

~~101.3.6 Existing buildings.~~ Additions, alterations, repairs, replacement, rehabilitations or changes of occupancy shall be permitted to any existing structure or service system without requiring the existing systems to comply with all the requirements of the current building codes. All new work shall conform to the requirements of the technical codes for new construction except as modified by either the existing buildings code or the rehabilitation code. For any portion of an existing building or service system that creates a hazard or unsafe condition, the code enforcement official shall determine the extent to which that portion of the existing building or service system is to be upgraded to conform to the requirements of either the Existing Buildings Code, the Rehabilitation Code or the technical codes.

## SECTION 102 RULE-MAKING TO AMEND THE TECHNICAL CODES

### 102.1 Petition for rule-making.

**102.1.1 Petition Filing.** ~~4-~~ Any person wishing to file a petition requesting the adoption, amendment or repeal of a rule by the Building Code Council shall file a written petition on a form (see Appendix C) provided by the Building Code Council, ~~and 21 copies~~ Twenty-one hardcopies of the petition and supporting documentation shall be sent to with the Building Code Council Secretary or a single pdf and editable softcopy of the petition can be emailed to the Building Code Council Secretary.

**102.1.2 Required information.** ~~2-~~ The petition shall include the following information:

- a. ~~2-1~~ Name, address and occupation of petitioner;
- b. ~~2-2~~ A summary of the proposed action (adoption, amendment or repeal of a rule or rules);
- c. ~~2-3~~ A draft of the proposed rule or other action;
- d. ~~2-4~~ A complete statement of the reason for the proposed action with supporting documentation;
- e. ~~2-5~~ An identification of the persons or class of persons most likely to be affected by the proposed action; and
- f. ~~2-6~~ An economic impact analysis as required by General Statute §143-138(a).
- g. A cost/benefit analysis for North Carolina Energy Code amendments as required by General Statute §143-138(a1)(2).

**102.2 Presiding officer.** The presiding officer at any rule-making hearing shall have control of the proceedings, including: recognition of speakers, time allotments for presentations, the right to question speakers, direction of the discussion and management of the hearing.

**102.3 Record of proceedings.** A record of rule-making proceedings will be available for public inspection during regular office hours at the Building Code Council's office. This record will contain the original petition, if any, the notice, all written memoranda and information submitted, and a record or summary of oral presentations, if any, and, in any case where a proposal was rejected, the reason therefore.

**102.4 Effective date of rules.** Any rules that are adopted by the Building Code Council and approved by the Rules Review Commission shall be effective when the next edition of the relevant technical code is effective as provided in Rule 102.6 unless specified otherwise by the Building Code Council.

**102.5 Interim use of approved rules.** Any rules that are adopted by the Building Code Council and approved by the Rules Review Commission shall be accepted by the Code Enforcement Official as an approved alternate method of construction prior to the effective date if requested by the owner or his agent.

**102.6 Effective date of code editions.** The provisions of any code edition which have been approved by both the Building Code Council and the Rules Review Commission shall become effective the first day of January of the following year unless specified otherwise by the Building Code Council.

## SECTION 103 APPEALS

**103.1 General.** The following are appeals addressed by this code:

- (a) Appeal by a permit holder to local code enforcement management regarding a code determination made by a local code official for a specific job site.
- (b) Appeal by a permit holder to the NC Department of Insurance, Engineering Division regarding a determination

or interpretation by local code enforcement.

(c) Appeal by an inspection department or permit holder to the NC Building Code Council regarding an appeal decision issued by the NC Department of Insurance, Engineering Division.

(d) Appeal by a permit holder, designer, general public, or local code enforcement to the NC Building Code Council regarding a formal code interpretation issued by NC Department of Insurance, Engineering Division.

**103.1103.2 Form of complaints and other pleadings, supporting information.**

**103.2.1 Complaints.** ~~1-~~ There shall be no specific form required for complaints. To be sufficient, a complaint shall be in writing, identify the parties and shall reasonably apprise the Building Code Council of the facts that form the basis of the complaint.

**103.2.2 Other pleadings, Supporting information.** ~~2-~~ There shall be no specific form. Appendix E shall be required for answers, motions or other pleadings, supporting information relating to appeals before the Building Code Council, except they shall be in writing. To be sufficient, the document The pleadings, supporting information shall identify the case to which it refers and reasonably apprise the Building Code Council of the matters it alleges, answers or requests. In lieu of submission in writing, motions, requests and other pleadings, supporting information may be made on the record during the course of the hearing before the Building Code Council.

**103.2103.3 Governing provisions.** Hearings before the Building Code Council shall be governed by the provisions of General Statutes 150B, Article 3A.

**103.3103.4 Presiding officer.** The Building Code Council may designate any of its members to preside over the hearing in a case on appeal. When no designation is made, the ~~chairman~~ Chair of the Building Code Council shall preside, or, in his absence, the ~~vice chairman~~ Vice Chair shall preside. The presiding officer shall rule on motions or other requests made in an appeal case prior to the hearing in that case, except when the ruling on the motion would be dispositive of the case. When the ruling on a motion or request would be dispositive of the case, the presiding officer shall make no ruling and the motion or request shall be determined by a majority of the Building Code Council.

**103.4103.5 Continuances.** The Building Code Council's ~~Secretary~~ Chair may grant ~~the first request~~ requests for a continuance of a hearing for good cause. ~~Any subsequent requests for continuance may be granted by the chairman of the board.~~ The granting of a continuance is wholly discretionary.

**103.5103.6 Modifications.** Whenever there are practical difficulties involved in carrying out the provisions of the technical codes, the Building Code Council shall have the authority to grant modifications for individual cases, after the Building Code Council finds on appeal that (1) special individual reasons, conditions, and/or circumstances exist that make the strict letter of the technical codes impractical, (2) the modification is in compliance with the intent and purpose of the technical codes, and (3) the modification does not lessen health, accessibility, life, fire-safety or structural requirements.

**(General Statute 143-141)**

*Commentary: Limitation on what constitutes "practical difficulties." This section is not intended to permit setting aside or ignoring a code provision; rather, it is intended to provide for the acceptance of equivalent protection. Such modifications do not, however, extend to actions that are necessary to correct violations of the code. In other words, a code violation or the expense of correcting a code violation does not necessarily constitute a practical difficulty.*

**SECTION 104  
ADMINISTRATION**

**104.1 North Carolina Department of Insurance, Engineering Division.**

**104.1.1 Document approval.** Construction specifications and drawings, including Appendix B of this code, for buildings specified in Table 104.1 shall be submitted to the Engineering Division of the North Carolina Department of Insurance. The Engineering Division shall grant document approval before a permit is issued on any building listed in Table 104.1.

**TABLE 104.1  
NORTH CAROLINA DEPARTMENT OF INSURANCE, ENGINEERING DIVISION  
DOCUMENT APPROVAL FOR NEW CONSTRUCTION AND ADDITIONS**

OCCUPANCY GROUP	BUILDING PLANS TO BE APPROVED
-----------------	-------------------------------

Section 403 – High Rise <sup>1</sup>	All buildings
Section 402 – Covered Mall Buildings <sup>1</sup>	All buildings
City/county owned	All buildings 20,000 sq. ft. or greater as required by G.S. §58-31-40
Group A <sup>1,2</sup>	Occupant load over 1,000
Group E <sup>1</sup>	Over 2 stories or over 20,000 sq. ft./story
Group H <sup>1</sup>	Occupant load over 100
Group I <sup>1</sup>	Over 3 stories or over 10,000 sq. ft./story
Group R <sup>1</sup>	Over 4 stories or over 100 units/building

For SI: 1 square foot = 0.0929 m<sup>2</sup>.

- Plans and specifications are not required to be reviewed or approved by the Engineering Division on for buildings, except city/county owned, that are located in a city or county inspection jurisdiction approved to perform plans review by the NC Building Code Council, except city/county owned buildings are not exempt.
- Except temporary bleachers.

*Commentary: The square footage listed above refers to the footprint of a new building or building addition.*

*The occupant loads refer to a new building or building addition area only.*

*For the purpose of this table only, the occupant load for a church is based on the occupant load of the Occupant Group A-3 main meeting area. If the A-3 area is over 1,000 occupants, then DOI plan review is required unless exception 2 applies.*

*General Statute 58-31-40 indicates that such city/county owned buildings must be greater than 20,000 square feet (1858 m<sup>2</sup>) of new or additional building footprint to require DOI review. The 20,000 square feet (1858 m<sup>2</sup>) applies to individual structures on the site and not the sum of the structures.*

**104.1.2 Local plan review approval.** ~~1. An A local~~ inspection department may make a written request to the Building Code Council to review plans and specifications on buildings listed in Table 104.1. This authority ~~shall~~ may be granted provided that the following is met:

- The inspection department is adequately staffed by code enforcement officials with Standard Level III Certificates issued by the North Carolina Code Officials Qualification Board ~~in all areas and attest that the for~~ Building, Electrical, Fire, Mechanical and Plumbing.
- The jurisdiction attests it is capable of performing required inspections within 2 business days of request for inspection as required by NCGS 143-139.4.

**104.1.3 List of approved local jurisdictions.** ~~2-~~ Local inspection departments approved under this section shall be listed on the Department of Insurance web page, or a list shall be provided by the Building Code Council Secretary. [www.ncdoi.com/osfm](http://www.ncdoi.com/osfm).

## SECTION 105 ALTERNATE MATERIAL, DESIGN OR METHODS

**105.1 Approval General.** The provisions of ~~this code~~ the technical codes are intended to allow the use of any alternate material, design or method of construction, provided that the alternate has been approved by the code enforcement official. An alternative material, design or method of construction shall be approved where the code enforcement official finds that the proposed alternative material, design or method of construction complies with ~~the intent and provisions of the technical codes~~ Section 105.2.

*Commentary: The technical codes are not intended to inhibit innovative ideas or technological advances. A comprehensive regulatory document, such as the North Carolina Building Codes, cannot envision and then address all future innovations in the industry. As a result, a performance code must be applicable to and provide a basis for the approval of an increasing number of newly developed, innovative materials, systems and methods for which no code text or referenced standards yet exist. The fact that a material, product or method of construction is not addressed in the technical codes is not an indication that such material, product or method is intended to be prohibited. The code enforcement official is expected to apply sound technical judgment in accepting materials, systems or methods that, while not anticipated by the drafters of the current code text, can be demonstrated to offer equivalent performance. By virtue of its text, the code regulates new and innovative construction practices while addressing the relative safety of building occupants. The code enforcement official is responsible for determining if a requested alternative provides the equivalent level of protection of public health, safety and welfare as required by the code.*

**105.2 Approval process.** The two paths for approval are a prescriptive method and a performance method as required in Sections 105.2.1 and 105.2.2.

**105.2.1 Prescriptive method.** The alternate method shall demonstrate equal or safer characteristics as required prescriptively by the technical codes.

**105.2.2 Performance method.** The alternate method shall demonstrate equal or safer performance as required by the technical codes.

*Commentary: "Prescriptive method" refers to sections of the technical codes that indicate a specific material or method. An example would be from the NC Residential Code the requirement that a pier footing for a 1-story house be 1'-4"x2'-0"x8". That would be the minimum footing size if the footing is designed prescriptively.*

*"Performance method" refers to sections of the technical codes that indicate minimum design value. The footing for the same pier as described above could be designed to a lesser size if the performance requirements of the NC Residential Code are met. An example could be that the dead and/or load loads of the structure supported by the pier are less than expected by the code or the soil capacity is greater than 2,000 psf. Any of these factors could reduce the size of the footing to less than that required prescriptively in the NC Residential Code.*

**105.2.3 Tests or analysis.** Whenever there is insufficient evidence of compliance with the provisions of the technical codes, or evidence that a material, design or method does not conform to the requirements of the technical codes, or in order to substantiate claims for an alternative material, design or method, the code enforcement official shall have the authority to require tests as evidence of compliance to be made at no expense to the authority having jurisdiction. Test methods shall be as specified in the technical codes or by other recognized test standards. In the absence of recognized and accepted test methods, the code enforcement official shall ~~approve the~~ have authority to review and approve or disapprove proposed testing procedures. The following are accepted testing agencies:

- a. A certified testing lab approved by the International Accreditation Service (IAS) for the specific standard that the alternate material or method is required by the code to comply.
- b. International Code Council approved testing agencies.
- c. Other testing agencies as approved by the local inspection jurisdiction.
- d. North Carolina registered design professionals providing sealed reports or evaluation letters in their area of expertise.
- e. Mechanical and electrical 3<sup>rd</sup> party testing agencies approved by the NC Office of State Fire Marshal in accordance with N.C.G.S. § 66-25 and § 143-139.1 and listed on their website at: [Third Party Testing Agencies | OSFM \(ncosfm.gov\)](https://www.ncosfm.gov).

### **105.3 Appeals.**

**105.3.1 Local government.** The local building safety agency and fire marshal shall establish documented procedures to address requests for acceptance of a proposed alternate method. The procedure shall be published and made available to the general public upon request. The procedure shall include a requirement for a written response by the local government to the requesting party for a properly submitted request for appeal. The procedure shall require an acceptance or denial response be issued by the local government in 10 business days or less from the date of receipt of the request by the local government. The response shall include the evidence and codes considered in the decision as well as conclusions drawn from the evidence and codes.

**105.3.2 Decision of local government.** Appeal a of local jurisdiction decision is directed to the NC Department of Insurance in accordance with Section 203.2.2.

**105.3.3 Decision of North Carolina Department of Insurance, Engineering Division.** Appeal of a NC Department of Insurance, Engineering Division decision is directed to the North Carolina Building Code Council in accordance with Section 202.9.

## SECTION 106 PERMITS

**106.1 Permit required.** A current permit is required for all work described in the technical codes unless specifically exempted by the North Carolina General Statutes or the technical codes.

*Commentary: Reference North Carolina General Statute 160D-1110 for exemptions.*

### 106.2 Drawings and specifications.

**106.2.1 Requirements.** Drawings and specifications, as required by the inspection department, shall be drawn to scale with sufficient clarity and detail to indicate the nature and character of the work and shall accompany the application for a permit. All information, drawings, specifications and accompanying data shall bear the name, address and signature of the person responsible for the design.

**Exception**~~Exceptions:~~

1. Projects using the Building Information Modeling-Integrated Project Delivery (BIM-IPD) process, see Section 106.2.3.1.
2. Residential buildings exempted by **NCCGS 160D-1110, paragraph (b).NCCGS 160D-1110(b).**

**106.2.2 Additional data.** The inspection department may require details, computations, stress diagrams or documentation sealed by a registered design professional and other data necessary to describe the construction or installation of a system.

**Exception:** Projects using the BIM-IPD process, see Section 106.2.3.1.

**106.2.3 Review and approval.** When the inspection department issues a permit, it shall approve, in writing or by stamp, all sets of drawings and specifications “Reviewed for Code Compliance.”

**Exception:** Nothing in this section shall require the review and approval of one- and two-family dwelling plans.

*Commentary: Drawings and specifications shall be kept in a manner prescribed by North Carolina General Statute 160D-1126.*

**106.2.3.1 Building Information Modeling—Integrated Project Delivery Process.** When proposed by the permit applicant and when acceptable to the authority having jurisdiction, the BIM-IPD process may be utilized, replacing the requirements of Section 106.2.3, with the following permitting and inspection steps.

1. At the project start, the owner’s project team (Architect, Engineer, contractor, et al.) shall meet with the Code Enforcement Official (CEO) to determine the prevailing code compliance strategy for the full scope of the project, to be documented in an electronic Appendix B format or an equivalent format, acceptable to the CEO.
2. The CEO may issue a single project master permit, based on the initial project description and code compliance strategy agreement.

*Commentary: The CEO should work collaboratively to review building components or details as scheduled by the owner’s project team.*

3. The CEO shall inspect built work, as described in Section 107 of this code.
  - 3.1 Concurrence on compliance with the code, with respect to both the model and built product, shall be gained before inspections are approved.
4. The owner’s project team shall submit a validation document, at project substantial completion, documenting the building as constructed and compliance with the *North Carolina State Building Code*, for



records retention by the Authority Having Jurisdiction. Validation document: may be a three dimensional model, two dimensional electronic drawings and records, or a combination of both, accurately reflecting the completed building as approved by the code official in the field, and verified with respect to same.

- Where the validation document varies from the approved virtual model regarding building code compliance, the related Architect/ Engineer must approve the change.
- Receipt of the validation document shall be a condition on issuance of Certificate of Occupancy.

#### 106.2.3.2 Definitions.

**BIM:** Model-based technology linked with a data base of project information, using three-dimensional, real time dynamic modeling software, to plan all building construction. The model encompasses building geometry, spatial relationships, geographic information, and quantities and properties of building components.

**IPD:** A project delivery method that integrates key participants (owner, Architect, Engineer, contractor, code official, et al.), systems, business structures and practices into a process that collaboratively plans and constructs facilities. The collaborative process begins in early design and continues through all phases of design, fabrication and construction.

*Commentary: This applies to any project delivery method employing three-dimensional modeling software, to virtually construct all building components, by a collaborative team based process from design start to construction completion.*

#### 106.3 Permit application.

**Note to RRC:** Below text was submitted to RRC in error on 11/20/23 as this amendment (210608 Item B-2) was not carried forward by the NCBCCC during its approval process.

**106.3.1 Information required.** A permit application shall be filed with the Inspection Department on a form (see Appendix A) furnished for that purpose. The Inspection Department shall make available a list of information which that must be submitted with the building permit application, including a complete Building Code Summary (see Appendix B) complying with 106.3.2.

**Exception:** A Building Code Summary is not required if the AHJ (Authority Having Jurisdiction) determines plan review can be performed without the Building Code Summary.

**106.3.2 Building Code Summary.** The Building Code Summary used by an AHJ shall be in the exact format as, and contain only the information in, Appendix B of the Administrative Code and Policies. An AHJ shall only modify the Building Code Summary as set forth in section 103.5 103.6 Modifications, or as necessary to reflect any changes by the Office of State Fire Marshal to Appendix B which that have been approved of by the Building Code Council.

**Note to RRC:** Above text was submitted to RRC in error on 11/20/23 as this amendment (210608 Item B-2) was not carried forward by the NCBCCC during its approval process.

**Note to RRC:** The text below was approved by the NCBCCC on 6/13/23 and was unchanged.

**106.3.1 Information required.** A permit application shall be filed with the ~~Inspection Department~~ inspection department on a form furnished for that purpose. The ~~Inspection Department~~ inspection department shall make available a list of information that must be submitted with the building permit application, including a complete building code summary (see Appendix A of the Administrative Code and Policies). The ~~Inspection Department's~~ inspection department's building code summary shall be in the exact format as, and contain only the information in, Appendix B of the Administrative Code and Policies. The ~~Inspection Department~~ inspection department shall only modify its building code summary as set forth in section\_103.5 Modifications, or as necessary to reflect any changes by the Office of State Fire Marshal to Appendix B that have been approved by the Building Code Council.

**Note to RRC:** The text above was approved by the NCBCCC on 6/13/23 and was unchanged.

**106.4 Site address signage.** It is the responsibility of the permit applicant or designee to post the 911 emergency site address on an active jobsite at the commencement of work regulated by the NC Building Codes. The signage shall be temporary or permanent per 106.4.1 or 106.4.3.

**106.4.1 Temporary signage.** Signage to identify a construction site location can be temporary. Acceptable temporary signage may include such items as a permit placard, an address written on job box, yard signage or other

approved temporary street name markers shall be required if permanent street signs are not in place for new developments or subdivisions.

**106.4.2 Temporary Signage Location.** Address signage shall be placed such that it is legible from the street or road that fronts the property at all times during construction.

**106.4.3 Permanent signage.** Address signage meeting the requirements of the *International Residential Code* Section R319 for One- and Two-family Dwellings, *International Building Code* Section 501.2 or *International Fire Code* Section 505.1 for commercial buildings shall be deemed as meeting the requirements of this section.

## **SECTION 107 CONSTRUCTION INSPECTIONS**

**107.1 General.** The inspection department shall perform the following inspections:

1. Footing inspection – 107.1.1;
2. Under slab inspection, as appropriate – 107.1.2;
3. Foundation inspection – 107.1.3;
4. ~~Rough in inspection~~ Building framing – 107.1.4;
5. ~~Building framing inspection~~ Rough-in – 107.1.5;
6. Insulation inspection – 107.1.6;
7. Fire protection inspection – 107.1.7; and
8. Final inspection – 107.1.8.

*Commentary: The code enforcement official makes these inspections during certain phases of construction and is not on site at all times when construction is in progress. The code official verifies code compliance and/or code defects visible and subject to discovery during the above listed inspections and spot checks numerous similar items.*

*Nothing in any of Sections 107.1.1 through 107.1.8 requirements is intended to prevent partial inspections of the inspection types listed in Section 107.1 “General” as requested by the permit holder as allowed by the local inspection department. Cumulative partial inspections approved by the code official shall satisfy the same degree of readiness for inspection for viewing as described in Sections 107.1.1 through 107.1.8.*

*Not all items, such as, but not limited to, nailing of roof or other sheathing material, are always visible at framing inspection, but remain the responsibility of the permit holder to comply with the code.*

*Temporary electrical service poles may be inspected at any phase of construction as requested by the permit holder. Temporary utility (TU) applications deemed safe by the AHJ or as otherwise permitted by the code shall be allowed.*

**107.1.1 Footing inspection.** Footing inspections shall be made after the trenches are excavated, all grade stakes are installed, all reinforcing steel and supports are in place and tied, and all necessary forms are in place and braced before any concrete is placed.

**107.1.2 Under-slab inspection.** Under-slab inspections, as appropriate, shall be made after all materials and equipment to be concealed by the concrete slab are completed.

**107.1.3 Foundation inspection, crawl space.** Foundation and crawl space inspections shall be made after all foundation supports are installed.

