AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

<u>NOTE:</u> This request when viewed on computer extends 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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

Are you adopting the parts of this chapter in the International Residential Code (IRC) that are not addressed in the packet?

Yes. The NC Amendments to the I-Codes are identified by strikethrough/underline.

I note that "code" is not capitalized throughout this Code. So, I take it that it should remain lowercase everywhere is used as such?

Correct. "Code" is capitalized for specific uses (NC Building Code, International Building Code, etc.) and lowercase for general use elsewhere. We will coordinate this, where necessary, in the final ICC publication.

So that I'm clear – this will be the 2018 