*Commentary: Foundation inspections are conducted to verify correct installation and proper bearing support. Poured concrete and masonry walls that have reinforcement steel should be inspected prior to concrete placement. Crawl space leveling, ground clearances, positive drainage and waterproofing/dampproofing, when required, may be inspected at future inspections prior to concealment.*

~~107.1.5~~ **107.1.4 Building framing inspection.** Framing inspections shall be made after the roof (excluding permanent roof covering), wall ceiling, and floor framing is complete with appropriate blocking, bracing, and firestopping in place. The following items shall be in place and visible for inspection:

1. Pipes;
2. Chimneys and vents;

3. Flashing for roofs and chimneys;
4. Insulation baffles; and
5. All lintels that are required to be bolted to the framing for support shall not be covered by any exterior or interior wall or ceiling finish material before approval. Work may continue without approval for lintels supported on masonry or concrete.

**107.1.4**~~107.1.5~~ **Rough-in inspection.** Rough-in inspections shall be made when all building framing and parts of the electrical, plumbing, fire protection, or heating-ventilation or cooling system that will be hidden from view in the finished building have been placed, but before any wall, ceiling finish, or building insulation is installed.

*Commentary: Plumbing, mechanical, and electrical components installed underground should be considered as rough-in inspections and may be inspected at any point during construction prior to covering.*

**107.1.6 Insulation inspection.** Insulation inspections shall be made after an approved building framing and rough-in inspection and after the permanent roof covering is installed, with all insulation and vapor retarders in place, but before any wall or ceiling covering is applied.

*Commentary: Insulation baffles that cannot be seen at this inspection, such as vaulted ceilings with concealed rafter cavities, should have baffles installed at framing inspection for verification.*  
*It is acceptable that wall cavity insulation enclosed by an air barrier material behind tubs, showers, and fireplace units installed on exterior walls may not be observable by the code official.*

**107.1.6 Fire protection inspection.** Fire protection inspections shall be made in all buildings where any material is used for fire protection purposes. The permit holder or his agent shall notify the inspection department after all fire protection materials are in place. Fire protection materials shall not be concealed until inspected and approved by the code enforcement official.

*Commentary: Fire protection inspection is typically performed in commercial building structures and is required in addition to any special inspection as listed in Chapter 17 of the North Carolina Building Code.*

**107.1.8 Final inspection.** Final inspections shall be made for each trade after completion of the work authorized under the technical codes.

*Commentary: Each trade shall complete a final inspection giving approval to permitted work. Work required by the technical codes shall be complete before being requested. Temporary power and temporary certificate of occupancy (TCO) requests are allowed prior to final inspection.*

**107.2 Inspection requests.** It shall be the duty of the permit holder or his or her agent to notify the code enforcement official when work is ready for inspection and to provide access to and means for inspection of the work for any inspections that are required by this code.

**107.3 Approval required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code enforcement official. The code enforcement official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder that the work fails to comply with the technical codes. The code enforcement official shall identify code violations and when requested shall identify the specific sections of the technical codes that is violated. Any work that does not comply shall be corrected and shall not be covered or concealed until authorized by the code enforcement official.

**107.4 Independent inspections authorized by the code enforcement official.** The code enforcement official may authorize a North Carolina registered design professional to inspect the following structural elements, components and systems:

1. The excavation of soil and/or forming of footings with the associated placement of reinforcing steel prior to pouring concrete; and
2. The forming of floors, columns, beams and other structural members, including the placement of reinforcing steel prior to pouring concrete.

To utilize this procedure, the permit holder must continue to schedule all inspections normally required for this work by the inspection department. The registered design professional shall provide weekly reports bearing his seal to the inspection department indicating that the placement of the related construction elements, components and systems either complies or does not comply with the approved permit documents. Any change from the permit documents shall be approved by the code enforcement official prior to its implementation. The permit holder shall immediately inform the code enforcement official if he or she terminates his or her relationship with the registered design professional.

**107.5 Special inspections.** Special inspections required by the building code or the building inspector shall be performed by a North Carolina registered design professional or an inspector under his responsible charge.

**107.6 Inspections of component or element.** Acceptance of inspection of a component or element by a NC registered architect or engineer will require completion of the “Design Professional Inspection Form” found in Appendix G.

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## CHAPTER 2

# ADMINISTRATIVE POLICIES

### SECTION 201 SCOPE

**201.1 Scope.** Chapter 2 is provided as procedural policies. ~~Items discussed in this chapter are intended as commentary to the General Statutes.~~

### SECTION 202 BUILDING CODE COUNCIL

www.ncbuildingcodes.com

**202.1 Duties.** The Building Code Council has the following duties:

- 1 Prepare and adopt the North Carolina State Building Code;
2. Revise or amend the ~~code~~ North Carolina State Building Code;
3. Hear appeals from decisions of state code enforcement agencies as to any matter related to the code;
4. Make a thorough and continuing study of the manner of enforcement of the code and building laws;
5. Make recommendations to State agencies about any changes in administrative practices which could improve the enforcement of the code or building laws; and
6. Recommend to the General Assembly statutory changes to simplify and improve the building laws.  
(General Statutes 143-138, 143-140 and 143-142)

**202.2 Composition.** The Building Code Council shall consist of 17 members appointed by the governor as follows:

- ~~1 and~~ 2. Two registered architects;
- ~~3~~ 2. One licensed general contractor;
- ~~4~~ 3. One licensed general contractor specializing in residential construction;
- ~~5~~ 4. One licensed general contractor specializing in coastal residential construction;
- ~~6~~ 5. One licensed engineer practicing structural engineering;
- ~~7~~ 6. One licensed engineer practicing mechanical engineering;
- ~~8~~ 7. One licensed engineer practicing electrical engineering;
- ~~9~~ 8. One licensed plumbing and heating contractor;
- ~~10~~ 9. One municipal or county building inspector;
- ~~11~~ 10. One representative of the public who is not a member of the building construction industry;
- ~~12~~ 11. One licensed electrical contractor;
- ~~13~~ 12. One licensed engineer on the engineering staff of a State agency charged with approval of plans of State-owned buildings;
- ~~14~~ 13. One representative of the fire services;
- ~~15~~ 14. One licensed liquid petroleum gas dealer/contractor involved in the design of natural and liquified petroleum gas systems who has expertise and experience in natural and liquid petroleum gas piping, venting and appliances;
- ~~16~~ 15. One municipal elected official or city manager; and
- ~~17~~ 16. One county commissioner or county manager.

(General Statute 143-136)

**202.3 Officers and committees.** The Building Code Council shall elect a ~~chairman~~Chair and ~~vice-chairman~~Vice Chair from its appointed members. The officers shall serve for a period of two years from the date of election or until their successors are elected. The ~~Building Code Council~~NC Department of Insurance shall appoint a person from the Engineering Division to serve as secretary to the Building Code Council ~~from the Engineering Division of the Department of Insurance.~~

(General Statute 143-137)

**202.4 Meetings.** The Building Code Council shall meet regularly at least every 6 months. Special meetings may be called by the ~~chairman~~Chair. Any seven members of the Building Code Council shall constitute a quorum. Information concerning the exact time and place of all regular meetings and regular public hearings shall be made available to the public by the Engineering Division of the Department of Insurance 60 calendar days prior to each such meeting or public hearing. Information concerning the exact time and place of ~~each~~all ~~meetings~~special meetings with public hearings required to be noticed in the NC Register shall be made available ~~from~~to the public by the Engineering Division of the Department of Insurance 15 calendar days prior to each such meeting. Information concerning the exact time and place of all special meetings that do not have public hearings required to be noticed in the NC Register shall be made available to the public by the Engineering Division of the Department of Insurance 7 calendar days prior to each such meeting. Agenda items, other than proposed amendments, must be submitted to the Building Code Council Secretary 21 calendar days prior to the scheduled meeting.

(General ~~Statute 143-137~~Statutes143-137 and 143-138)

**202.5 Proposed amendments.** The Building Code Council may revise or amend the code, either on its own motion or upon application from any person, state agency or political subdivision of the state. Each request to amend the code shall comply with the following policies ~~of the Building Code Council:~~

**202.5.1 Filings.** Twenty-one ~~copies~~hardcopies or a single pdf with an editable softcopy of the proposed amendment with supporting documentation shall be filed with the Building Code Council Secretary.

**202.5.1.1 Improper filings.** When a request proposed amendment is improperly filed or not in accordance with ~~all the rules listed above~~Sections 202.5.1 through 202.5.3, the Building Code Council Secretary shall reject the submittal and notify the applicant of the proper procedure to follow.

**202.5.2 Submission date.** The proper filing shall be received by the first day of the month prior to the ~~quarterly~~next scheduled ~~council~~Council regular meeting date.

**202.5.3 Filing format and required information.** Each request proposed amendment shall be legibly printed, typed or copied on a form (see Appendix C) available from the North Carolina Department of Insurance, Building Code Council section and shall at a minimum contain the following:

1. The proposed amendment must be set forth in full and contain an explicit reference to the affected section or sections of the code;
2. The request shall state the reasons for the proposed amendment with supporting documentation;
3. The proposed amendment shall comply with the standards set forth in General Statute 143-138(c) and reference to the particular standards shall be set forth in the request for the amendment; and
4. The proposed amendment shall contain an economic impact analysis as required by General Statute 143-138(a1).

**202.5.4 Secretary duties.** Upon the proper filing of a request proposed amendment, the Building Code Council Secretary shall forward one copy of said request proposed amendment to each ~~council~~Council member prior to the scheduled meeting date. Persons filing proposed amendment petitions are hereby notified of the place and time of the scheduled ~~hearings-meetings~~hearings-meetings. The Building Code Council Secretary shall cause agendas to be published for all meetings and public hearings. The Building Code Council Secretary shall cause to be published the notice of public hearing as specified in North Carolina General Statutes 143-138(a).

**202.5.5 Actions taken.** This section addresses actions taken by the North Carolina Building Code Council for properly filed petitions for rulemaking (code amendments).

**202.5.5.1 New petitions for ~~rulemaking~~rulemaking (B-items).** Prior to the next scheduled ~~council~~Council meeting:

**202.5.5.1.1 Council ~~chair~~Chair.** The ~~council chair~~Council Chair shall assign each proposed amendment to the appropriate standing committee chair(s).

**202.5.5.1.2. Standing committee.** The standing committee(s) shall review the proposed amendment and the chair(s) of the committee(s) shall then, based on the committee review, recommend to the ~~council~~Council:

- a. denial;
- b. acceptance;
- c. acceptance with committee modifications; or,

**ADMINISTRATIVE POLICIES**

d. tabling the proposed amendment to the next scheduled council/Council meeting pending further review by the committee(s) or an ad-hoc committee appointed by the council chair/Council Chair.

**202.5.5.1.3 Council.** The council/Council will determine whether the proposed amendment or committee modified proposed amendment will be accepted, denied or tabled for further review by the standing committee or an ad-hoc committee. For proposed amendments that are sent to a committee or ad-hoc committee for review, the council/Council shall set a date for the committee to issue its findings to the council/Council.

The council/Council will take no further action on items that are denied. Granted items may be referred to committee for review (General Statute 150B-20(d)). The Secretary to the council/Council shall inform the proponent of the proposed amendment in writing of the reason for the denial (General Statute 150B-20(c)).

**202.5.5.2 Notice of rulemaking proceedings and public hearing-hearing (C-items).** Amendments/Proposed amendments that are approved by the council/Council in Section 202.5.5.1.3 shall be:

- a. included in the agenda for the following council/Council meeting;public hearing;
- b. advertised by the North Carolina Office of Administrative Hearings for public hearing as required by General Statute 150B-21.2; and,
- c. advertised on the North Carolina Department of Insurance website a minimum of 15 calendar days prior to the public hearing date.

**202.5.5.3 Final adoption-adoption (D-items).** The Building Code Council shall either grant or deny properly submitted proposed petitions for rulemaking/amendments at the meeting following the public hearing required by Section 202.5.5.2. Granted proposed amendments shall be published on the North Carolina Department of Insurance website within 30 days after the adopted amendment is reviewed and approved by the North Carolina Rules Review Commission and in accordance with Section 202.6.1.

The council/Council will take no further action on items/proposed amendments that are denied. Amendments/Proposed amendments that are substantially similar to a denied proposed amendment cannot be resubmitted for consideration by the council/Council for a minimum of 12 months from the date of the denial.

**202.5.5.4 North Carolina Rules Review Commission.** A proposed amendment that is granted by the council/Council is not adopted or but is not published as adopted until it has been approved by the Rules Review Commission. If the commission sends an adopted amendment back to the council/Council for further work, the revised proposed amendment shall be readopted/is not considered adopted and will not be published as adopted/readopted until it is resubmitted to the commission and the commission approves the adopted amendment. Amendments are not approved for use based on the effective date under which the amendment was adopted by the Council until approved by the commission.

**202.5.6** The Building Code Council shall either grant or deny the proposed petition for rule-making at the meeting following receipt of the proposed rule change. The council will take no further action on items that are denied. Granted items may be referred to committee for review.

**202.5.7** The Building Code Council may hold a public hearing on granted items at the next quarterly scheduled meeting. The council may take final action on granted items at the next quarterly scheduled meeting after the public hearing.

**Table 202.5.5**  
**Typical Timeline Example for Adopted Rules**

<u>Rule Petition Received:</u>	February 1
<u>Standing Committee First Review:</u>	February – March
<u>Rule Petition Granted for Public Hearing:</u>	March BCC meeting
<u>Notice of Hearing Published:</u>	April NC Register
<u>Committee Review:</u>	April – May
<u>Hearing Held:</u>	June BCC <u>meeting/public hearing</u>
<u>Standing Committee Final Review:</u>	June – September
<u>Final Rule Adoption:</u>	September BCC meeting
<u>Rules Review Meeting:</u>	November RRC meeting
<u>Approved:Effective:</u>	<u>December – First day of the month following the month the adopted rule is approved by RRC or a delayed effective</u>

date approved by the BCC.

**202.6 Publications.**

**202.6.1 Amendments.** The Building Code Council shall print all amendments to the codes, and the amendments shall be available for distribution in accordance with General Statute 143-138(g). ~~Publication of adopted amendments on the Building Code Council website is deemed to meet the publication requirement of General Statute 143-138(g).~~ Amendments, ~~Notices~~ meeting and public hearing notices and minutes are available either at no charge on the Council web page or for a fee as prescribed by Agency Rules page.

**202.6.2 Council webpage.** The minutes and agenda of the Building Code Council may be found on the Council web page located at ~~http://www.ncbuildingcodes.com~~ <https://www.ncosfm.gov/codes/building-code-council-bcc/meeting-dates>. Click on the desired information topic.

~~202.6.3 Engineering newsletter.~~ Newsletters will be sent to online subscribers. Archive copies may be found on the Engineering web page located at <http://www.ncdoi.com/osfm>. Click on Building Codes to subscribe.

**202.7 Approval of local ordinances.** The Building Code Council may approve local regulations governing the Fire Prevention Code. All regulations shall be approved by the Building Code Council in order to be legally effective. Regulations approved by the local governing body, which are found to be more stringent than the fire prevention code and, which are found to regulate activities and conditions in buildings, structures, and premises that pose dangers of fire, explosion or related hazards, and are not in conflict with the North Carolina Building Code, shall be approved once reviewed and filed by the Building Code Council. The rules listed in Section 202.5 shall apply for filing a proposed local deviation to the Fire Prevention Code along with the following:

1. Twenty-one ~~copies~~ hardcopies or a single pdf and editable soft copy of the resolution adopted by the governing body requesting the proposed deviation to the fire prevention code.
2. After approval by the Building Code Council, the Building Code Council Secretary shall advise the local governing body and shall retain a copy in the Building Code Council’s file as a permanent record.

[General Statute 143-138(e)]

**202.8 Committees.**

**202.8.1 Super committees.** There are two supercommittees designated by N.C.G.S. 143-136, commercial committee and residential committee. The duties of those committees are to, in their respective areas of authority, approve or deny proposed code amendments prior to the amendment being addressed by the full ~~council~~ Council and make recommendations to the full ~~council~~ Council regarding appeals before the ~~council~~ Council.

~~202.8.1~~ **202.8.2 Standing committees.** The standing committees shall consist of members of the Building Code Council. The ~~Chairman~~ Chair of the Building Code Council shall appoint the chairmen and members of each committee.

~~202.8.2~~ **202.8.3 Ad hoc committees.** For each code edition, the ~~Chairman~~ Chair shall establish and appoint ad hoc code revision committees and appoint the chairmen. The ad hoc committees shall consider and prepare revisions and amendments to the code volumes. Each ad hoc committee shall consist of members of the Building Code Council, Department of Insurance staff, licensed contractors, and design professionals most affected by the code volume for which the ad hoc committee is responsible and members of the public.

*Guidelines for Ad Hoc Committees:*

1. ~~Ad Hoc committee is asked to approach its~~ Approach code review with the idea of producing a newly amended code with as few changes from the ~~2009 ICC~~ model codes as the committee deems practicable.
2. Current Code shall be considered ~~base line~~ baseline for code comparison.
3. ~~Ad Hoc committee is asked to provide~~ Provide a list of major changes to the Standing Committee and Council for review.
4. ~~If code changes are thought to be controversial, it is suggested that the Ad Hoc committee consider~~ Consider handling ~~such~~ complex code change-items as separate standalone code ~~changes~~ changes to avoid adoption delays of code volumes.
5. Ad Hoc committees shall submit its report to the appropriate Standing Committee for review.
6. After its review, the Standing Committee is asked to make a recommendation to the Building Code Council for adoption.

**202.8.4 Hearing committee.** The ~~chairman~~ Chair may appoint a hearing committee to hear an appeal.

**202.9 Appeals.** [General Statute 143-141(d)]

**202.9.1 Engineering division.** A written technical interpretation shall be provided as specified in Section 203.2.1.2.



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Any person may appeal in writing an order, decision or ~~determination~~interpretation pertaining to the code or any state building law by filing written notice with the Commissioner of Insurance or his designee within 10 calendar days after the order, decision or ~~determination~~interpretation. A copy of the appeal shall be furnished to each party. (General Statutes 143-140 and 160D-1127)

**202.9.2 Building Code Council.** The Building Code Council shall hear appeals from the decisions of state enforcement agencies relating to any matter related to the code. Any person wishing to appeal a decision of a state enforcement agency to the Building Code Council shall give written notice of appeal as follows:

**202.9.2.1 Filing.** Twenty-one ~~copies~~hardcopies including an original of the Notice of Appeal or a single pdf and editable softcopy shall be filed with the Building Code Council c/o North Carolina Department of Insurance, Engineering Division, 325 North Salisbury Street, Room ~~5-44542~~, Raleigh, North Carolina 27603, and one copy shall be filed with the state enforcement agency from which the appeal is taken.

**202.9.2.2 Submission date.** The Notice of Appeal shall be received no later than 30 days from the date of the decision of the State enforcement agency. (General Statute 143-141).

**202.9.2.3 Filing format and required information.** The Notice of Appeal shall be legibly printed, typewritten or copied and shall contain the following (See Appendix E):

1. Name, address of the party or parties requesting the appeal.
2. The name of the state enforcement agency, and the date of the decision from which the appeal is taken, and a copy of the written decision received from the enforcement agency taken.
3. The decision from which the appeal is taken shall be set forth in full in the Notice of Appeal or a copy of the decision shall be attached to all copies of the Notice of Appeal.
4. The contentions and allegations of fact must be set forth in full in a clear and concise manner with reference to the sections of the code in controversy.
5. The original Notice of Appeal shall be signed by the party or parties filing appeal.
6. The Notice of Appeal shall be received by the first day of the month prior to the Building Code Council's quarterly scheduled meeting in order to be placed on the agenda for that meeting. The ~~Chairman~~Chair may schedule a special meeting to hear an appeal.

**202.9.2.4 Secretary duties.** Upon the proper filing of the Notice of Appeal, the Building Code Council Secretary shall forward one copy of the Notice of Appeal to ~~each member of the attorney for the Building Code Council and the council's~~Council's attorney shall distribute the appeal as necessary to each ~~council~~Council member.

**202.9.2.5 Hearing Committee.** The ~~chairman~~Chair may appoint a Hearing Committee to hear appeals. The Secretary shall send notice in writing to the party or parties requesting an appeal and to the Building Code Council Hearing Committee members at least 15 days prior to the Hearing Committee meeting. A written decision of the Hearing Committee meeting shall be provided to all Building Code Council Members. The actions of the Hearing Committee shall be final, unless appealed to the full Building Code Council in writing within 30 days of the Hearing Committee's action. If a Hearing Committee consists of at least seven ~~council~~Council members, it will constitute a quorum of the full ~~council~~Council. Further appeals shall be as specified in Section 202.9.3.

**202.9.2.5202.9.2.6 Dismissal.** The Building Code Council shall, upon a motion of the State enforcement agency or on its own motion, dismiss appeals for the following reasons:

1. Not pursued by the appellant or withdrawn;
2. Appeal not filed in accordance with these rules; or
3. Lack of jurisdiction by the Building Code Council.

**202.9.2.6202.9.2.7 Findings.** When the Building Code Council finds that a State enforcement agency was in error in its interpretation of the code, the Building Code Council shall remand the case to the agency with instructions to take such actions as the Building Code Council directs. When the Building Code Council finds on appeal that materials or methods of construction proposed are equivalent to those required by the code, the Building Code Council shall remand the case to the state enforcement agency with instructions to permit the use of such materials or methods of construction. The Building Code Council shall immediately initiate procedures for amending the code to permit the use of such materials or methods of construction.

**202.9.2.7202.9.2.8 Decision.** The Building Code Council shall provide a written decision setting forth the findings of fact and the Building Code Council's conclusions to each party or parties filing the appeal and to the State enforcement agency from which the appeal was taken.

**202.9.3 Superior court.** Whenever any person desires to appeal a decision of the Building Code Council or a decision of a State or local enforcement agency, he may appeal either to the Wake County Superior Court or the superior court of the county in which the proposed building is to be situated in accordance with the provisions of

Chapter 150B of the General Statutes.

~~{General Statute 143-141(d)}~~

**SECTION 203  
NORTH CAROLINA DEPARTMENT OF INSURANCE**

www.ncdoi.com/osfm

**203.1 Administration.**

**203.1.1 Commissioner of Insurance.** The Commissioner of Insurance through the Engineering Division shall have general supervision of the administration and enforcement of the North Carolina State Building Code. This includes all sections of the code pertaining to:

1. General building restrictions and regulations;
2. Plumbing;
3. Heating and air conditioning;
4. Electrical systems;
5. Fire protection; and
6. Natural or liquified petroleum gas systems. ~~{General Statute 143-139(b)}~~

~~(General Statute 143-139(b))~~

**203.1.1.1 Investigation of fires.** Whenever the Commissioner of Insurance has reason to believe that investigators of fire or fire prevention inspectors are not fulfilling their responsibilities, he or his ~~designee~~ deputy shall take proper steps to have all provisions of the law enforced.

(General Statute 58-2-95)

**203.1.1.2 Investigation of premises for dangerous materials.** The Commissioner of Insurance or his or her designee shall hear appeals from orders issued by the code enforcement official to remove or remedy combustible materials or inflammable conditions dangerous to any building or premises. The appeal shall be made within 24 hours of issue, not counting weekends or holidays. The commissioner shall cause the complaint to be investigated immediately. The Commissioner or his or her designee may make inspections of the complaint alone or in the company of the code enforcement official. Unless the Commissioner by his or her authority revokes the order of the code enforcement official, the order remains in force and must be complied with by the owner or occupant.

(General Statute 58-79-20)

**203.1.1.3 Buildings within primary fire limits.** The Commissioner of Insurance or his or her designee shall review all permits to erect, alter, repair or move any wood-frame building or structure within the primary fire district of a municipality. Such permits shall be received and approved by the ~~Inspection Department~~ inspection department and approved by the ~~Municipal Council~~ governing board prior to the Commissioner or his or her designee's approval.

(General Statute 160D-1128)

**203.2 Engineering Division.** The Engineering Division of the Department of Insurance shall serve as staff for the Building Code Council and the Code Official's Qualification Board. The Engineering Division shall work in cooperation with code enforcement officials and provide general supervision in the administration and interpretation of the codes. The staff shall handle correspondence and maintain an accurate and complete record of:

1. All meetings or hearings,
2. Laboratory studies, and
3. Technical work performed by or for the Building Code Council.

All records shall be available for public inspection during regular office hours. All funds for the operation of the Building Code Council shall be appropriated to the Department of Insurance. The Department of Insurance may hire additional staff as may be necessary to handle the work of the Building Code Council with the approval of the ~~council~~ Council.

[General Statute 143-137(c)]

**203.2.1 Interpretations.**

**203.2.1.1 Informal interpretations.** The Engineering Division shall provide informal interpretations on code-related matters either by e-mail, letter or telephone. These informal interpretations may be accepted by the local code enforcement official or party requesting the interpretation. Either party may request a formal interpretation

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of the code.

**203.2.1.2 Formal interpretations.** Any person may request in writing a formal interpretation of the code. The request shall be addressed to the Chief Code Consultant for the Department of Insurance. The request shall be specific and shall reference the code sections in question. All formal interpretations shall be in writing and include Appendix E as a cover document. A formal interpretation shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. Formal interpretations determined to be of a general nature may be posted on the department web site.

(General Statute 143-140)

**203.2.2 Appeals.** Any person may appeal in writing an order, decision or determination of a code enforcement official pertaining to the code or any state building law. The appeal shall be addressed to the Chief Engineer for the Department of Insurance by filing written notice within 10 days after the order, decision or determination. The appeal shall contain the type and size of the building in question, the location of the building and shall reference the code sections in question. The decision shall be in writing and shall set forth the facts found. The decision rendered shall be based on the technical provisions of the code, public health and safety and shall be construed liberally to those ends. A decision shall be binding on all parties unless an appeal is submitted to the Building Code Council as specified in Section 202.9.2. A copy of the appeal and written decision shall be furnished to each party. A decision regarding an appeal of alternate material, design, or methods as allowed by Section 105.3 shall be provided in 10 business days or less as required by General Statute 143.140.1.

(General Statute 160D-1127)

**203.2.3 Code Errata.** It shall be the responsibility of the Chief Code Consultant for the Department of Insurance to issue errata to the NC State Building Codes. Before publishing an errataerrata, the errata shall be reviewed by the Chair of the NC Building Code Council standing committee for the related code. The errata shall be published on the Department of Insurance website with the code amendments.

**203.2.3 Engineering newsletter.** Newsletters will be sent to online subscribers. Archive copies may be found on the Engineering web page located at <https://www.ncosfm.gov/Newsletters>. To subscribe to engineering newsletters go to [https://lists.ncmail.net/mailman/listinfo/ncdoi\\_engineering](https://lists.ncmail.net/mailman/listinfo/ncdoi_engineering).

## SECTION 204 CITY AND COUNTY GOVERNMENT

[www.ncgov.com](http://www.ncgov.com)

(Click on "For Government, Local Government")

**204.1 General.** The powers, duties and responsibilities of the code enforcement official are generally described in General Statute 160D, Article 11. This section does not apply to properties owned by state and federal government entities unless specifically requested by those entities.

### 204.2 Inspection department.

**204.2.1 General.** The responsibility for administration and enforcement of the code has been allocated to local code enforcement officials under the supervision of State officials as designated within Section 203.  
[General Statute 143-139(b)]

**204.2.2 Jurisdiction.** A municipal inspection department shall have jurisdiction over all areas within the city limits, all extraterritorial areas that the city has jurisdiction pursuant to state laws, and over any areas in which the municipal limits have contracted with another unit of government to perform code enforcement. A county inspection department shall have jurisdiction over all unincorporated areas outside any municipal jurisdiction located within the county, all areas in which a municipality has requested the county to enforce the code, and within the jurisdiction of another unit of government in which the county has contracted to perform code enforcement. A joint inspection department created by two or more units of government shall have the authority to enforce the code in all areas of legal jurisdiction of all units of government supporting the joint department.  
(General Statutes 160D-1104 and 160D-1107)

**204.2.3 Duties.** Inspection departments shall:

1. Receive applications and supporting data for permits;
2. Issue or deny permits;
3. Make all necessary inspections to ensure code compliance;
4. Identify technical provisions found to be inconsistent with the inspection;
5. Issue or deny certificates of compliance and certificates of occupancy;
6. Issue stop work orders or orders to correct violations;

7. Maintain adequate records of permits issued or denied, inspections made, corrections ordered and certifications issued; and
8. Take other actions that may be required to adequately enforce the code.

(General Statute 160D-1104)

**204.2.4 Code enforcement officials qualifications.** No state or local government employee shall enforce any provision of the North Carolina State Building Codes who does not possess an appropriate valid certificate issued by the North Carolina Code Officials Qualification Board as specified in General Statutes 143-151.13 and 160D-1103.

**204.2.5 Conflict of interest.** Information about conflict of interest for code enforcement officials can be found in General Statute 160D-1108.

**204.2.6 Right of entry.** The code enforcement official shall have the right to enter buildings or premises as described in General Statutes 160D-1113 and 160D-1117.

**204.2.7 Stop work orders.** General Statute 160D-404 authorizes a code enforcement official to issue stop work orders. The statute describes when a stop work order can be issued, and how the stop work order is to be issued. See Section 204.10 for appeal of stop work orders.

**204.2.8 Unsafe building or systems.** A code enforcement official's authority to condemn an unsafe building is found in General Statute 160D-1119.

**204.3 Fire prevention department.**

**204.3.1 General.** The responsibility for administration and enforcement of the North Carolina Fire Prevention Code has also been allocated to county fire marshals and city fire chiefs under the supervision of State officials as designated within Section 203.

(General Statutes ~~160A-292~~, 160A-291, and 160A-292)

**204.3.2 Jurisdiction.** A municipal fire department shall have jurisdiction over all areas within the city limits, all extraterritorial areas that the city has jurisdiction pursuant to state laws, and over any areas in which the municipal limits have contracted with another unit of government to perform code enforcement. The county fire marshal and his or her appointed assistants shall have jurisdiction over all unincorporated areas outside any municipal jurisdiction located within the county, all areas in which a municipality has requested the county to enforce the code, and within the jurisdiction of another unit of government in which the county has contracted to perform code enforcement. A joint inspection department created by two or more units of government shall have the authority to enforce the code in all areas of legal jurisdiction of all units of government supporting the joint department.

(General Statutes 153A-234, 160A-292, 160D-1104 and 160D-1107)

**204.3.3 Duties.** Fire prevention departments shall:

1. Receive applications and supporting data for permits;
2. Issue or deny permits;
3. Make all necessary inspections to ensure code compliance;
4. Identify technical provisions found to be inconsistent with the inspection;
5. Issue or deny certificates of compliance and certificates of occupancy;
6. Issue stop work orders or orders to correct violations;
7. Maintain adequate records of permits issued or denied, inspections made, corrections ordered and certifications issued;
8. Take other actions that may be required to adequately enforce the code; Code enforcement actions;
9. Investigate the cause, origin, and circumstances of every fire in which property has been destroyed or damaged;
10. Inspect public school buildings a minimum of two times during a calendar year for removal of hazards, provided that the periodic inspections shall be at least 120 days apart; and
11. Inspect new and existing lodging establishments, including hotels, motels, and tourist homes that provide accommodations for seven or more continuous days (extended-stay establishments), bed and breakfast inns, and bed and breakfast homes for the installation and maintenance of carbon monoxide alarms and detectors annually.

(General Statutes 160D-1104, 58-79-1, 115C-525(b), 130A-247, and 143-138(b)(2))

**204.3.4 Fire code enforcement official's qualifications.** No county fire marshal or municipal fire chief or their appointed assistants shall enforce any provision of the North Carolina State Building Codes who does not possess an appropriate valid certificate issued by the North Carolina Code Official's Qualification Board as specified in General Statutes 143-151.13 and 160D-1103.

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**204.3.5 Conflict of interest.** Information about conflict of interest for code enforcement officials can be found in General Statute 160D-1108.

**204.3.6 Right of entry.** The fire code enforcement official shall have the right to enter buildings or premises where it is necessary to make a fire prevention inspection to enforce the provisions of the North Carolina Fire Prevention Code or where otherwise authorized as described in General Statutes 153A-234, 160A-292, 160D-1113 and 160D-1117.

**204.3.7 Administrative Inspection Warrants.** Where the fire code enforcement official has first obtained a proper inspection warrant to secure entry to conduct an inspection, an owner, the owner's authorized agent, or occupant or person having charge, care or control of the building or premises shall not fail or neglect, to permit entry therein by the fire code enforcement official for the purpose of inspection and examination.

(General Statute 15-27.2)

**204.3.8 Identification.** The fire code enforcement official shall carry proper identification credentials when inspecting structures or premises in the performance of duties, and shall present proper credentials when making inspections.

(General Statute 160D-1117)

**204.3.9 Stop work orders.** General Statute 160D-404 authorizes a fire code enforcement official to issue stop work orders. The statute describes when a stop work order can be issued, and how the stop work order is to be issued. See Section 204.10 for appeal of stop work orders.

**204.3.10 Unsafe building or systems.** A fire code enforcement official's authority to condemn an unsafe building is found in General Statute 160D-1119.

### ~~204.3~~204.4 Permits.

~~204.3.1~~204.4.1 **General.** No person may commence or proceed with:

1. The construction, reconstruction, alteration, repair, movement to another site, removal or demolition of any building;
2. The installation, extension or general repair of any plumbing system;
3. The installation, extension, alteration or general repair of any heating or cooling equipment system; or
4. The installation, extension, alteration or general repair of any electrical wiring, devices, appliances or equipment without first securing from the Inspection Department inspection department with jurisdiction over the site of the work each permit required by the North Carolina State Building Codes and other State or local law or local ordinance or regulation applicable to the work.

(General Statute 160D-1110)

~~204.3.2~~204.4.2 **Validity Expiration.** In accordance with General Statute 160D-1111, a permit expires 6 months, or any lesser time fixed by local ordinances, after the date of issuance if the work authorized by the permit has not been commenced. If, after commencement, the work is discontinued for a period of 12 months, the permit immediately expires. No work authorized by a permit that has expired may be performed until a new permit has been issued.

~~204.3.3~~204.4.3 **Changes in work.** Work shall not deviate substantially from that described on the permit documents.

~~204.3.4~~204.4.4 **Information required.** A permit application shall be filed with the Inspection Department inspection department on a form furnished for that purpose. The Inspection Department inspection department shall make available a list of information which must be submitted with the building permit application, including a complete building code summary (see Appendix B) and a permit application information sheet (see Appendix A).

~~204.3.5~~204.4.5 **Design professional seal required.** Where the General Statutes, North Carolina Board of Architecture and Registered Interior Designers, or the North Carolina Board of Examiners for Engineers and Land Surveyors require, no permit shall be issued unless the construction documents (drawings and specifications) bear the North Carolina seal of a registered design professional. Construction documents shall include the name and address of the business entity (individual, corporation or partnership) with whom the registered design professional is affiliated. Questions concerning this section should be directed to the North Carolina Board of Architecture and Registered Interior Designers, the North Carolina Board of Examiners for Engineers and Land Surveyors, or the National Institute for Certification Engineering Technologies (NICET) Board of Governors.

(General Statute 83A-10 and 83A-13)

~~204.3.5.1~~204.4.5.1 **Registered design professional.** The registered design professional shall be a registered architect, registered interior designer, licensed professional engineer or NICET Level III sprinkler or fire alarm designer legally registered or licensed under the laws of this state.

~~204.3.6~~204.4.6 **Contractor license required.** When the General Statutes require that general construction,

plumbing, mechanical, electrical, fire protection or gas work be performed by an appropriately licensed individual, no permit for such type work shall be issued to an unlicensed person or firm. Additional requirements may be found in General Statutes 87-14, 87-21(e), 87-43.1, 87-58, 153A-134, 160A-194 and 160D-1110.

**204.3.7204.4.7 Contractor responsibilities.** It shall be the duty of every person who contracts for the installation or repair of a building or service system to comply with State or local rules and regulations concerning licensing. It shall be the contractor’s responsibility to conform to the technical codes for all installations or repairs of a building or service system.

**204.4.204.5 Issuing permits.**

**204.4.1204.5.1 Action on permits.** In accordance with General Statute 160D-1110, the **Inspection Department/inspection department** shall examine each application for a permit to determine if it is in compliance with the requirements of the technical codes and other pertinent laws and ordinances. If the inspection department is satisfied that the work described in the application conforms to the requirements of the technical codes and other pertinent laws and ordinances, it shall issue a permit to the applicant. If the application does not conform to the requirements of the technical codes and other pertinent laws and ordinances, the application shall be returned to the applicant with the reasons for refusal stated.  
(General Statute 160D-1104 and 160D-1110)

**204.4.2204.5.2 Permits for modular construction.** Permits shall be required for the installation, connection of units, foundations, utility connections or alterations of buildings or components manufactured off the site and labeled by a third-party agency accredited and listed by the Building Code Council.

**204.4.2.1204.5.2.1 Third-party certification agencies.** Third-party certification agencies shall be accredited and listed by the Building Code Council. Inspection and certification of buildings or components manufactured off the site and labeled by a third-party agency shall be accepted by the inspection department without further inspection. Permits and fees may be required for any installation, connection of units, foundations, utility connections or alterations of such work.

**204.5.204.6 Conditions of the permit.**

**204.5.1204.6.1 Contractor responsibilities.** It shall be the duty of every person who contracts for the installation or repair of a building or services system to comply with state or local rules and regulations concerning licensing. It shall be the contractor’s responsibility to conform to this code and the technical codes for all installations or repairs of a building or service system. Violations and penalties of these provisions are listed in Sections 204.12 through 204.14 of this code. Additional requirements can be found in General Statutes 87-1 through 87-14.

**204.5.2204.6.2 Permit intent.** A permit issued shall be construed as permission to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes. Issuance of a permit shall not prevent the inspection department from requiring correction of errors in plans, construction or violations of this code.  
(General Statute 160D-1110)

**204.5.3204.6.3 Revocation of permits.**

**204.5.3.1204.6.3.1 Misrepresentation of application.** The code enforcement official shall revoke, in writing, a permit or approval issued under the provisions of this or the technical codes for:

1. Any substantial departure from the approved application, drawings or specifications;

*Comment: Change of contractor or subcontractor is considered a substantial departure from the approved application.*

2. Refusal or failure to comply with the requirements of any applicable State or local laws; or,
3. Any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.
4. See the North Carolina Fire Prevention Code for other permit revocation requirements.

**204.5.3.2204.6.3.2 Violation of code provisions.** The code enforcement official may revoke a permit upon determination that the work for which the permit was issued is in violation of, or not in conformity with, the provisions of this or the technical codes.  
(General Statute 160D-1115)

**204.6.204.7 Fees.**

**204.6.1204.7.1 Fees.** A permit shall not be issued until the fees prescribed by the local governing authority have been paid. No amendment to a permit shall be released until the additional fee, if any, has been paid.  
(General Statute 160D-402)

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~~204.6.2~~**204.7.2 Work commencing before permit issuance.** If any person commences any work on a building or service systems before obtaining the necessary permit, he or she shall be subject to a penalty as established by the local governing body.  
(General Statutes 160D-402)

~~204.7.2~~**204.8 Inspections.** In addition to the inspections required by Section 107, the code enforcement official shall provide inspections as required by Sections 204.8.1 and 204.8.2.

~~204.7.1~~**204.8.1 Periodic inspections for hazardous or unlawful conditions.** The inspection department shall make periodic inspections as specified in General Statute 160D-1117.

~~204.7.2~~**204.8.2 Required public school inspections.** Inspections of schools for fire hazards shall be in accordance with General Statute 115C-525(b).

~~204.8.2~~**204.9 Certificate of compliance.**

~~204.8.1~~**204.9.1 Building occupancy.** A new building shall not be occupied or a change made in the occupancy, nature or use of a building or part of a building until after the inspection department has issued a certificate of compliance. The certificate of compliance shall not be issued until all required service systems have been inspected for compliance with the technical codes and other applicable laws and ordinances and released by the inspection department.  
(General Statute 160D-1116)

~~204.8.2~~**204.9.2 Certificate of compliance.** Upon satisfactory completion of a building, plumbing, mechanical, electrical, fire protection or gas system, or portion thereof, a certificate of compliance shall be issued. The certificate of compliance represents that a structure or system is complete and for certain types of permits is permission granted for connection to a utility system. The certificate of compliance shall not be construed to grant authority to occupy a building.  
(General Statute 160D-1116)

~~204.8.3~~**204.9.3 Temporary/partial occupancy compliance.** A temporary/partial certificate of compliance may be issued permitting occupancy for a stated period for specific portions of a building or service system that the inspector finds safe for occupancy prior to final completion of the entire building or system.  
(General Statute 160D-1116)

**204.10 Certificate of occupancy.**

~~204.8.4 Issuing certificate of occupancy.~~**204.10.1 Building occupancy.** A new building shall not be occupied until after the inspection department has issued a certificate of occupancy. Upon satisfactory completion of a building and after the an approved final inspection, the inspection department may shall issue a certificate of occupancy stating the occupancy that may be safely occupied. ~~The certificate of occupancy shall state the occupancy may be safely occupied.~~ See section 204.8.4.1 for application of upfits and shell buildings.

~~204.8.4.1~~**204.10.1.1 Existing buildings.** A certificate of occupancy for any existing building, including upfits and shell buildings, may be obtained by applying to the inspection department and supplying the information and data necessary to determine compliance with the technical codes for the occupancy intended. Where necessary, the code enforcement official may require detailed drawings and inspections to determine compliance with the applicable codes. When, upon examination and inspection, it is found that the building conforms to the provisions of the technical codes and other applicable laws and ordinances for such occupancy, a certificate of occupancy shall be issued. The certificate shall state the approved occupancy type. This section also applies to a change of occupancy within an existing building.

**204.10.1.2 Temporary/partial occupancy.** A temporary/partial certificate of occupancy may be issued permitting occupancy for a stated period for specific portions of a building that the inspector finds safe for occupancy prior to final completion of the entire building.

~~204.9.2~~**204.11 Service utilities.**

~~204.9.1~~**204.11.1 Connection of service utilities.** No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by the technical codes until approved by the inspection department and a certificate of compliance is issued.  
(General Statute 143-143.2)

~~204.9.2~~**204.11.2 Temporary connection.** The inspection department may authorize the temporary connection of the building or system to the utility source of energy, fuel or power for the purpose of testing building service systems.  
(General Statute 160D-1116)

~~204.10~~**204.12 Appeal of stop work orders.** Whenever a stop order has been issued by an inspection department involving alleged violations of the State Building Codes, the owner or builder may appeal in writing to the Commissioner of Insurance, or his or her designee, within 5 days after the date the order is issued, with a copy of the

appeal to the inspection department. No further work may take place in violation of a stop order. The Commissioner, or his or her designee, shall promptly conduct an investigation. The inspection department and the owner or builder shall be permitted to submit relevant evidence for the investigation. The Commissioner of Insurance, or his or her designee, shall provide a written statement of the decision setting forth the facts found, the decision reached and the reasons for the decision. In the event of dissatisfaction with the decision, the person affected shall have the option of appealing as set forth in Section 203.1.2.

(General Statutes 160D-1114)

**~~204.11.1~~204.13 Floor loads and occupant loads.**

**~~204.11.1~~204.13.1 Occupancy.** No building shall be occupied for any purpose that will cause the floors to be loaded beyond their safe capacity. It shall be the responsibility of the owner or occupant of any building, where excessive floor loading is likely to occur, to employ a design professional in computing the safe load capacity. The computations shall be filed as a permanent record of the inspection department. The inspection department may permit occupancy of a building when the department is satisfied that the capacity will not be exceeded.

**~~204.11.1~~204.13.2 Occupant load posted.** When required by the code enforcement official and in all Group A-2 occupancies with a North Carolina alcohol license, signs stating the occupant load determined in accordance with occupant load specified in the technical codes shall be posted by the owner of the building in each assembly room, auditorium or room used for a similar purpose where fixed seats are not installed. The seating capacity shall be determined in accordance with the technical codes and signs posted at locations approved by the code enforcement official. It shall be unlawful to remove or deface such notice or to permit more than this legal number of people within such space. The signs shall read as follows:

“Occupancy by more than \_\_\_\_\_ persons is dangerous and unlawful

\_\_\_\_\_, CEO”

**~~204.12~~204.14 Violations.** Any person, firm, corporation or agent who violates a provision of this code or the technical codes shall be guilty of a Class 3 misdemeanor. Each person shall be considered guilty of a separate offense for each and every portion thereof during which any violation is committed or continued, for a period of 30 days. Upon conviction of any such violation the person shall be liable to a fine not to exceed \$50.00 for each offense. Any violation incurred more than 1 year after another conviction for violation of the occupancy limits shall be treated as a first offense for the purposes of establishing and imposing penalties.

[General Statute 143-138(h)]

**~~204.13~~204.15 Remedies.**

**~~204.13.1~~204.15.1 General.** In case any building or structure is constructed or its purpose altered so that it ~~becomes in violation~~ violates the requirements of the technical codes, or if the occupancy limits established are exceeded, the code enforcement official may institute any appropriate action or proceedings, including civil remedies, to:

1. Prevent the unlawful erection, construction or reconstruction or alteration of purpose, or overcrowding;
2. Restrain, correct or abate the violation; or
3. Prevent the occupancy or use of the building, structure or land until the violation is corrected.

**~~204.13.2~~204.15.2 Fire prevention.** Refer to the *North Carolina Fire Code* for summary abatement requirements for fire prevention code violations and penalties.

**~~204.14~~204.16 Code enforcement official not fulfilling responsibilities.** When the code enforcement official does not fulfill his responsibilities as specified in Section 204.13, the Commissioner of Insurance or his or her designee may institute any appropriate actions or proceedings available.

(General Statutes 14-230, 14-231, 14-232, 160D-1109)

**SECTION 205  
OTHER AGENCIES**

www.ncgov.com (Click on NC Agencies)

**205.1 Administration by the North Carolina Department of Labor.**

**205.1.1 Commissioner of Labor.** The Commissioner of Labor shall have general supervision over the Elevator and Amusement Device Division and the Boiler Pressure Vessel Division.

[General Statute ~~143-139(e)~~143-139(c) and 143-139(d)]



## ADMINISTRATIVE POLICIES

**205.1.2 Elevator and amusement device division.** The Elevator and Amusement Device Division shall enforce the provisions of the North Carolina State Building Code that pertain to the operation of:

1. Elevators;
2. Dumbwaiters;
3. Escalators;
4. Moving walks;
5. Personnel hoists;
6. Chair and wheelchair lifts;
7. Manlifts;
8. Special equipment; and
9. Amusement devices.

**Exceptions:**

1. Devices and equipment located and operated within a single-family residence.
2. Equipment constructed, installed and used exclusively for the movement of materials.
3. Mining equipment covered by either the Federal Mine Safety and Health Act or the Mine Safety and Health Act of North Carolina.
4. Zip lines.

[General Statute 143-139(d)]

**205.1.3 Boiler and pressure vessel division.** The Boiler and Pressure Vessel Division shall enforce the provisions of Chapter 95 of the General Statutes which pertain to boilers and pressure vessels.

**Exception:** The Boiler and Pressure Vessel Division shall not regulate hot water supply boilers equipped with ASME Code and National Board certified safety relief valves, which are fired with oil, gas, or electricity or hot water supply tanks heated by any indirect means which do not exceed any of the following limitations:

1. Heat input of 200,000 Btu/hr;
2. Water temperature of 200°F (93°C);
3. Nominal water capacity of 120 gallons (454 L).

[General Statutes 95-69.10(c), 143-139(c)]

## CHAPTER 3

# **REPRINT OF THE NORTH CAROLINA GENERAL STATUTES PERTAINING TO THE ENFORCEMENT ADMINISTRATION OF THE NORTH CAROLINA STATE BUILDING CODES**

The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other State agencies, occupational licensing boards and commissions. It shall be the responsibility of a permit holder, design professional, contractor or occupational license holder to determine whether any additional requirements exist.

The current language of the General Statutes may be viewed online at [www.ncleg.gov](http://www.ncleg.gov) or by clicking on the referenced statute number below.

The following list, while extensive, may not include all applicable North Carolina General Statutes.

### **Property Owners**

1-539.2	Dismantling portion of building
14-68	Failure of owner of property to comply with orders of public authorities
106-581.1	Agriculture Defined
160D-903	Agricultural Uses (qualifications for bona fide farm status)

### **Misconduct in Public Office** *(NCGS Chapter 14, Article 31)*

<del>14-228-232</del>	<del>Misconduct in public office</del>
<del>14-414</del>	<del>Pyrotechnics defined; exceptions</del>
<del>14-228</del>	<del>Buying and selling offices</del>
<del>14-229</del>	<del>Acting as officer before qualifying as such</del>
<del>14-230</del>	<del>Willfully failing to discharge duties</del>
<del>14-231</del>	<del>Failing to make reports and discharge other duties</del>
<del>14-232</del>	<del>Swearing falsely to official reports</del>

### **Administrative Search and Inspection Warrants**

15-27.2	Warrants to conduct inspections authorized by law
58-2-95	Commissioner to supervise local inspectors
58-31-40	Commissioner to inspect state property; plans submitted
58-79-20	Inspection of premises; dangerous material removed

### **Electrical Materials, Devices, Appliances and Equipment** *(NCGS Chapter 66, Article 4)*

<del>66-23-27</del>	<del>Electrical materials, devices, appliances and equipment</del>
<del>66-23</del>	<del>Sale of electrical goods regulated</del>
<del>66-24</del>	<del>Identification marks required</del>
<del>66-25</del>	<del>Acceptable listings as to safety of goods</del>
<del>66-26</del>	<del>Legal responsibility of proper installations unaffected</del>
<del>66-27</del>	<del>Violation made misdemeanor</del>
<del>66-27.01</del>	<del>Enforcement</del>

## **Safety Features of Hot Water Heaters**

*(NCGS Chapter 66, Article 4A)*

<u>66-27.1</u>	<u>Certain automatic hot water tanks or heaters to have approved relief valves; installation or sale of unapproved relief valves forbidden</u>
<u>66-27.2</u>	<u>Certain hot water supply storage tank or heater baffles, heat traps, etc., to be tested before installation or sale</u>
<u>66-27.3</u>	<u>Violation of Article made misdemeanor</u>
<u>66-27.4</u>	<u>Local regulation of hot water heater safety features</u>

## **Architects**

<u>83A-1-13</u>	<u>Architects</u>
<u>83A-1</u>	<u>Definitions</u>
<u>83A-12</u>	<u>Prohibited practice</u>
<u>83A-13</u>	<u>Exemptions</u>

## **General Contractors**

*(NCGS Chapter 87, Article 1)*

<u>87-1-15</u>	<u>General contractors</u>
<u>87-1</u>	<u>"General contractor" defined; exceptions</u>
<u>87-1.1</u>	<u>Exception for licenses under Article 2 or 4</u>
<u>87-1.2</u>	<u>Exception for specified Department of Transportation contractors</u>
<u>87-14</u>	<u>Regulations as to issue of building permits</u>
<u>87-15.6</u>	<u>Homeowners Recovery Fund</u>

## **Plumbing, Heating, and Fire Sprinkler Contractor**

<u>87-21</u>	<u>Plumbing, heating and fire sprinkler contractor</u>
<u>87-21</u>	<u>Definitions; contractors licensed by Board; examination; posting license, etc.</u>

## **Electrical Contractors**

*(NCGS Chapter 87, Article 4)*

<u>87-43</u>	<u>Electrical contractors</u>
<u>87-43</u>	<u>Electrical contracting defined; licenses</u>
<u>87-43.1</u>	<u>Exceptions</u>
<u>87-43.2</u>	<u>Issuance of license</u>
<u>87-43.3</u>	<u>Classification of licenses</u>

## **Refrigeration Contractors**

<u>87-57-58</u>	<u>Refrigeration contractors</u>
<u>87-57</u>	<u>License required of persons, firms or corporations engaged in the refrigeration trade</u>
<u>87-58</u>	<u>Definitions; contractors licensed by Board; examinations</u>

## **Engineers**

<u>89C-3-23</u>	<u>Engineers</u>
<u>89C-3</u>	<u>Definitions</u>
<u>89C-23</u>	<u>Unlawful to practice engineering or land surveying without licensure; unlawful use of title or terms; penalties; Attorney General to be legal adviser</u>

## **Uniform Boiler and Pressure Vessel Act**

(NCGS Chapter 95, Article 7A)

<u>95-69</u>	<u>Uniform boiler and pressure vessel act</u>
<u>95-69.8</u>	<u>Short title</u>
<u>95-69.9</u>	<u>Definitions</u>
<u>95-69.10</u>	<u>Application of Article; exemptions</u>
<u>95-69.11</u>	<u>Powers and duties of commissioner</u>
<u>95-69.16</u>	<u>Inspection certificate required</u>

**Public Schools**

<u>105-130-151</u>	<u>Accessibility tax credit</u>
<u>115C-525</u>	<u>Public schools</u>
<u>115C-525</u>	<u>Fire prevention</u>

**Gasoline and Oil Inspection and Regulation**

(NCGS Chapter 119, Article 5)

(Liquefied petroleum gases)

<u>119 Article 5</u>	<u>Liquefied petroleum gases</u>
<u>119-54</u>	<u>Purpose: definitions: scope of Article</u>

**Wastewater Systems**

(NCGS Chapter 130A, Article 10)

<u>130A-336-339</u>	<u>Wastewater system construction</u>
<u>130A-336</u>	<u>Improvement permit and authorization for wastewater system construction required</u>
<u>130A-337</u>	<u>Inspection; operation permit required</u>
<u>130A-338</u>	<u>Authorization for wastewater system construction required before other permits to be issued</u>
<u>130A-339</u>	<u>Limitation on electrical service</u>

**Public Works**

(NCGS Chapter 133, Article 1)

<u>133-1-4</u>	<u>Public works</u>
<u>133-1</u>	<u>Employment of architects, etc., on public works when interested in use of materials prohibited</u>
<u>133-1.1</u>	<u>Certain buildings involving public funds to be designed, etc., by architect or engineer</u>
<u>133-2</u>	<u>Drawing of plans by material furnisher prohibited</u>
<u>133-3</u>	<u>Specifications to carry competitive items; substitution of materials</u>
<u>133-4</u>	<u>Violation of Chapter made misdemeanor</u>

**Inspection of State-Owned Buildings**

<u>143-135.1</u>	<u>Inspection of state-owned buildings</u>
<u>143-135.1</u>	<u>State buildings exempt from county and municipal building requirements; consideration of recommendations by counties and municipalities</u>

**Building Code Council and Building Code**

(NCGS Chapter 130A, Article 9)

<u>143-136-143</u>	<u>Building Code Council and Building Code</u>
<u>143-136</u>	<u>Building Code Council created; membership</u>

<u>143-137</u>	<u>Organization of Council; rules; meetings; staff; fiscal affairs</u>
<u>143-138</u>	<u>North Carolina State Building Code</u>
<u>143-138.1</u>	<u>Introduction and instruction of the North Carolina Building Code; posting of written commentaries and interpretations on Department of Insurance Web site</u>
<u>143-139</u>	<u>Enforcement of Building Code</u>
<u>143-139.1</u>	<u>Certification of manufactured buildings, structures or components by recognized independent testing laboratory; minimum standards for modular homes</u>
<u>143-139.2</u>	<u>Enforcement of insulation requirements; certificate for occupancy; no electric service without compliance</u>
<u>143-139.3</u>	<u>Inspection of liquified petroleum gas piping systems for residential structures</u>
<u>143-140</u>	<u>Hearings before enforcement agencies as to questions under Building Code</u>
<u>143-141</u>	<u>Appeals to Building Code Council</u>
<u>143-142</u>	<u>Further duties of the Building Code Council</u>
<u>143-143</u>	<u>Effect on certain existing laws</u>
<u>143-143.2</u>	<u>Electric wiring of houses, buildings, and structures</u>
<u>143-143.3</u>	<u>Temporary toilet facilities at construction sites</u>
<u>143-143.4</u>	<u>Door lock exemption for certain businesses</u>
<u>143-143.5</u>	<u>Access to toilets in shopping malls</u>

**Code Officials Qualification Board**  
*(NCGS Chapter 130A, Article 9C)*

<u>143-151.8-21</u>	<u>Code officials qualification board</u>
<u>143-151.8</u>	<u>Definitions</u>
<u>143-151.9</u>	<u>North Carolina Code Officials Qualification Board established; members; terms; vacancies</u>
<u>143-151.10</u>	<u>Compensation</u>
<u>143-151.11</u>	<u>Chairman; vice-chairman; other officers; meetings; reports</u>
<u>143-151.12</u>	<u>Powers</u>
<u>143-151.13</u>	<u>Required standards and certificates for Code-enforcement officials</u>
<u>143-151.13A</u>	<u>Professional development program for officials</u>
<u>143-151.14</u>	<u>Comity</u>
<u>143-151.15</u>	<u>Return of certificate to Board; reissuance by Board</u>
<u>143-151.16</u>	<u>Certification fees; renewal of certificates; examination fees</u>
<u>143-151.17</u>	<u>Grounds for disciplinary actions; investigation; administrative procedures</u>
<u>143-151.18</u>	<u>Violations; penalty; injunction</u>
<u>143-151.19</u>	<u>Administration</u>
<u>143-151.20</u>	<u>Donations and appropriations</u>
<u>143-151.21</u>	<u>Disposition of fees</u>

**Master Electrical and Natural Gas Meters Prohibited**  
*(NCGS Chapter 143, Article 9E)*

<u>143-151.42</u>	<u>Prohibition of master meters for electric and natural gas service</u>
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**North Carolina Home Inspector Licensure Board**  
*(NCGS Chapter 143, Article 9F)*

<u>143-151.43-64</u>	<u>North Carolina home inspector board</u>
<u>143-151.43</u>	<u>Short title</u>

<u>143-151.44</u>	<u>Purpose</u>
<u>143-151.45</u>	<u>Definitions</u>
<u>143-151.46</u>	<u>North Carolina Home Inspector Licensure Board established; members; terms; vacancies</u>
<u>143-151.47</u>	<u>Compensation of Board members</u>
<u>143-151.48</u>	<u>Election of officers; meetings of Board</u>
<u>143-151.49</u>	<u>Powers and responsibilities of Board</u>
<u>143-151.50</u>	<u>License required to perform home inspections for compensation or to claim to be a "licensed home inspector"</u>
<u>143-151.51</u>	<u>Requirements to be licensed as a home inspector</u>
<u>143-151.53</u>	<u>Notification to applicant following evaluation of application</u>
<u>143-151.54</u>	<u>Miscellaneous license provisions</u>
<u>143-151.55</u>	<u>Renewal of license; inactive licenses; lapsed licenses</u>
<u>143-151.56</u>	<u>Suspension, revocation, and refusal to renew license</u>
<u>143-151.57</u>	<u>Fees</u>
<u>143-151.58</u>	<u>Duties of licensed home inspector</u>
<u>143-151.59</u>	<u>Violation is a misdemeanor</u>
<u>143-151.60</u>	<u>Injunctions</u>
<u>143-151.62</u>	<u>Persons and practices not affected</u>
<u>143-151.63</u>	<u>Administration</u>
<u>143-151.64</u>	<u>Continuing education requirements</u>

**Administrative Procedures Act**  
**(NCGS Chapter 150B, Article 2A)**

<u>150B-18-21</u>	<u>Administrative Procedures Act</u>
<u>150B-18</u>	<u>Scope and effect</u>
<u>150B-19</u>	<u>Restrictions on what can be adopted as a rule</u>
<u>150B-19.1</u>	<u>Requirements of agencies in the rule-making process</u>
<u>150B-19.3</u>	<u>Limitations on certain environmental rules</u>
<u>150B-20</u>	<u>Petitioning an agency to adopt a rule</u>
<u>150B-21</u>	<u>Agency must designate rule-making coordinator; duties of coordinator</u>
<u>150B-21.1</u>	<u>Procedure for adopting a temporary rule</u>
<u>150B-21.1A</u>	<u>Adopting an emergency rule</u>
<u>150B-21.2</u>	<u>Procedure for adopting a permanent rule</u>
<u>150B-21.3</u>	<u>Effective date of rules</u>
<u>150B-21.3A</u>	<u>Periodic review and expiration of existing rules</u>
<u>150B-21.4</u>	<u>Fiscal and regulatory impact analysis on rules</u>
<u>150B-21.5</u>	<u>Circumstances when notice and rule-making hearing not required; circumstances when submission to the Commission not required</u>
<u>150B-21.6</u>	<u>Incorporating material in a rule by reference</u>
<u>150B-21.7</u>	<u>Effect of transfer of duties or termination of agency on rules</u>
<u>150B-21.8</u>	<u>Review of rule by Commission</u>
<u>150B-21.9</u>	<u>Standards and timetable for review by Commission</u>
<u>150B-21.10</u>	<u>Commission action on permanent rule</u>
<u>150B-21.11</u>	<u>Procedure when Commission approves permanent rule</u>
<u>150B-21.12</u>	<u>Procedure when Commission objects to a permanent rule</u>

**Cities and Counties**  
*(NCGS Chapter 160D, Article 4)*

<u>160D Article 11</u>	<u>Building Code Enforcement</u>
<u>160D-401</u>	<u>Application</u>
<u>160D-402</u>	<u>Administrative staff</u>
<u>160D-404</u>	<u>Enforcement</u>
<u>160D-405</u>	<u>Appeals of administrative decisions</u>
<u>160D-406</u>	<u>Quasi-judicial procedure</u>
<u>160D-1101</u>	<u>Definitions</u>
<u>160D-1102</u>	<u>Building code administration</u>
<u>160D-1103</u>	<u>Qualification of inspectors</u>
<u>160D-1104</u>	<u>Duties and responsibilities</u>
<u>160D-1104.1</u>	<u>Remote inspection alternative</u>
<u>160D-1105</u>	<u>Other arrangements for inspection</u>
<u>160D-1106</u>	<u>Alternative inspection method for components or element</u>
<u>160D-1107</u>	<u>Mutual aid contracts</u>
<u>160D-1108</u>	<u>Conflicts of interest</u>
<u>160D-1109</u>	<u>Failure to perform duties</u>
<u>160D-1110</u>	<u>Building permits</u>
<u>160D-1111</u>	<u>Expiration of building permits</u>
<u>160D-1112</u>	<u>Changes in work</u>
<u>160D-1113</u>	<u>Inspections of work in progress</u>
<u>160D-1114</u>	<u>Appeals of stop orders</u>
<u>160D-1115</u>	<u>Revocation of building permits</u>
<u>160D-1116</u>	<u>Certificates of compliance; temporary certificates of occupancy</u>
<u>160D-1117</u>	<u>Periodic inspections</u>
<u>160D-1118</u>	<u>Defects in buildings to be corrected</u>
<u>160D-1119</u>	<u>Unsafe buildings condemned</u>
<u>160D-1120</u>	<u>Removing notice from condemned building</u>
<u>160D-1121</u>	<u>Action in event of failure to take corrective action</u>
<u>160D-1122</u>	<u>Orders to take corrective action</u>
<u>160D-1123</u>	<u>Appeal; finality of order if not appealed</u>
<u>160D-1124</u>	<u>Failure to comply with order</u>
<u>160D-1125</u>	<u>Enforcement</u>
<u>160D-1126</u>	<u>Records and reports</u>
<u>160D-1127</u>	<u>Appeals</u>
<u>160D-1128</u>	<u>Fire limits</u>
<u>160D-1129</u>	<u>Regulation authorized as to repair, closing, and demolition of nonresidential buildings or structures; order of public officer</u>
<u>160D-1130</u>	<u>Vacant building receivership*</u>

APPENDIX A

PERMIT APPLICATION INFORMATION SHEET

The following information is required on all permit applications. Additional information may be included to ensure that all state and local laws are complied with. This information may be arranged in any order and the following outline is only the minimum information required.

City/County Name \_\_\_\_\_

Inspection Department \_\_\_\_\_

Permit Application \_\_\_\_\_

Applicant Name \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Project Address \_\_\_\_\_

Total Project Cost \_\_\_\_\_ Electrical Cost \_\_\_\_\_

Subdivision \_\_\_\_\_ Block # \_\_\_\_\_ Lot # \_\_\_\_\_

Developer \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Property Owner \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Project Contact \_\_\_\_\_ Phone # (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Description of Proposed Work \_\_\_\_\_

Type of Building:  New  Existing  Addition  N/A

Type of Construction:  IA  IB  IIA  IIB  IIIA  IIIB  
 ~~IV-A~~  IV-B  IV-C  IV-HT  VA  VB

Occupancy:  A-1  A-2  A-3  A-4  A-5  B  E  F-1  F-2  
 H-1  H-2  H-3  H-4  H-5  I-1  I-2  I-3  I-4  
 M  R-1  R-2  R-3  R-4  S-1  S-2  U

Equipment:  New  Existing  Addition  N/A

Property Use:  Detached Single Family  Detached Two Family  Townhouse  
 Apartment  Condominium  
 Other (Library, Office, Etc.)

Building Area: Total Area (sf) \_\_\_\_\_ Area per floor (sf) \_\_\_\_\_

Building Height: Feet \_\_\_\_\_ # of Stories \_\_\_\_\_

State Agency Approvals:

NC Department of Insurance  Yes  No  N/A

Plan Approval  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_



Specifications  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

NC Department of Labor  Yes  No  N/A

Elevators \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_ Boilers \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

Plan Approval  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

Specifications  Yes  No  N/A # of Sheets \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

**Utilities Approvals:**

Water:  Public  Private  Private Health Dept. Permit # \_\_\_\_\_

Sewer:  Public  Private  Private Health Dept. Permit # \_\_\_\_\_

Place ~~X~~ Check each applicable box and complete additional information for each permit type needed.

**General Construction Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Electrical Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Mechanical Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

License # \_\_\_\_\_ Classification \_\_\_\_\_

Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Architect  Engineer NC Reg. # \_\_\_\_\_

Owner  Other

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Plumbing Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

Place ~~X~~ Check each applicable box and complete additional information for each permit type needed.

**Sprinkler Protection Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other                NICET Level \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Fire Alarm System Permit**

Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 License # \_\_\_\_\_ Classification \_\_\_\_\_  
 Design Professional \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Architect             Engineer            NC Reg. # \_\_\_\_\_  
 Owner                 Other  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Sign Permit**

Location of Sign \_\_\_\_\_ Address \_\_\_\_\_  
 Off Premises Sign     Wall Sign             Ground Sign             Awning Sign  
 Projection Sign       Special Event Sign     Other  
 Sign/Business Owner \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_  
 Contractor Name \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zip \_\_\_\_\_

**Accessory Structures Permit**

Accessory Building \_\_\_\_\_ Size \_\_\_\_\_ Sq.Ft.

Solid Fence       Dish Antenna       Swimming Pool       Other (Describe) \_\_\_\_\_

I hereby certify that all information in this application is correct and all work will comply with the State Building Code and all other applicable State and local laws and ordinances and regulations. The Inspection Department will be notified of any changes in the approved plans and specifications for the project permitted herein.

Owner/Agent Signature \_\_\_\_\_

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**APPENDIX B**

**20182024 BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

(EXCEPT ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: \_\_\_\_\_

Address: \_\_\_\_\_ Zip Code \_\_\_\_\_

Owner/Authorized Agent \_\_\_\_\_ Phone # (\_\_\_\_)\_\_\_\_-\_\_\_\_ E-Mail \_\_\_\_\_

Owned By:  City/County  Private  State

Code Enforcement Jurisdiction:  City  County  State

**CONTACT:** \_\_\_\_\_

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	_____	_____	_____	(____)_____	_____
Civil	_____	_____	_____	(____)_____	_____
Electrical	_____	_____	_____	(____)_____	_____
Fire Alarm	_____	_____	_____	(____)_____	_____
Plumbing	_____	_____	_____	(____)_____	_____
Mechanical	_____	_____	_____	(____)_____	_____
Sprinkler- Standpipe	_____	_____	_____	(____)_____	_____
Structural	_____	_____	_____	(____)_____	_____
Retaining Walls > 5 feet High	_____	_____	_____	(____)_____	_____
Other	_____	_____	_____	(____)_____	_____

("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

**20182024 NC BUILDING CODE:**  New Building  Shell/Core  1<sup>st</sup> Time

Interior Completions

Addition  Phased Construction—Shell Core

**20182024 NC EXISTING BUILDING CODE:** (check all that apply)

Prescriptive  Alteration Level I  Alteration Level II  Alteration Level III

Change of Use  Historic Property  Repair  Chapter 14

**CONSTRUCTED:** (date) \_\_\_\_\_ **CURRENT USE(S)** (Ch. 3): \_\_\_\_\_

**RENOVATED:** (date) \_\_\_\_\_ **PROPOSED USE(S)** (Ch. 3): \_\_\_\_\_

**OCCUPANCY CATEGORY** (Table 1604.5): Current: \_\_\_\_\_ Proposed: \_\_\_\_\_

**BASIC BUILDING DATA**

**Construction Type:**     I-A             II-A             III-A             V-A  
 (check all that apply)    ~~IV~~IV-A     ~~I~~BIV-B     ~~H~~BIV-C     ~~III~~BIV-HT  
 ~~V~~B  
**Sprinklers:**     No     Partial     NFPA 13     NFPA13R     NFPA13D  
**Standpipes:**     No            Class:     I     II     III             Wet     Dry  
**Primary Fire District:**     No     Yes  
**Flood Hazard Area:**         No     Yes  
**Special Inspections Required:**     No     Yes

**GROSS BUILDING AREA TABLE**

(add or delete lines as necessary)

Floor	Existing (sq ft)	New (sq ft)	Subtotal
3rd Floor	0	0	0
2nd Floor	0	0	0
Mezzanine	0	0	0
1st Floor	0	0	0
Basement	0	0	0
<b>TOTAL</b>			0

Note to RRC: Page break

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**ALLOWABLE AREA**

**Primary Occupancy Classification(s):**

- Assembly  A-1  A-2  A-3  A-4  A-5
- Business
- Educational
- Factory  F-1 (Moderate)  F-2 (Low)
- Hazardous  H-1 (Detonate)  H-2 (Deflagrate)  
 H-3 (Combust)  H-4 (Health)  H-5 (HPM)
- Institutional  I-1  I-2  I-3  I-4  
~~I-1 Condition  1  2~~  
~~I-2 Condition  1  2~~  
~~I-3 Condition  1  2  3  4  5~~  
~~Condition  1  2  3  4~~
- Mercantile
- Residential  R-1  R-2  R-3  R-4
- Storage  S-1 Moderate  S-2 Low  High-piled  
 Parking Garage  Open  Enclosed  Repair Garage
- Utility and Miscellaneous

**Accessory Occupancy Classification(s):** \_\_\_\_\_

**Incidental Uses (Table 509.1):** \_\_\_\_\_

This separation is not exempt as a Nonseparated Use (see exceptions).

**Special Uses (Chapter 4 – List Code Sections):** \_\_\_\_\_

**Special Provisions: (Chapter 5 – List Code Sections):** \_\_\_\_\_

**Mixed Occupancy:**  No  Yes Separation: \_\_\_\_ Hr. Exception: \_\_\_\_\_

(Select one of the following)

Non-separated Use (508.3)

Separated Use (508.4)—See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Select one

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

$$\text{_____} + \text{_____} + \dots = \text{_____} \leq 1.00$$

(add to or delete rows from the following table as necessary to capture all relevant information)

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 <sup>4</sup> AREA	(C) AREA FOR FRONTAGE INCREASE <sup>1, 5</sup>	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>2, 3</sup>

1. Frontage area increases from Section 506.2506.3 are computed thus:

- a. Perimeter which fronts a public way or open space having 20 feet minimum width = \_\_\_\_\_ (F)
- b. Total Building Perimeter = \_\_\_\_\_ (P)
- c. Ratio (F/P) = \_\_\_\_\_ (F/P)
- d. W = Minimum width of public way = \_\_\_\_\_ (W)

2. Unlimited area applicable under conditions of Section 507.
  3. Maximum Building Area = total number of stories in the building  $\times D$  (maximum 3 stories) (506.2).
  4. The maximum area of open parking garages shall comply with Table 406.5.4. ~~The maximum area of traffic control towers must comply with Table 412.3.1.~~
  5. Frontage increase is based on the unsprinklered area value in Table 506.2.
- 

Note to RRC: Page break

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### ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)			
Building Height in Stories (Table 504.4)			

1. Provide code reference if the “Shown on Plans” quantity is not based on Table 504.3 or 504.4.

### FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQ'D	PROVIDED (W/ REDUCTION) *				
Structural Frame Including columns, girders, and trusses							
Bearing Walls							
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing walls and partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction Including supporting beams and joists							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures—Exit							
Shaft Enclosures—Other							
Corridor Separation							
Occupancy/Fire Barrier Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

\* Indicate section number permitting reduction

**PERCENTAGE OF WALL OPENING CALCULATIONS**

FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

**LIFE SAFETY SYSTEM REQUIREMENTS**

- Emergency Lighting:  Yes  No
- Exit Signs:  Yes  No
- Fire Alarm:  Yes  No
- Smoke Detection Systems:  Yes  No
- Carbon Monoxide Detection:  Yes  No

**LIFE SAFETY PLAN REQUIREMENTS**

Life Safety Plan Sheet #: \_\_\_\_\_

- Fire and/or smoke rated wall locations (Chapter 7)
- Assumed and real property line locations (if not on the site plan)
- Exterior wall opening area with respect to distance to assumed property lines (705.8)
- Occupancy Use for each area as it relates to occupant load calculation (~~Table 1004.1.2~~)(Table 1004.5)
- Occupant loads for each area
- Exit access travel distances (1017)
- Common path of travel distances [~~Tables 1006.2.1 & 1006.3.2(1)~~](Tables 1006.3.4(1) & 1006.3.4(2))
- Dead end lengths (~~1020.4~~)(1020.5)
- Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (~~1005.3~~)(1005.3.2)
- Actual occupant load for each exit door
- A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- Location of doors with panic hardware (~~1010.1.10~~)(1010.2.9)
- Location of doors with delayed egress locks and the amount of delay (~~1010.1.9.7~~)(1010.2.13)
- Location of doors with electromagnetic egress locks (~~1010.1.9.9~~)(1010.2.11)
- Location of doors equipped with hold-open devices (716.2.6.1)
- Location of emergency escape windows (~~1030~~)(1031)
- The square footage of each fire area (202)
- The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- Note any code exceptions or table notes that may have been utilized regarding the items above



**ACCESSIBLE DWELLING UNITS**  
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

**ACCESSIBLE PARKING**  
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH		
				132" ACCESS AISLE	8' ACCESS AISLE	
TOTAL						

**PLUMBING FIXTURE REQUIREMENTS**  
(TABLE 2902.1)

USE	WATERCLOSETS			URINALS	LAVATORIES			SHOWERS/TUBS	DRINKING FOUNTAINS	
	Male	Female	Unisex		Male	Female	Unisex		Regular	Accessible
SPACE										
EXIST'G										
NEW										
REQ'D										

**SPECIAL APPROVALS**

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

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**ENERGY SUMMARY**

**ENERGY REQUIREMENTS:**

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design versus the annual energy cost for the proposed design.

**Existing building envelope complies with code:**  (If checked, the remainder of this section is not applicable.)

**Exempt Building:**  (Provide code and applicable code section or statutory reference)

**Climate Zone:**  3A  4A  5A

**Method of Compliance:**

Energy Code:  Performance  Prescriptive

ASHSAE 90.1:  Performance  Prescriptive

Other:  Performance (specify source) \_\_\_\_\_

**THERMAL ENVELOPE:** (Prescriptive method only)

**Roof/ceiling Assembly** (each assembly)

Description of assembly: \_\_\_\_\_  
*U*-Value of total assembly: \_\_\_\_\_  
*R*-Value of insulation: \_\_\_\_\_  
 Skylights in each assembly: \_\_\_\_\_  
     *U*-Value of skylight: \_\_\_\_\_  
 total square footage of skylights in each assembly: \_\_\_\_\_

**Exterior Walls** (each assembly)

Description of assembly \_\_\_\_\_  
*U*-Value of total assembly: \_\_\_\_\_  
*R*-Value of insulation: \_\_\_\_\_  
 Openings (windows or doors with glazing)  
     *U*-Value of assembly: \_\_\_\_\_  
     Solar heat gain coefficient: \_\_\_\_\_  
     projection factor: \_\_\_\_\_  
     Door *R*-Values: \_\_\_\_\_

**Walls below grade** (each assembly)

Description of assembly: \_\_\_\_\_  
*U*-Value of total assembly: \_\_\_\_\_  
*R*-Value of insulation: \_\_\_\_\_

**Floors over unconditioned space** (each assembly)

Description of assembly: \_\_\_\_\_  
*U*-Value of total assembly: \_\_\_\_\_  
*R*-Value of insulation: \_\_\_\_\_

**Floors slab on grade**

Description of assembly: \_\_\_\_\_  
*U*-Value of total assembly: \_\_\_\_\_  
*R*-Value of insulation: \_\_\_\_\_  
 Horizontal/vertical requirement: \_\_\_\_\_  
 slab heated: \_\_\_\_\_

**APPENDIX B**  
**20182024 BUILDING CODE SUMMARY**  
**FOR ALL COMMERCIAL PROJECTS**

**STRUCTURAL DESIGN**  
**(PROVIDE ON SHEET 1 OR 2 OF THE STRUCUTRAL SHEETS)**

**DESIGN LOAD:**

**Importance Factors:** Wind ( $I_w$ ) \_\_\_\_\_  
 Snow ( $I_s$ ) \_\_\_\_\_  
 Seismic ( $I_E$ ) \_\_\_\_\_

**Live Loads:** Roof \_\_\_\_\_ psf  
 Mezzanine \_\_\_\_\_ psf  
 Floor \_\_\_\_\_ psf

**Ground Snow Load:** \_\_\_\_\_ psf

**Wind Load:** Basic Wind Speed \_\_\_\_\_ mph (ASCE-7)  
 Exposure Category \_\_\_\_\_

**SEISMIC DESIGN CATEGORY:**  A  B  C  D

Provide the following Seismic Design Parameters:

**Occupancy Category:** (Table 1604.5)  I  II  III  IV

**Spectral Response Acceleration:**  $S_s$  \_\_\_\_\_ %g  $S_1$  \_\_\_\_\_ %g

**Site Classification:** (ASCE 7)  A  B  C  D  E  F

Data Source:  Field Test  Presumptive  Historical Data

**Basic structural system** (check one)

- Bearing Wall  Dual w/Special Moment Frame
- Building Frame  Dual w/Intermediate R/C or Special Steel
- Moment Frame  Inverted Pendulum

**Analysis Procedure:**  Simplified  Equivalent Lateral Force  Dynamic

**Architrcal, Mechanical, Components anchored?**  Yes  No

**LATERAL DESIGN CONTROL:**  Earthquake  Wind

**SOIL BEARING CAPACITIES:**

Field Test (provide copy of test report) \_\_\_\_\_ psf  
 Presumptive Bearing capacity \_\_\_\_\_ psf  
 Pile size, type, and capacity \_\_\_\_\_

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APPENDIX B

**20182024 BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

MECHANICAL DESIGN  
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)  
MECHANICAL SUMMARY

**MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT**

**Thermal Zone**

winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_

**Interior design conditions**

winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_  
relative humidity: \_\_\_\_\_

**Building heating load:** \_\_\_\_\_

**Building cooling load:** \_\_\_\_\_

**Mechanical Spacing Conditioning System**

Unitary  
description of unit: \_\_\_\_\_  
heating efficiency: \_\_\_\_\_  
cooling efficiency: \_\_\_\_\_  
size category of unit: \_\_\_\_\_

Boiler  
Size category. If oversized, state reason.: \_\_\_\_\_

Chiller  
Size category. If oversized, state reason.: \_\_\_\_\_

**List equipment efficiencies:** \_\_\_\_\_

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APPENDIX B

**2018~~2024~~ BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS**

ELECTRICAL DESIGN  
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)  
ELECTRICAL SUMMARY

**ELECTRICAL SYSTEM AND EQUIPMENT**

**Method of Compliance:**

- Energy Code:     Prescriptive     Performance  
ASHRAE 90.1:     Prescriptive     Performance

**Lighting schedule** (each fixture type) lamp type required in fixture number of lamps in fixture ballast type used in the fixture number of ballasts in fixture total wattage per fixture total interior wattage specified versus allowed (whole building or space by space) total exterior wattage specified versus allowed

**Additional Prescriptive Compliance**

- 506.2.1 More Efficient Mechanical Equipment
  - 506.2.2 Reduced Lighting Power Density
  - 506.2.3 Energy Recovery Ventilation Systems
  - 506.2.4 Higher Efficiency Service Water Heating
  - 506.2.5 On-Site Supply of Renewable Energy
  - 506.2.6 Automatic Daylighting Control Systems
-





# APPENDIX C CODE CHANGE PROPOSAL NORTH CAROLINA BUILDING CODE COUNCIL

325 North Salisbury Street, Room 5-44  
Raleigh, North Carolina 27603  
(919) 647-0019 (919) 647-0008

barry.gupton@ncdoi.gov david.rittlinger@ncdoi.gov  
Petition for Rule Making

Item Number \_\_\_\_\_

Granted by BCC \_\_\_\_\_ Adopted by BCC \_\_\_\_\_ Approved by RRC \_\_\_\_\_  
Denied by BCC \_\_\_\_\_ Disapproved by BCC \_\_\_\_\_ Objection by RRC \_\_\_\_\_

PROPONENT \_\_\_\_\_ PHONE (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  
REPRESENTING \_\_\_\_\_  
ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
E-MAIL \_\_\_\_\_ FAX (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

North Carolina State Building Code, Volume \_\_\_\_\_ Section \_\_\_\_\_ (select as many codes as apply):

Administrative  Building  Fire  Residential  
 Mechanical  Plumbing  Fuel Gas  Energy

Section(s) \_\_\_\_\_

CHECK ONE:  Revise section to read as follows:  Delete section and substitute the following:  
 Add new section to read as follows:  Delete section without substitution:

~~LINE THROUGH LANGUAGE TO BE DELETED~~      UNDERLINE LANGUAGE TO BE ADDED

Type or print. Continue proposal or reason on plain paper attached to this form. See reverse side for instructions.

Will this proposal change the cost of construction?      Decrease       Increase       No   
Will this proposal increase the cost of a dwelling by \$80 or more?      Yes       No   
Will this proposal affect Local or State funds?      Local       State       No   
Will this proposal cause a substantial economic impact (≥ \$1,000,000)?      Yes       No

- Non-Substantial – Provide an economic analysis including benefit/cost estimates.
- Substantial – The economic analysis must also include two alternatives, time value of money and risk analysis.
- Pursuant to §143-138(a1)(2) a cost-benefit analysis is required for all proposed amendments to the NC Energy Conservation Code and the NC Residential Code, Chapter 11.

REASON:

Signature \_\_\_\_\_

BCC CODE CHANGES

DATE: \_\_\_\_\_ FORM

3/14/17 12/13/22



## INSTRUCTIONS

(This page is not required to be submitted with the proposed code amendment.)

**Each proposed code change request shall comply with the following rules:**

**Rule 1:** The Original, ~~and twenty two (22) copies~~ twenty-one (21) hardcopies, one (1) pdf and one (1) editable softcopy of the proposed Petition for Rule-Making ~~along with~~ including supporting documentation shall be filed with the Building Code Council Secretary. ~~Submit one (1) electronic copy via email.~~ The softcopies can be submitted via email to the Building Code Council Secretary.

**Rule 2:** The filing shall be received by the first day of the month prior to the quarterly scheduled meeting date.

**Rule 3:** Each request shall be typewritten on this form and shall contain the following:

- (1) The proposed rule change must be set forth in full and contain explicit reference to the affected section or sections of the code.
- (2) The request shall state the reasons for the proposed rule change with supporting documentation.
- (3) The proposed rule change shall comply with the standards set forth in GS 143-138(c) and reference to the particular standards shall be set forth in the request for the amendment.
- (4) The proposed rule change shall contain an economic impact analysis as required by GS 143-138(a).

**Rule 4:** When a request is improperly filed or not in accordance with all the rules listed above, the Council Secretary shall reject the submittal and notify the applicant of the proper procedure to follow.

**Rule 5:** Upon the proper filing of a request, the Council Secretary shall forward one copy of said request to each ~~council~~ Council member prior to the scheduled meeting date. Persons filing proposed petitions are hereby notified of the place and time of the scheduled hearings. The Council Secretary shall cause to be published the notice of public hearing as specified in GS 143-138(a).

**Rule 6:** The Council shall either grant or deny the proposed Petition for Rule-making at the meeting following receipt of the proposed rule change. The Council will take no further action on items that are Denied. Granted items may be referred to Committee for review.

**Rule 7:** The Council will hold a public hearing on granted items at the next quarterly scheduled meeting. The Council will take final action on granted items at the next quarterly scheduled meeting after the public hearing.

<b>Timeline Example</b>	
Petition Received:	February 1
Petition Granted:	March BCC meeting
Notice of Hearing Published:	April NC Register
Committee Review:	May - June
Hearing Held:	June BCC meeting
Final Adoption:	September BCC meeting
Rules Review Hearing:	November RRC meeting
Approved:	December 1

## APPENDIX D

### AFFIDAVIT OF WORKERS' COMPENSATION COVERAGE N.C.G.S. §87-14

The undersigned applicant for Building Permit # \_\_\_\_\_ being the

\_\_\_\_\_ Contractor

\_\_\_\_\_ Owner

\_\_\_\_\_ Officer/Agent of the Contractor or Owner

Do hereby aver under penalties of perjury that the person(s), firm(s) or corporation(s) performing the work set forth in the permit:

\_\_\_\_\_ has/have three (3) or more employees and have obtained workers' compensation insurance to cover them,

\_\_\_\_\_ has/have one or more subcontractor(s) and have obtained workers' compensation insurance to cover them,

\_\_\_\_\_ has/have one or more subcontractor(s) who has/have their own policy of workers' compensation covering themselves,

\_\_\_\_\_ has/have not more than two (2) employees and no subcontractors,

while working on the project for which this permit is sought. It is understood that the Inspection Department issuing the permit may require certificates of coverage of workers, compensation insurance prior to issuance of the permit and at any time during the permitted work from any person, firm or corporation carrying out the work.

Firm name: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



# APPENDIX E APPEALS NORTH CAROLINA BUILDING CODE COUNCIL

325 North Salisbury Street, Room  
5\_44 Raleigh, North Carolina 27603  
(919) 647-0019 (919) 647-0009

APPEAL TO NCDOI/NCBCC

Hearing Date \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

GS 160D-1127

Formal Interpretation by NCDOI \_\_\_\_\_

Appeal of Local Decision to NCDOI \_\_\_\_\_

GS 143-140, GS 143-141

Appeal of Local Decision to NCBCC \_\_\_\_\_

Appeal of NCDOI Decision to NCBCC \_\_\_\_\_

APPELLANT \_\_\_\_\_ PHONE (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ X \_\_\_\_\_.

REPRESENTING \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

E-MAIL \_\_\_\_\_ FAX (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

North Carolina State Building Code, Volume \_\_\_\_\_ Section \_\_\_\_\_ (select as many codes as apply):

- Administrative       Building       Fire       Residential
- Mechanical       Plumbing       Fuel Gas       Energy

Section(s) \_\_\_\_\_

- REQUEST ONE:       Formal Interpretation by NCDOI       Appeal of Local Decision to NCBCC
- Appeal of Local Decision to NCDOI       Appeal of NCDOI Decision to NCBCC

Type or print. Include all background information as required by the referenced General Statutes and the attached policies. Attach additional supporting information.

REASON:

Signature \_\_\_\_\_ DATE: \_\_\_\_\_ APPEAL TO NCDOI/NCBCC NCDOI/NCBCC FORM 3/14/17 12/13/22

**202.9 Appeals.**

**202.9.1 Engineering Division.** A written technical interpretation shall be provided as specified in Section 203.2.1.2. Any person may appeal in writing an order, decision, or determination pertaining to the code or any state building law by filing written notice with the Commissioner of Insurance or his designee within 10 days after the order, decision or determination. A copy of the appeal shall be furnished to each party.

(General Statutes 143-140, 153A-374 and 160A-434)

**203.2.1 Interpretations.**

**203.2.1.1 Informal interpretations.** The Engineering Division shall provide informal interpretations on code related matters either by e-mail, letter or telephone. These informal interpretations may be accepted by the local code enforcement official or party requesting the interpretation. Either party may request a formal interpretation of the code.

**203.2.1.2 Formal interpretations.** Any person may request in writing a formal interpretation of the code. The request shall be addressed to the Chief Code Consultant for the Department of Insurance. The request shall be specific and shall reference the code sections in question. All formal interpretations shall be in writing. A formal interpretation shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. Formal interpretations determined to be of a general nature may be posted on the department web site. (General Statute 143-140)

**203.2.2 Appeals.** Any person may appeal in writing an order, decision or determination of a code enforcement official pertaining to the code or any state building law. The appeal shall be addressed to the Chief Engineer for the Department of Insurance by filing written notice within 10 days after the order, decision or determination. The appeal shall contain the type and size of the building in question, the location of the building, and shall reference the code sections in question. The decision shall be in writing and shall set forth the facts found. The decision rendered shall be based on the technical provisions of the code, public health and safety and shall be construed liberally to those ends. A decision shall be binding on all parties unless an appeal is submitted to the Building Code Council as specified in Section 201.9.2. A copy of the appeal and written decision shall be furnished to each party.

(General Statutes 153A-374 and 160A-434)

**202.9.2 Building Code Council.** The Building Code Council shall hear appeals from the decisions of a state enforcement agencies relating to any matter related to the code. Any person wishing to appeal a decision of a state enforcement agency to the Building Code Council shall give written notice of appeal as follows:

**202.9.2.1** Twenty one copies including an original of the Notice of Appeal shall be filed with the Building Code Council c/o NC Department of Insurance, Engineering Division, 325 North Salisbury Street, Room 5-44, Raleigh, NC 27603 and one copy shall be filed with the State enforcement agency from which the appeal is taken.

**202.9.2.2** The Notice of Appeal shall be received no later than 30 days from the date of the decision of the State enforcement agency.

**202.9.2.3** The Notice of Appeal shall be legibly printed, typewritten or copied and shall contain the following:

- (1) Name, address of the party or parties requesting the appeal.
- (2) The name of the State enforcement agency, the date of the decision from which the appeal is taken, and a copy of the written decision received from the enforcement agency.
- (3) The decision from which the appeal is taken shall be set forth in full in the Notice of Appeal or a copy of the decision shall be attached to all copies of the Notice of Appeal.
- (4) The contentions and allegations of fact must be set forth in full in a clear and concise manner with reference to the sections of the code in controversy.
- (5) The original Notice of Appeal shall be signed by the party or parties filing appeal.
- (6) The Notice of Appeal shall be received by the first day of the month prior to the Building Code Council's quarterly scheduled meeting in order to be placed on the agenda for that meeting. The Chairman may schedule a special meeting to hear an appeal.

**202.9.2.4** Upon the proper filing of the Notice of Appeal, the Building Code Council Secretary shall forward one copy of the Notice of Appeal to each member of the Building Code Council. The Chairman may appoint a Hearing Committee to hear appeals. The Secretary shall send notice in writing to the party or parties requesting an appeal and to the Building Code Council Hearing Committee members at least 15 days prior to the Hearing Committee meeting. A written decision of the Hearing Committee meeting shall be provided to all Building Code Council Members. The actions of the Hearing Committee shall be final, unless appealed to the full Building Code Council in writing within 30 days of the Hearing Committee's action. If a Hearing Committee consists of at least seven council members, it will constitute a quorum of the full council.

APPENDIX E

Further appeals shall be as specified in Section 202.9.3.

~~202.9.2.5~~ The Building Code Council shall, upon a motion of the State enforcement agency or on its own motion, dismiss appeals for the following reasons:

1. Not pursued by the appellant or withdrawn;
2. Appeal not filed in accordance with these rules; or
3. Lack of jurisdiction.

~~202.9.2.6~~ When the Building Code Council finds that a State enforcement agency was in error in its interpretation of the code, the Building Code Council shall remand the case to the agency with instructions to take such actions as the Building Code Council directs. When the Building Code Council finds on appeal that materials or methods of construction proposed are equivalent to those required by the code, the Building Code Council shall remand the case to the State enforcement agency with instructions to permit the use of such materials or methods of construction. The Building Code Council shall immediately initiate procedures for amending the code to permit the use of such materials or methods of construction.

~~202.9.2.7~~ 202.9.2.7 The Building Code Council shall provide a written decision setting forth the findings of fact and the Building Code Council's conclusions to each party or parties filing the appeal and to the state enforcement agency from which the appeal was taken.

~~202.9.3~~ **Superior court.** Whenever any person desires to appeal a decision of the Building Code Council or a decision of a State or local enforcement agency, he may appeal either to the Wake County Superior Court or the Superior Court of the county in which the proposed building is to be situated in accordance with the provisions of Chapter 150B of the General Statutes.

[General Statute 143-141(d)]

# APPENDIX F

STATE OF NORTH CAROLINA

**OWNER EXEMPTION AFFIDAVIT  
PURSUANT TO G.S. 87-14(a)(1)**

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ Inspections Department

Address and Parcel Identification of Real Property Where Building is to be Constructed or Altered:

\_\_\_\_\_

I, \_\_\_\_\_,

(Print Full Name)

hereby claim an exemption from licensure under G.S. 87-1(b)(2) by initialing the relevant provision in paragraph 1 and initialing paragraphs 2 – 4 below and attesting to the following:

1. \_\_\_\_\_ I certify that I am the owner of the property set forth above on which this building is to be constructed or altered;

OR

\_\_\_\_\_ I am legally authorized to act on behalf of the firm or corporation which is constructing or altering this building on the property owned by the firm or corporation as set forth above (name of firm or corporation:

\_\_\_\_\_);

2. \_\_\_\_\_ I will personally superintend and manage all aspects of the construction or alteration of the building and that duty will not be delegated to any person not duly licensed under the terms of Article 1 of Chapter 87 of the General Statutes of North Carolina;

3. \_\_\_\_\_ I will be personally present for all inspections required by the *North Carolina State Building Code*, unless the plans for the construction or alteration of the building were drawn and sealed by an architect licensed pursuant to Chapter 83A of the General Statutes of North Carolina;

4. \_\_\_\_\_ I understand that a copy of this AFFIDAVIT will be transmitted to the North Carolina Licensing Board for General Contractors for verification that I am validly entitled to claim an exemption under G.S. 87-1(b)(2) for the building construction or alteration specified herein. I further understand that, if the North Carolina Licensing Board for General Contractors determines that I was not entitled to claim this exemption, the building permit issued for the building construction or alteration specified herein shall be revoked pursuant to G.S. ~~153A-362~~ or G.S. ~~160A-422~~ 160D-1115.

\_\_\_\_\_  
(Signature of Affiant)

\_\_\_\_\_  
Date

Sworn to (or affirmed) and Subscribed before me this the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Printed Name of Notary Public

My Commission Expires: \_\_\_\_\_ (Notary Stamp or Seal)

(NOTE: It is a Class F felony to willfully commit perjury in any affidavit taken pursuant to law—G.S. 14-209)



## APPENDIX F

To: All NC Building Code Enforcement Jurisdictions

The North Carolina Licensing Board for General Contractors has implementing procedures to comply with NC General Statute 87-14. For projects costing \$30,000 or more, property owners claiming exemption to the general contractor licensing requirement when applying for a building permit are required, before being entitled to the permit, to execute a verified affidavit attesting:

- a. That the person is the owner of the property on which the building is being constructed or, in the case of a firm or corporation, is legally authorized to act on behalf of the firm or corporation.
- b. That the person will personally superintend and manage all aspects of the construction of the building and that the duty will not be delegated to any other person not duly licensed.
- c. That the person will be personally present for all inspections required by the *North Carolina State Building Code*, unless the plans for the building were drawn and sealed by an architect licensed pursuant to Chapter 83A of the General Statutes.

The statute further requires that a copy of the affidavit be transmitted to the North Carolina Licensing Board for General Contractors for the purpose of verifying the applicant was validly entitled to claim the exemption. If during the permitting process any irregularities are detected that call in to question whether a permit applicant is fully complying with all applicable laws, the person issuing the permit should make note of the circumstances when forwarding information to the Board and provide a copy of the building permit application, including contact information for any subcontractors listed. **Please be aware the new requirements are not intended to delay the issuance of the building permit. When the person applying for the building permit reasonably satisfies the permitting authority that the applicable laws are being complied with, and executes all required documents, the building permit should be issued without delay.** Upon review of the documents, should any irregularities be detected that require further action, the Board's staff will contact the code enforcement authority.

Whenever possible, the most practical method of submitting affidavits to the Board is to scan the documents and transmit them as PDF email attachments to the appropriate Field Investigator serving the various code enforcement jurisdictions throughout the state. Specific email addresses have been set up for this purpose. Alternately, the documents may be faxed or sent via US Mail. ~~Attached to this email are pages with the~~ The assigned territories, email addresses for affidavit transmittal, fax numbers and contact information for the Board's field staff are found on the next page. Please contact the staff member serving your area with any questions you may have. ~~Also attached to this email is a model affidavit developed by the NC Home Builders Association in conjunction with the UNC School of Government. You may use this model affidavit or develop your own, as long as all the required information is provided.~~ Additional information is available on the UNC School of Government website using the following link: <http://www.sog.unc.edu/node/767>.

Thank you for your assistance in this matter. The Board sincerely appreciates your cooperation in implementing these new requirements.

## FIELD INVESTIGATOR REGIONS

### Region 1 — Coastal/SE (14) (Joel Macon 910-458-8899) Email: joelmacon@nclbgc.org

Bladen	Columbus	Duplin	Johnston	New Hanover	Pender
Brunswick	Craven	Harnett	Jones	Onslow	Sampson
Carteret	Cumberland				

### Region 2 — Coastal N/E (27)(28) (Dean Burbage 252-927-3326) Email: deanburbage@nclbgc.org

Beaufort	Dare	Greene	Martin	Perquimans	<u>Warren</u>
Bertie	Edgecombe	Halifax	Nash	Pitt	Wayne
Camden	<u>Franklin</u>	Hertford	Northampton	Tyrrell	Wilson
Chowan	Gates	Hyde	Pamlico	Vance	
Currituck	Granville	Lenoir	Pasquotank	Washington	

### Region 3 — Upper Piedmont (17)(16) (Curtis Huff 919-690-8734) Email: curtishuff@nclbgc.org

Alamance	Durham	Lee	Randolph	Surry	Yadkin
Caswell	Forsyth	Orange	Rockingham	<u>Wake</u>	
Chatham	<del>Franklin</del>	<del>Warren</del>			
Guilford	Person	Stokes	Wilkes		

### Region 4 — Lower Piedmont (15) (Waties Greene ~~980-210-3627~~ 910-653-5356) Email: watiesgreene@nclbgc.org

Anson	Davidson	Mecklenburg	Richmond	Scotland
Cabarrus	Hoke	Montgomery	Robeson	Stanly
Davie	Iredell	Moore	Rowan	Union

### Region 5 — Western (27) (Ryan Cody 828-689-3388) Email: ryancody@nclbgc.org

Alexander	Burke	Cleveland	Jackson	Mitchell	Watauga
Alleghany	Caldwell	Gaston	Lincoln	Polk	Yancey
Ashe	Catawba	Graham	Macon	Rutherford	
Avery	Cherokee	Haywood	Madison	Swain	
Buncombe	Clay	Henderson	McDowell	Transylvania	

Affidavits transmitted to the Board via IJS Mail should be sent to:

Susan Sullivan, Director of Investigations  
 NC Licensing Board for General Contractors  
 P.O. Box 171875400 Creedmoor Road  
 Raleigh, North Carolina 2761927612  
[www.nclbgc.org](http://www.nclbgc.org) / email: [complaints@nclbgc.org](mailto:complaints@nclbgc.org)

# APPENDIX G

## DESIGN PROFESSIONAL INSPECTION FORM

RECORD OF THE INSPECTION OF A COMPONENT OR ELEMENT BY A NC LICENSED ARCHITECT OR ENGINEER

### Project Information:

Residential Single-Family Project: Y N	Commercial Project: Y N
Code Enforcement Project No:	Permit No:
Project Name:	Owner:
Project Address:	Suite No:
Date Inspected:	Contractor Name:
Component Inspected:	

### Responsible Licensed NC Architect or NC Engineer

Name:	
Firm Name:	
Phone Numbers:	Office: Mobile:
Email Address:	
Mailing Address:	

### APPLICABLE CODE:

2024 NCBC = 2024 NC Building Code; 2024 NCRC = 2024 NC Residential Code

Describe Element/Component/Type of Inspection: \*

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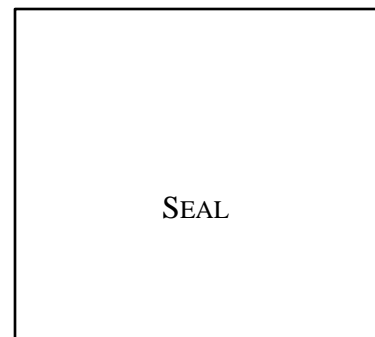
---

\*(subgrade form/letter may also be required)

### Attestation/Signature:

By signing below, I certify that the component and/or element of the building as identified on this form has been inspected by me or someone under my direct supervision per G.S. ~~160D-11-6~~160D-1106 and is in compliance with the Code or other proposal of the architect or engineer for the project. This inspection is in compliance with all of the requirements of the above referenced code. Attach any additional documents if needed.

\_\_\_\_\_  
Licensed Architect or Engineer



### Inspection Department disclaimer:

Upon the receipt of a signed written document as required by G.S. ~~160D-11-6~~160D-1106, Code Enforcement shall be discharged and released from any liabilities, duties and responsibilities imposed by this article or in common law from any claim arising out of or attributed to the component or element in the construction of the building for which the signed written document was submitted. Be aware that this inspection will be noted in all inspection records including the Certificate of Occupancy or

DRAFT

## Burgos, Alexander N

---

**From:** Rittlinger, David B  
**Sent:** Tuesday, December 26, 2023 2:50 PM  
**To:** Liebman, Brian R  
**Cc:** Childs, Nathan D; Burgos, Alexander N  
**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Brian,  
Thank you for clarifying and I appreciate the quick response.  
Have a great day.

David B. Rittlinger, PE, LEED AP  
Code Interpretations Supervisor  
Chief Code Consultant  
Engineering Division



N.C. Department of Insurance  
Office of State Fire Marshal  
1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
919.647.0008

[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)

Link to free view of 2018 NC Codes  
<https://codes.iccsafe.org/codes/north-carolina>

---

**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>  
**Sent:** Friday, December 22, 2023 10:02 AM  
**To:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Cc:** Childs, Nathan D <nchilds@NCDOJ.GOV>; Burgos, Alexander N <alexander.burgos@oah.nc.gov>  
**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Hi David,

Yes, your understanding is correct, for all of the codes. Sorry for not mentioning the Form in the requests for changes, but I thought we already had that covered, and didn't want to create any confusion. My apologies.

Please let me know if you have any further questions, and have a Merry Christmas!

Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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---

**From:** Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>  
**Sent:** Friday, December 22, 2023 7:55 AM  
**To:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>  
**Cc:** Childs, Nathan D <[nchilds@NCDOJ.GOV](mailto:nchilds@NCDOJ.GOV)>; Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>  
**Subject:** RE: 2024 NC Administrative Code Requests for Changes

Brian,  
Good morning.  
Thank you for your work on this.

I do not see any comments concerning the accuracy of the Form 400 in which the “adoption” box in 3 was checked and the “petition for rule making” box in 9A was checked.

To be consistent with what was discussed per the agreement and in phone conversations concerning all the proposed 2024 NC Building Codes, I will revise the Form 400 and check the “amendment” box in 3 and the “agency” box in 9A in the resubmission of these rules for the proposed 2024 NCACP.

The 2023 NC Electrical Code (2023 NEC with NC amendments) is a repeal and adopt action by the agency so it is different, per the agreement and discussions.

The 2024 NC Building, Existing Building, Fire, Mechanical, Fuel Gas, Plumbing, Energy Conservation and Residential Codes submissions of the Form 400 will check the “amendment” box in 3 and the “agency” box in 9A as the submitted changes will indicate the differences between the 2018 and 2024 that were approved by the NCBCA this year.

Does this reflect an accurate submission of Form 400 for all of the 2024 NC Buildings Codes and the 2023 NC Electrical Code to RRC for consideration as permanent rules? Sorry to bring this back up, but I want to be 100% sure that the submissions are accurate for your work and review as well as the RRC’s efforts.

Thank you any feedback you can provide.  
Merry Christmas.

David B. Rittlinger, PE, LEED AP  
Code Interpretations Supervisor  
Chief Code Consultant  
Engineering Division



N.C. Department of Insurance  
Office of State Fire Marshal  
1429 Rock Quarry Road, Suite 105  
Raleigh, NC 27610  
919.647.0008

[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)

Link to free view of 2018 NC Codes  
<https://codes.iccsafe.org/codes/north-carolina>

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**From:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>  
**Sent:** Thursday, December 21, 2023 5:11 PM  
**To:** Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>  
**Cc:** Childs, Nathan D <[nchilds@NCDOJ.GOV](mailto:nchilds@NCDOJ.GOV)>; Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>  
**Subject:** 2024 NC Administrative Code Requests for Changes

Good afternoon all,

I've completed my review of the 2024 Administrative Code, and the change to Appendix B that was sent in separately. Attached, please find my requests for changes. If you have any questions or concerns, let me know.

In terms of a due date, I think it depends on when you want to bring these back before the Commission. The extension granted last week means you can either go to the January 31, 2024 meeting, or the February 28, 2024 meeting. For January, I'd need the changes back by **January 17, 2024**. For February, I'd need them back by **February 14, 2024**. That gives us 10 business days between your due date and the meeting. That said, if you try for the January meeting and miss, we can still go to February.

Thanks for all your hard work on this Code and all the others, and have a Merry Christmas and Happy New Year!

Best,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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Email correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties by an authorized state official.

## Burgos, Alexander N

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**Subject:** FW: [External] Dec. 14, 2023 RRC Meeting - Agenda Item 17 - Request for Extension of Period for Reviewing Rules

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**From:** Childs, Nathan <nchilds@ncdoj.gov>  
**Sent:** Monday, December 11, 2023 3:56 PM  
**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>; Burgos, Alexander N <alexander.burgos@oah.nc.gov>  
**Cc:** Bridget Herring (herring.ncbcc@gmail.com) <herring.ncbcc@gmail.com>; mmatheny@ashevillenc.gov; Rittlinger, David B <david.rittlinger@ncdoi.gov>; Ethridge, Courtney H <cethridge@ncdoj.gov>  
**Subject:** RE: [External] Dec. 14, 2023 RRC Meeting - Agenda Item 17 - Request for Extension of Period for Reviewing Rules

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Much appreciated! Merry Christmas!

---

**From:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>  
**Sent:** Monday, December 11, 2023 3:52 PM  
**To:** Childs, Nathan <[nchilds@ncdoj.gov](mailto:nchilds@ncdoj.gov)>; Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>  
**Cc:** Bridget Herring ([herring.ncbcc@gmail.com](mailto:herring.ncbcc@gmail.com)) <[herring.ncbcc@gmail.com](mailto:herring.ncbcc@gmail.com)>; [mmatheny@ashevillenc.gov](mailto:mmatheny@ashevillenc.gov); Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>; Ethridge, Courtney <[Cethridge@ncdoj.gov](mailto:Cethridge@ncdoj.gov)>  
**Subject:** RE: [External] Dec. 14, 2023 RRC Meeting - Agenda Item 17 - Request for Extension of Period for Reviewing Rules

Thanks, Nathan. I will recommend approval of your extension request at this week's meeting.

Merry Christmas!  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law N.C.G.S. Chapter 132 and may be disclosed to third parties.

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**From:** Childs, Nathan <[nchilds@ncdoj.gov](mailto:nchilds@ncdoj.gov)>  
**Sent:** Monday, December 11, 2023 3:50 PM  
**To:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>; Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>  
**Cc:** Bridget Herring ([herring.ncbcc@gmail.com](mailto:herring.ncbcc@gmail.com)) <[herring.ncbcc@gmail.com](mailto:herring.ncbcc@gmail.com)>; [mmatheny@ashevillenc.gov](mailto:mmatheny@ashevillenc.gov); Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>; Ethridge, Courtney H <[cethridge@ncdoj.gov](mailto:cethridge@ncdoj.gov)>  
**Subject:** [External] Dec. 14, 2023 RRC Meeting - Agenda Item 17 - Request for Extension of Period for Reviewing Rules  
**Importance:** High



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Good afternoon Brian:

Pursuant to our prior communications regarding the four final rules (2024 N.C. Administrative Code & Policies (Agenda Item #17(1)), 2024 NC Plumbing Code (Agenda Item #17(3)), 2024 NC Residential Code (Agenda Item #17(4)), and amendment to Appendix B in 2024 N.C. Administrative Code & Policies (Agenda Item #17(2))) appearing on the Commission's December 14, 2023 meeting agenda, the North Carolina Building Code Council requests, pursuant to N.C. Gen. Stat. § 150B-21.10 (3) and 26 N.C. Admin. Code 5.0115(a), an extension of the period for reviewing the rules to allow Council staff to provide the supplemental review aide and complete copies of the proposed 2024 North Carolina code volumes referenced in my December 4, 2023 letter to you (attached).

Thank you and happy holidays,

Nathan Childs



**Nathan D. Childs**

Assistant Attorney General

Insurance Section

(919) 716-0010

[nchilds@ncdoj.gov](mailto:nchilds@ncdoj.gov)

Street Address: 114 W. Edenton St., Raleigh, NC 27603

Mailing Address: P.O. Box 629, Raleigh, NC 27602-0629

Website: [ncdoj.gov](http://ncdoj.gov)

Please note messages to or from this address may be public records.

al.

## Burgos, Alexander N

---

**Subject:** FW: [External] Dec. 14, 2023 RRC Meeting - Agenda Item 17 - Request for Extension of Period for Reviewing Rules

---

**From:** Childs, Nathan <[nchilds@ncdoj.gov](mailto:nchilds@ncdoj.gov)>

**Sent:** Monday, December 11, 2023 3:50 PM

**To:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>; Burgos, Alexander N <[alexander.burgos@oah.nc.gov](mailto:alexander.burgos@oah.nc.gov)>

**Cc:** Bridget Herring ([herring.ncbcc@gmail.com](mailto:herring.ncbcc@gmail.com)) <[herring.ncbcc@gmail.com](mailto:herring.ncbcc@gmail.com)>; [mmatheny@ashevillenc.gov](mailto:mmatheny@ashevillenc.gov); Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>; Ethridge, Courtney H <[cethridge@ncdoj.gov](mailto:cethridge@ncdoj.gov)>

**Subject:** [External] Dec. 14, 2023 RRC Meeting - Agenda Item 17 - Request for Extension of Period for Reviewing Rules

**Importance:** High

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Good afternoon Brian:

Pursuant to our prior communications regarding the four final rules (2024 N.C. Administrative Code & Policies (Agenda Item #17(1)), 2024 NC Plumbing Code (Agenda Item #17(3)), 2024 NC Residential Code (Agenda Item #17(4)), and amendment to Appendix B in 2024 N.C. Administrative Code & Policies (Agenda Item #17(2))) appearing on the Commission's December 14, 2023 meeting agenda, the North Carolina Building Code Council requests, pursuant to N.C. Gen. Stat. § 150B-21.10 (3) and 26 N.C. Admin. Code 5.0115(a), an extension of the period for reviewing the rules to allow Council staff to provide the supplemental review aide and complete copies of the proposed 2024 North Carolina code volumes referenced in my December 4, 2023 letter to you (attached).

Thank you and happy holidays,

Nathan Childs



**Nathan D. Childs**

Assistant Attorney General

Insurance Section

(919) 716-0010

[nchilds@ncdoj.gov](mailto:nchilds@ncdoj.gov)

Street Address: 114 W. Edenton St., Raleigh, NC 27603

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Please note messages to or from this address may be public records.

al.

JOSH STEIN  
ATTORNEY GENERAL



REPLY TO: NATHAN D. CHILDS  
INSURANCE SECTION  
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December 4, 2023

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Rules Review Commission  
1711 New Hope Church Road  
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Email: [brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)  
*Via Email Only*

**RE: 2024 updates to North Carolina State Building Code volumes**

Dear Mr. Liebman:

This letter will follow-up on and confirm our discussion and agreement on Tuesday November 21, 2023, when David Rittlinger and I met with you at your office.

As you know, I serve as counsel to the North Carolina Building Code Council (BCC) and David is Chief Code Consultant with the Office of the State Fire Marshal and serves as rulemaking coordinator for the BCC. David and I met with you on November 21 to discuss the three permanent rules that were objected to by the Rules Review Commission at the Commission's November 16, 2023 meeting (the 2024 edition of the North Carolina Building Code (221213 Item B-3), the 2024 edition of the North Carolina Fire Prevention Code (221213 Item B-4), and the 2024 edition of the North Carolina Existing Building Code (221213 Item B-5)), as well as the pending rules adopting the 2024 editions of the seven other volumes comprising the North Carolina State Building Code. As we discussed, these updates are based on the 2021 editions of model codes developed by the International Code Council (ICC) and the 2023 edition of the National Electrical Code developed by the National Fire Prevention Association, and would take effect January 1, 2025.

Timing is important because the BCC is subject to statutory time constraints to adopt certain portions of the 2024 edition of the State Building Code. As we have discussed, N.C. Gen. Stat. § 143-138(d) provides that the BCC may revise or amend

Mr. Brian Liebman

December 4, 2023

Page 2

the North Carolina Residential Code (as well as the provisions in the North Carolina Plumbing Code, North Carolina Electrical Code, North Carolina Energy Conservation Code, North Carolina Mechanical Code, and North Carolina Fuel-Gas Code applicable to one- and two-family dwellings) “only every six years” with the next six-year revision to take effect January 1, 2025. Further, Section 143-138(d) requires that the BCC adopt permanent rules revising these codes “with at least six months between adoption and effective date.”

In other words, the BCC must adopt the permanent rules updating these codes on or before June 30, 2024 or miss the statutory six-year window to revise or amend the Residential Code volume, as well as the provisions controlling the construction of one- or two-family dwellings found in the other five identified volumes. Accordingly, time is of the essence to address the Commission’s concerns and plot a path forward.

In its November 16, 2023 objections to the 2024 editions of the Building Code, Fire Code, and Existing Building Code, the Rules Review Commission adopted your November 11, 2023 RRC Staff Opinion, which objected to the adopted rules based on:

- (1) the BCC’s purported lack of statutory authority to incorporate the respective model codes by reference in the permanent rules, as allowed by N.C. Gen. Stat. § 150B-21.6;
- (2) the BCC’s purported failure to substantially comply with the 30-day submission requirement of N.C. Gen. Stat. § 150B-21.2(g);
- (3) the BCC’s purported failure to comply with the timing and notice requirements of N.C. Gen. Stat. § 150B-20 controlling petitions for rulemaking; and
- (4) that the formatting of the BCC’s submissions to the Commission purportedly prevent the Commission from satisfactorily completing its review of the rules for statutory authority as required by N.C. Gen. Stat. § 150B-21.9(a)(1).

*See RRC Staff Opinion, pp. 2-5, Nov. 11, 2023.*

While the BCC does not agree with the Staff Opinion's interpretation of N.C. Gen. Stat. § 150B-21.6, which the BCC will explain further under separate cover, we were able to come to agreements at the November 21 meeting addressing the other issues identified in your Staff Opinion, as detailed below.

Importantly, it is our understanding that compliance with these agreements will allow for the Commissions' consideration of the 2024 editions of the North Carolina Plumbing Code, North Carolina Residential Code, and North Carolina Administrative Code and Policies, which appear on the Commission's December 14, 2023 meeting agenda, as well as the 2024 editions of the North Carolina Mechanical Code, North Carolina Fuel-Gas Code, North Carolina Energy Conservation Code, and the 2023 North Carolina Electrical Code, which the BCC anticipates will be submitted to appear on the Commission's January 18, 2024 meeting agenda. We agreed that, so long as the BCC complies with the agreements, staff counsel will not recommend objection to the rules based on the grounds set out in the November 11, 2023 RRC Staff Opinion.

First, to address the Commission's concerns regarding the formatting of the BCC's submissions, we came to an agreement that the BCC will provide the Commission with three supplemental submissions for each code (except the 2023 North Carolina Electrical Code) that will allow Commission staff to more easily review the adopted permanent rules and compare them to the 2018 editions of the respective North Carolina codes, as amended by the BCC.

1. *Formatted Review Aide*

The first of the supplemental submissions will mirror the supplemental submission for the 2024 edition of the North Carolina Administrative Code and Policies, submitted to you by David Rittlinger on November 20, 2023. Like that submission, these supplements, in Microsoft Word format, will provide the Commission with an abridged copy of each proposed rule showing only those adoptions and amendments, by way of underlining and strikeouts, to the existing North Carolina 2018 code, as amended, by the proposed 2024 edition of the code. Per our agreement, these submissions will not address indexes and preliminary material in the codes, but rather will show differences to the substantive text provisions. Sections, tables, and appendices without changes will not be included in the submissions. We further agreed that submission of this supplemental aide will be sufficient for the Commission's consideration of post-publication changes to each code volume.

*2. 2017-2023 Amendments to Code Volumes*

So that the Commission can confirm (if it wishes) that the submission reflects all revisions made to the subject code by the BCC after the ICC's publication of the hard-copy 2018 North Carolina State Building Code, a PDF file containing all amendments to each respective code made by the BCC between December 2017 and March 2023, will also be provided.

*3. Full Copy of 2024 North Carolina Edition of Code Volume*

Finally, an electronic file containing a full copy of the 2024 edition of each respective code will be provided to Commission staff. Because the BCC grants the ICC the copyright to each code volume as part of its publishing agreement with ICC, the BCC asks that these electronic files not be published on the Commission's website.

*Exception: 2023 North Carolina Electrical Code*

We agreed that no such supplemental submissions are necessary for the 2023 edition of the North Carolina Electrical Code. As we discussed, due to the timing requirements of N.C. Gen. Stat. § 143-138(d), the 2017 North Carolina Electrical Code presently governs the construction of one- and two-family dwellings, while the 2020 North Carolina Electrical Code governs all other construction in the state. Instead, the BCC will provide the Commission with the document prepared by the BCC ad hoc committee that developed the 2023 North Carolina Electrical Code identifying those substantial changes between the 2020 North Carolina Electrical Code and the adopted 2023 North Carolina Electrical Code.<sup>1</sup> We agreed that this will be sufficient to complete the Commission's review. In addition, the BCC will adopt a rule repealing the 2017 and 2020 editions of the North Carolina Electrical Codes effective January 1, 2025. In return, staff counsel agreed not to recommend objection to the 2023 North Carolina Electrical Code based on the grounds identified in the November 11 RRC Staff Opinion.

**Second**, with regard to the objections based on the 30-day submission requirement of N.C. Gen. Stat. § 150B-21.2(g), we agreed that given the longstanding communications between Commission staff and the BCC<sup>2</sup> regarding the formatting of submissions to the Commission and other issues relating to the rules, staff

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<sup>1</sup> OSBM approved a fiscal note for the 2023 North Carolina Electrical Code on August 14, 2023.

<sup>2</sup> Pursuant to N.C. Gen. Stat. § 143-137(c), personnel of the Division of Engineering of the Department of Insurance serve as staff to the BCC.

Mr. Brian Liebman

December 4, 2023

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counsel will not recommend objection to the 2024 North Carolina Residential Code, 2024 North Carolina Plumbing Code, and 2024 North Carolina Administrative Code and Policies, which were submitted to the Commission more than 30 days after their adoption, as the BCC has substantially complied with the requirement.

As both parties outlined to the Commission at the November 16 meeting, these submissions are voluminous, technically complex, and subject to different formatting requirements because the State Building Code is not published in the North Carolina Administrative Code and is published by the BCC, rather than the Codifier of Rules. Accordingly, communications with RRC Staff regarding the Building Code updates began in late 2022 regarding a schedule for submission of the rules and intensified in July 2023, when the first updated code volume was submitted to the Commission by David Rittlinger. With the input of Commission staff, the BCC adopted the rules in groups and began submitting the adopted rules to the Commission. Correspondence regarding the format, content, prior code update submissions, and appropriate terminology regarding the adoption of the updates continued throughout the late summer and fall.

A rule is valid so long as it is adopted “in substantial compliance” with APA procedures. N.C. Gen. Stat. § 150B-18. In the BCC’s view, the purpose of the 30-day submission deadline in Section 150B-21.2(g) is to prevent rulemaking agencies from abandoning final rules through inaction. None of the communications from the BCC to Commission staff indicated that the BCC intended to withdraw or abandon the final rules. Rather, the continued interaction with the Commission demonstrates the BCC’s continued efforts to submit the rules in a format acceptable to the Commission and shows the BCC’s substantial compliance with the requirement. To the extent that the BCC deviated from the proscribed procedures, it was for the purpose of working with Commission staff to address their concerns. Importantly, any delay in the submission of the rules to the Commission did not violate the due process rights of the regulated public, and the North Carolina construction industry is well-aware that the code updates are scheduled to take effect January 1, 2025.

Accordingly, it is our understanding, per our November 21 agreement, that staff will not recommend that the Commission object to the final rules appearing on the December 14, 2023 meeting agenda on the grounds that the BCC did not substantially comply with N.C. Gen. Stat. § 150B-21.2(g)’s 30-day submission deadline. If this is not the case, please let me know immediately.

**Third**, as we discussed at the November 21 meeting, the boxes for “petition for rule-making” in section 9A of the “Submission for Permanent Rule” forms for the 2024 editions of the North Carolina Building Code, the North Carolina Fire Prevention Code, and the North Carolina Existing Buildings Code were checked in error. These permanent rules were proposed by the respective ad hoc code revision committees and standing committees appointed by the BCC expressly for this purpose, pursuant to N.C. Gen. Stat. § 143-137(a) and Section 202.8.2 of the North Carolina Administrative Code & Policies, 2018 North Carolina State Building Code.

Accordingly, these permanent rules are prompted by “agency” action, rather than a petition for rule-making, and are not subject to the timing, action, and notice requirements of N.C. Gen. Stat. § 150B-20. Accordingly, to the extent necessary, the BCC will submit corrected “Submission of Permanent Rule” forms for these three rules and all pending code revision rules, checking the “Agency” box in section 9A.<sup>3</sup> Per our November 21 agreement, we understand that staff will not recommend that the Commission object to code revision rules based on the BCC’s purported failure to comply with the requirements of N.C. Gen. Stat. § 150B-20.

I want to thank you for meeting with us and for working with us to find agreement on how the BCC can address the Commission’s objections, especially given the tight statutory deadlines here.

If your understanding regarding our agreements is different than mine, please let me know immediately, as significant resources are being devoted to ensure compliance with the BCC’s obligations. We need to hear from you no later than Wednesday, December 6, 2023. If you are aware of any other concerns that we did not address and resolve in our November 21 meeting, please let me know now so that I can respond.

If you have any questions or would like to discuss, please do not hesitate to contact me.

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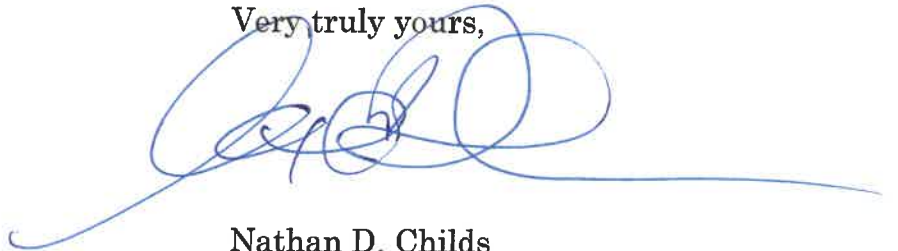
<sup>3</sup> As we also discussed at the November 21 meeting, N.C. Gen. Stat. § 150B-20 is codified in *Part 1* of Article 2A of Chapter 150B, whereas the scope of the Commission’s authority to review rules for APA compliance is limited to ensuring that they were “adopted in accordance with *Part 2* of this Article.” N.C. Gen. Stat. § 150B-21.9(a)(4) (emphasis added).



Mr. Brian Liebman  
December 4, 2023  
Page 7

With best regards, I am

Very truly yours,

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke extending to the right.

Nathan D. Childs  
Assistant Attorney General

cc: Bridget Herring, Chair of North Carolina Building Code Council (*via email*)  
David Rittlinger, Chief Code Consultant, Division of Engineering, Office of  
the State Fire Marshal (*via email*)  
Joseph D. Starling, P.E., Chief State Electrical Engineer & Inspector (*via  
email*)

## Burgos, Alexander N

---

**From:** Liebman, Brian R  
**Sent:** Friday, December 8, 2023 11:03 AM  
**To:** Rittlinger, David B; Childs, Nathan D  
**Cc:** Burgos, Alexander N  
**Subject:** RE: [External] Comments on 2024 Plumbing Code

Nathan and David,

I do not think it would be appropriate for me to discuss the BCC's response to a public comment with you.

Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
brian.liebman@oah.nc.gov

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**From:** Rittlinger, David B <david.rittlinger@ncdoi.gov>  
**Sent:** Friday, December 8, 2023 10:43 AM  
**To:** Liebman, Brian R <brian.liebman@oah.nc.gov>; Childs, Nathan D <nchilds@NCDOJ.GOV>  
**Subject:** RE: [External] Comments on 2024 Plumbing Code

Brian / Nathan,  
Let's discuss the necessary actions for this in advance of the 12/14/23 RRC meeting.  
I am available today. Monday and Tuesday I am generally not available as I will be running the NCBCC meetings.  
Wednesday I am available.  
Thank you

David B. Rittlinger, PE, LEED AP  
Code Interpretations Supervisor  
Chief Code Consultant  
Engineering Division



N.C. Department of Insurance  
Office of State Fire Marshal  
1429 Rock Quarry Road, Suite 105  
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919.647.0008

[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)

Link to free view of 2018 NC Codes  
<https://codes.iccsafe.org/codes/north-carolina>

---

**From:** Canaan Huie <[canaanhuie@mvalaw.com](mailto:canaanhuie@mvalaw.com)>  
**Sent:** Wednesday, December 6, 2023 3:50 PM  
**To:** rrc.comments <[rrc.comments@oah.nc.gov](mailto:rrc.comments@oah.nc.gov)>  
**Cc:** Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>  
**Subject:** [External] Comments on 2024 Plumbing Code

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Good afternoon.

Attached is a letter requesting the Rules Review Commission object to sections 702.1, 702.4, 1102.2, and 1102.7 of the 2024 Plumbing Code. These sections do not comply with the provisions of G.S. 150B-21.9. In each case, the section violates G.S. 150B-21.9(a)(1) because it is not within the authority delegated to the agency by the General Assembly. In fact, in each case, the section is contrary to a specific statutory provision.

Please don't hesitate to contact me if you have any questions.

Thanks,  
Canaan

**Y. Canaan Huie**  
[He/him/his](#)  
**Attorney at Law**  
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December 6, 2023

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Attorney at Law

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Brian Liebman  
North Carolina Office of Administrative Hearings  
Rules Review Commission  
1711 New Hope Church Road  
Raleigh, NC 27609

**Re: 2024 NC Plumbing Code**

Dear Mr. Liebman:

I am writing on behalf of Charlotte Pipe and Foundry Company to request the Rules Review Commission object to certain sections of the 2024 Plumbing Code, which was adopted by the Building Code Council on September 12, 2023. The specific sections for which we request an objection are sections 702.1, 702.4, 1102.2, and 1102.7. As outlined below, these sections do not comply with the provisions of G.S. 150B-21.9. In each case, the section violates G.S. 150B-21.9(a)(1) because it is not within the authority delegated to the agency by the General Assembly. In fact, in each case, the section is contrary to a specific statutory provision.

**Background**

Prior to the adoption of the 2024 Plumbing Code by the Building Code Council, the Plumbing Code contained a limitation that prohibited the use of certain plastic pipe, plastic pipe fittings, and plastic plumbing appurtenances in certain systems in buildings in which the top occupied floor exceeds 75 feet in height. Specifically, these sections included the following relevant language:

- Section 702.1. “**Exception:** Plastic pipe with an inside diameter of 2 inches (51 mm) and larger shall not be used for storm drainage drain, waste and vent conductors in buildings in which the top occupied floor exceeds 75 feet (23m) in height.”
- Section 702.4. “**Exception:** Plastic pipe fittings and plastic plumbing appurtenances with an inside diameter of 2 inches (51 mm) and larger shall not be used for drain, waste and vent conductors in buildings in which the top occupied floor exceeds 75 feet (23 m) in height.”
- Section 1102.2. “**Exception:** Plastic pipe with an inside diameter of 2 inches and larger shall not be used for storm drainage conductors in buildings in which the top occupied floor exceeds 75 feet (23m) in height.”

- Section 1102.7. **“Exception:** Plastic pipe fittings and plastic plumbing appurtenances with an inside diameter of 2 inches and larger shall not be used for storm drainage conductors in buildings in which the top occupied floor exceeds 75 feet (23m) in height.”

In 2023, the General Assembly enacted statutory language that codified these limitations. [S.L. 2023-137, HB 600](#), Regulatory Reform Act of 2023, became law on October 10, 2023. Section 36 of that act, which became effective October 10, 2023, pursuant to Section 54(b) of the act, reads as follows:

**“PRESERVE EXISTING NORTH CAROLINA BUILDING CODE LIMITATION ON THE USE OF PLASTIC PIPE IN CERTAIN BUILDINGS**

**SECTION 36.** G.S. 143-138 is amended by adding a new subsection to read:

‘(b24) Limitation on Use of Plastic Pipes. – No State, county, or local building code or regulation shall allow for the use of plastic pipes, plastic pipe fittings, and plastic plumbing appurtenances with an inside diameter 2 inches (51 millimeters) and larger in either of the following circumstances:

- (1) Drain, waste, and vent conductors in buildings in which the top occupied floor exceeds 75 feet (23 meters) in height.
- (2) Storm drainage conductors in buildings in which the top occupied floor exceeds 75 feet (23 meters) in height.’”

The corresponding sections adopted as part of the 2024 Plumbing Code (Sections 702.1, 702.4, 1102.2, and 1102.7) do not contain these limitations. In fairness to the Building Code Council, the 2024 Plumbing Code was adopted by the Council on September 12, 2023 – four weeks prior to the enactment of S.L. 2023-137.

### **Analysis**

As currently written, these sections would allow for the use of plastic pipes, plastic pipe fittings, and plastic plumbing appurtenances with an inside diameter 2 inches (51 millimeters) and larger in drain, waste, and vent conductors and storm drainage conductors in buildings in which the top occupied floor exceeds 75 feet (23 meters) in height in direct contradiction of the newly enacted G.S. 143-138(b24).

- Section 702.1 of the 2024 Plumbing Code provides, “Above-ground soil, waste and vent pipe shall conform to one of the standards listed in Table 702.1.” The standards listed in Table 702.1 include plastic pipe with an inside diameter 2 inches and larger. The Section does not contain the limitation required by G.S. 143-138(b24) and, therefore, appears to authorize the use of plastic pipe with an inside diameter 2 inches and larger in drain, waste, and vent conductors in buildings in which the top occupied floor exceeds 75 feet (23 meters) in height in direct violation of that statute.
- Section 702.4 of the 2024 Plumbing Code provides, “Pipe fittings shall be approved for installation with the piping material installed and shall comply with the applicable standards listed in Table 702.4.” The standards listed in Table 702.4 include plastic pipe fittings and plastic plumbing appurtenances with an inside diameter 2 inches and larger. The Section does not contain the limitation required by G.S. 143-138(b24)

and, therefore, appears to authorize the use of plastic pipe fittings and plastic pipe appurtenances with an inside diameter 2 inches and larger in drain, waste, and vent conductors in buildings in which the top occupied floor exceeds 75 feet (23 meters) in height in direct violation of that statute.

- Section 1102.2 of the 2024 Plumbing Code provides, “Inside storm drainage conductors installed above ground shall conform to one of the standards listed in Table 702.1.” The standards listed in Table 702.1 include plastic pipe with an inside diameter 2 inches and larger. The Section does not contain the limitation required by G.S. 143-138(b24) and, therefore, appears to authorize the use of plastic pipe with an inside diameter 2 inches and larger in storm drainage conductors in buildings in which the top occupied floor exceeds 75 feet (23 meters) in height in direct violation of that statute.
- Section 1102.7 of the 2024 Plumbing Code provides, “Pipe fittings shall be approved for installation with the piping material installed, and shall conform to the respective pipe standards or one of the standards listed in Table 1102.7.” The standards listed in Table 1102.7 include plastic pipe fittings and plastic plumbing appurtenances with an inside diameter 2 inches and larger. The Section does not contain the limitation required by G.S. 143-138(b24) and, therefore, appears to authorize the use of plastic pipe fittings and plastic pipe appurtenances with an inside diameter 2 inches and larger in storm drainage conductors in buildings in which the top occupied floor exceeds 75 feet (23 meters) in height in direct violation of that statute.

### **Requested action**

Because these sections do not contain the limitation required by G.S. 143-138(b24), they are not within the authority delegated to the Building Code Council by the General Assembly. We therefore request that the Rules Review Commission object to Sections 702.1, 702.4, 1102.2, and 1102.7 of the 2024 Plumbing Code as adopted by the Building Code Council.

I understand that it is not the role of the Rules Review Commission to revise rules, but merely to approve or object to them. I will add, however, that we would have no objection to these sections if the limiting language were included as is the case with the corresponding sections in the current Plumbing Code.

I’m happy to meet with you in person or by phone or video conference if you have any questions. Thank you for your consideration.

Sincerely,

Y. Canaan Huie

Cc: David Rittlinger, Building Code Council

## Burgos, Alexander N

---

**Subject:** FW: [External] RE: 2024 Updates to NC State Building Code - Nov. 21, 2023 Agreements

---

**From:** Liebman, Brian R <brian.liebman@oah.nc.gov>

**Sent:** Monday, December 4, 2023 5:28 PM

**To:** Childs, Nathan D <nchilds@NCDOJ.GOV>; Burgos, Alexander N <alexander.burgos@oah.nc.gov>

**Cc:** Bridget Herring (herring.ncbcc@gmail.com) <herring.ncbcc@gmail.com>; mmatheny@ashevillenc.gov; Rittlinger, David B <david.rittlinger@ncdoi.gov>; Starling, Joseph <joseph.starling@ncdoi.gov>; Holder, Karen <Karen.Holder@ncdoi.gov>; Ethridge, Courtney H <cethridge@ncdoj.gov>

**Subject:** RE: [External] RE: 2024 Updates to NC State Building Code - Nov. 21, 2023 Agreements

Hi Nathan,

Hope you had a good weekend as well. I've reviewed the letter, and I confirm that the letter captures our agreements about the BCC's submissions. To be clear, my agreement not to recommend objection for the same grounds as in the November 11, 2023 staff opinion (1) is contingent upon BCC making the submissions referenced in your letter, and (2) is not binding upon the Rules Review Commission itself.

Best,  
Brian

Brian Liebman  
Counsel to the North Carolina Rules Review Commission  
Office of Administrative Hearings  
(984)236-1948  
[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)

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JOSH STEIN  
ATTORNEY GENERAL



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December 4, 2023

Brian Liebman, Esq.  
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Email: [brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)  
*Via Email Only*

**RE: 2024 updates to North Carolina State Building Code volumes**

Dear Mr. Liebman:

This letter will follow-up on and confirm our discussion and agreement on Tuesday November 21, 2023, when David Rittlinger and I met with you at your office.

As you know, I serve as counsel to the North Carolina Building Code Council (BCC) and David is Chief Code Consultant with the Office of the State Fire Marshal and serves as rulemaking coordinator for the BCC. David and I met with you on November 21 to discuss the three permanent rules that were objected to by the Rules Review Commission at the Commission's November 16, 2023 meeting (the 2024 edition of the North Carolina Building Code (221213 Item B-3), the 2024 edition of the North Carolina Fire Prevention Code (221213 Item B-4), and the 2024 edition of the North Carolina Existing Building Code (221213 Item B-5)), as well as the pending rules adopting the 2024 editions of the seven other volumes comprising the North Carolina State Building Code. As we discussed, these updates are based on the 2021 editions of model codes developed by the International Code Council (ICC) and the 2023 edition of the National Electrical Code developed by the National Fire Prevention Association, and would take effect January 1, 2025.

Timing is important because the BCC is subject to statutory time constraints to adopt certain portions of the 2024 edition of the State Building Code. As we have discussed, N.C. Gen. Stat. § 143-138(d) provides that the BCC may revise or amend



Mr. Brian Liebman

December 4, 2023

Page 2

the North Carolina Residential Code (as well as the provisions in the North Carolina Plumbing Code, North Carolina Electrical Code, North Carolina Energy Conservation Code, North Carolina Mechanical Code, and North Carolina Fuel-Gas Code applicable to one- and two-family dwellings) “only every six years” with the next six-year revision to take effect January 1, 2025. Further, Section 143-138(d) requires that the BCC adopt permanent rules revising these codes “with at least six months between adoption and effective date.”

In other words, the BCC must adopt the permanent rules updating these codes on or before June 30, 2024 or miss the statutory six-year window to revise or amend the Residential Code volume, as well as the provisions controlling the construction of one- or two-family dwellings found in the other five identified volumes. Accordingly, time is of the essence to address the Commission’s concerns and plot a path forward.

In its November 16, 2023 objections to the 2024 editions of the Building Code, Fire Code, and Existing Building Code, the Rules Review Commission adopted your November 11, 2023 RRC Staff Opinion, which objected to the adopted rules based on:

- (1) the BCC’s purported lack of statutory authority to incorporate the respective model codes by reference in the permanent rules, as allowed by N.C. Gen. Stat. § 150B-21.6;
- (2) the BCC’s purported failure to substantially comply with the 30-day submission requirement of N.C. Gen. Stat. § 150B-21.2(g);
- (3) the BCC’s purported failure to comply with the timing and notice requirements of N.C. Gen. Stat. § 150B-20 controlling petitions for rulemaking; and
- (4) that the formatting of the BCC’s submissions to the Commission purportedly prevent the Commission from satisfactorily completing its review of the rules for statutory authority as required by N.C. Gen. Stat. § 150B-21.9(a)(1).

*See RRC Staff Opinion, pp. 2-5, Nov. 11, 2023.*

While the BCC does not agree with the Staff Opinion's interpretation of N.C. Gen. Stat. § 150B-21.6, which the BCC will explain further under separate cover, we were able to come to agreements at the November 21 meeting addressing the other issues identified in your Staff Opinion, as detailed below.

Importantly, it is our understanding that compliance with these agreements will allow for the Commissions' consideration of the 2024 editions of the North Carolina Plumbing Code, North Carolina Residential Code, and North Carolina Administrative Code and Policies, which appear on the Commission's December 14, 2023 meeting agenda, as well as the 2024 editions of the North Carolina Mechanical Code, North Carolina Fuel-Gas Code, North Carolina Energy Conservation Code, and the 2023 North Carolina Electrical Code, which the BCC anticipates will be submitted to appear on the Commission's January 18, 2024 meeting agenda. We agreed that, so long as the BCC complies with the agreements, staff counsel will not recommend objection to the rules based on the grounds set out in the November 11, 2023 RRC Staff Opinion.

First, to address the Commission's concerns regarding the formatting of the BCC's submissions, we came to an agreement that the BCC will provide the Commission with three supplemental submissions for each code (except the 2023 North Carolina Electrical Code) that will allow Commission staff to more easily review the adopted permanent rules and compare them to the 2018 editions of the respective North Carolina codes, as amended by the BCC.

1. *Formatted Review Aide*

The first of the supplemental submissions will mirror the supplemental submission for the 2024 edition of the North Carolina Administrative Code and Policies, submitted to you by David Rittlinger on November 20, 2023. Like that submission, these supplements, in Microsoft Word format, will provide the Commission with an abridged copy of each proposed rule showing only those adoptions and amendments, by way of underlining and strikeouts, to the existing North Carolina 2018 code, as amended, by the proposed 2024 edition of the code. Per our agreement, these submissions will not address indexes and preliminary material in the codes, but rather will show differences to the substantive text provisions. Sections, tables, and appendices without changes will not be included in the submissions. We further agreed that submission of this supplemental aide will be sufficient for the Commission's consideration of post-publication changes to each code volume.

*2. 2017-2023 Amendments to Code Volumes*

So that the Commission can confirm (if it wishes) that the submission reflects all revisions made to the subject code by the BCC after the ICC's publication of the hard-copy 2018 North Carolina State Building Code, a PDF file containing all amendments to each respective code made by the BCC between December 2017 and March 2023, will also be provided.

*3. Full Copy of 2024 North Carolina Edition of Code Volume*

Finally, an electronic file containing a full copy of the 2024 edition of each respective code will be provided to Commission staff. Because the BCC grants the ICC the copyright to each code volume as part of its publishing agreement with ICC, the BCC asks that these electronic files not be published on the Commission's website.

*Exception: 2023 North Carolina Electrical Code*

We agreed that no such supplemental submissions are necessary for the 2023 edition of the North Carolina Electrical Code. As we discussed, due to the timing requirements of N.C. Gen. Stat. § 143-138(d), the 2017 North Carolina Electrical Code presently governs the construction of one- and two-family dwellings, while the 2020 North Carolina Electrical Code governs all other construction in the state. Instead, the BCC will provide the Commission with the document prepared by the BCC ad hoc committee that developed the 2023 North Carolina Electrical Code identifying those substantial changes between the 2020 North Carolina Electrical Code and the adopted 2023 North Carolina Electrical Code.<sup>1</sup> We agreed that this will be sufficient to complete the Commission's review. In addition, the BCC will adopt a rule repealing the 2017 and 2020 editions of the North Carolina Electrical Codes effective January 1, 2025. In return, staff counsel agreed not to recommend objection to the 2023 North Carolina Electrical Code based on the grounds identified in the November 11 RRC Staff Opinion.

**Second**, with regard to the objections based on the 30-day submission requirement of N.C. Gen. Stat. § 150B-21.2(g), we agreed that given the longstanding communications between Commission staff and the BCC<sup>2</sup> regarding the formatting of submissions to the Commission and other issues relating to the rules, staff

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<sup>1</sup> OSBM approved a fiscal note for the 2023 North Carolina Electrical Code on August 14, 2023.

<sup>2</sup> Pursuant to N.C. Gen. Stat. § 143-137(c), personnel of the Division of Engineering of the Department of Insurance serve as staff to the BCC.

Mr. Brian Liebman

December 4, 2023

Page 5

counsel will not recommend objection to the 2024 North Carolina Residential Code, 2024 North Carolina Plumbing Code, and 2024 North Carolina Administrative Code and Policies, which were submitted to the Commission more than 30 days after their adoption, as the BCC has substantially complied with the requirement.

As both parties outlined to the Commission at the November 16 meeting, these submissions are voluminous, technically complex, and subject to different formatting requirements because the State Building Code is not published in the North Carolina Administrative Code and is published by the BCC, rather than the Codifier of Rules. Accordingly, communications with RRC Staff regarding the Building Code updates began in late 2022 regarding a schedule for submission of the rules and intensified in July 2023, when the first updated code volume was submitted to the Commission by David Rittlinger. With the input of Commission staff, the BCC adopted the rules in groups and began submitting the adopted rules to the Commission. Correspondence regarding the format, content, prior code update submissions, and appropriate terminology regarding the adoption of the updates continued throughout the late summer and fall.

A rule is valid so long as it is adopted “in substantial compliance” with APA procedures. N.C. Gen. Stat. § 150B-18. In the BCC’s view, the purpose of the 30-day submission deadline in Section 150B-21.2(g) is to prevent rulemaking agencies from abandoning final rules through inaction. None of the communications from the BCC to Commission staff indicated that the BCC intended to withdraw or abandon the final rules. Rather, the continued interaction with the Commission demonstrates the BCC’s continued efforts to submit the rules in a format acceptable to the Commission and shows the BCC’s substantial compliance with the requirement. To the extent that the BCC deviated from the proscribed procedures, it was for the purpose of working with Commission staff to address their concerns. Importantly, any delay in the submission of the rules to the Commission did not violate the due process rights of the regulated public, and the North Carolina construction industry is well-aware that the code updates are scheduled to take effect January 1, 2025.

Accordingly, it is our understanding, per our November 21 agreement, that staff will not recommend that the Commission object to the final rules appearing on the December 14, 2023 meeting agenda on the grounds that the BCC did not substantially comply with N.C. Gen. Stat. § 150B-21.2(g)’s 30-day submission deadline. If this is not the case, please let me know immediately.

**Third**, as we discussed at the November 21 meeting, the boxes for “petition for rule-making” in section 9A of the “Submission for Permanent Rule” forms for the 2024 editions of the North Carolina Building Code, the North Carolina Fire Prevention Code, and the North Carolina Existing Buildings Code were checked in error. These permanent rules were proposed by the respective ad hoc code revision committees and standing committees appointed by the BCC expressly for this purpose, pursuant to N.C. Gen. Stat. § 143-137(a) and Section 202.8.2 of the North Carolina Administrative Code & Policies, 2018 North Carolina State Building Code.

Accordingly, these permanent rules are prompted by “agency” action, rather than a petition for rule-making, and are not subject to the timing, action, and notice requirements of N.C. Gen. Stat. § 150B-20. Accordingly, to the extent necessary, the BCC will submit corrected “Submission of Permanent Rule” forms for these three rules and all pending code revision rules, checking the “Agency” box in section 9A.<sup>3</sup> Per our November 21 agreement, we understand that staff will not recommend that the Commission object to code revision rules based on the BCC’s purported failure to comply with the requirements of N.C. Gen. Stat. § 150B-20.

I want to thank you for meeting with us and for working with us to find agreement on how the BCC can address the Commission’s objections, especially given the tight statutory deadlines here.

If your understanding regarding our agreements is different than mine, please let me know immediately, as significant resources are being devoted to ensure compliance with the BCC’s obligations. We need to hear from you no later than Wednesday, December 6, 2023. If you are aware of any other concerns that we did not address and resolve in our November 21 meeting, please let me know now so that I can respond.

If you have any questions or would like to discuss, please do not hesitate to contact me.

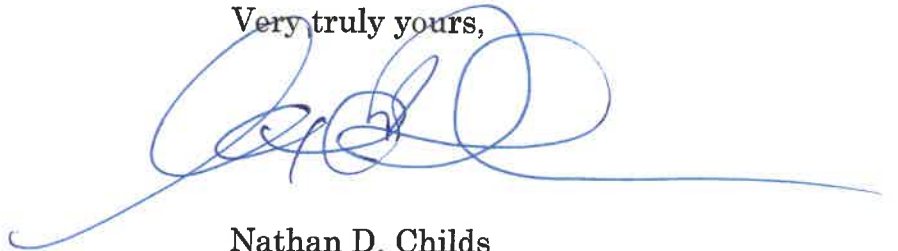
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<sup>3</sup> As we also discussed at the November 21 meeting, N.C. Gen. Stat. § 150B-20 is codified in *Part 1* of Article 2A of Chapter 150B, whereas the scope of the Commission’s authority to review rules for APA compliance is limited to ensuring that they were “adopted in accordance with *Part 2* of this Article.” N.C. Gen. Stat. § 150B-21.9(a)(4) (emphasis added).

Mr. Brian Liebman  
December 4, 2023  
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With best regards, I am

Very truly yours,

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke extending to the right.

Nathan D. Childs  
Assistant Attorney General

cc: Bridget Herring, Chair of North Carolina Building Code Council (*via email*)  
David Rittlinger, Chief Code Consultant, Division of Engineering, Office of  
the State Fire Marshal (*via email*)  
Joseph D. Starling, P.E., Chief State Electrical Engineer & Inspector (*via  
email*)

## Burgos, Alexander N

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**Subject:** FW: [External] RE: 2024 Updates to NC State Building Code - Nov. 21, 2023 Agreements  
**Attachments:** 2023.12.04 NDC Rev. Ltr to B. Liebman re 11-21-23 BCC Rule Agreements.pdf

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**From:** Childs, Nathan <[nchilds@ncdoj.gov](mailto:nchilds@ncdoj.gov)>  
**Sent:** Monday, December 4, 2023 3:35 PM  
**To:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>  
**Cc:** Bridget Herring ([herring.ncbcc@gmail.com](mailto:herring.ncbcc@gmail.com)) <[herring.ncbcc@gmail.com](mailto:herring.ncbcc@gmail.com)>; [mmatheny@ashevillenc.gov](mailto:mmatheny@ashevillenc.gov); Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>; Starling, Joseph <[joseph.starling@ncdoi.gov](mailto:joseph.starling@ncdoi.gov)>; Holder, Karen <[Karen.Holder@ncdoi.gov](mailto:Karen.Holder@ncdoi.gov)>; Ethridge, Courtney H <[cethridge@ncdoj.gov](mailto:cethridge@ncdoj.gov)>  
**Subject:** [External] RE: 2024 Updates to NC State Building Code - Nov. 21, 2023 Agreements

**CAUTION:** External email. Do not click links or open attachments unless verified. Report suspicious emails with the Report Message button located on your Outlook menu bar on the Home tab.

Good afternoon Brian:

Thanks again for your phone call on Friday and hope that you had a good weekend. Per our discussion, please see the attached letter setting out our agreements facilitating review of the 2024 code update rules. The changes that we discussed appear on page 5.

Per our conversation, please confirm by reply to this email that the attached letter captures our agreements regarding the Commission's review of the permanent rules for the 2024 editions of the State Building Code volumes. Of course, please don't hesitate to give me a call if you would like to discuss.

Best regards,

Nathan



**Nathan D. Childs**  
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Please note messages to or from this address may be public records.

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**From:** Childs, Nathan  
**Sent:** Friday, December 1, 2023 1:53 PM  
**To:** Liebman, Brian R <[brian.liebman@oah.nc.gov](mailto:brian.liebman@oah.nc.gov)>  
**Cc:** Bridget Herring ([herring.ncbcc@gmail.com](mailto:herring.ncbcc@gmail.com)) <[herring.ncbcc@gmail.com](mailto:herring.ncbcc@gmail.com)>; Rittlinger, David B <[david.rittlinger@ncdoi.gov](mailto:david.rittlinger@ncdoi.gov)>; Starling, Joseph <[joseph.starling@ncdoi.gov](mailto:joseph.starling@ncdoi.gov)>; Holder, Karen <[Karen.Holder@ncdoi.gov](mailto:Karen.Holder@ncdoi.gov)>; Ethridge, Courtney <[Cethridge@ncdoj.gov](mailto:Cethridge@ncdoj.gov)>  
**Subject:** 2024 Updates to NC State Building Code - Nov. 21, 2023 Agreements  
**Importance:** High

Good afternoon Brian:

I want to thank you again for meeting with David Rittlinger and I on November 21, 2023 to discuss the Commission's November 16, 2023 objections to the Building Code Council rules and for working with us to reach an agreement facilitating review of the remaining rules for the 2024 code update cycle. Per our meeting, I have memorialized our agreement in the attached letter, based on the language we developed at the meeting.

I will give you a call to ensure receipt. If your understanding regarding our agreements is different than mine, please let me know immediately, as the Engineering Division of the Office of State Fire Marshal is dedicating significant resources to honoring the Council's obligations.

Hope that you had a good Thanksgiving and speak with you soon,

Nathan



**Nathan D. Childs**

Assistant Attorney General

Insurance Section

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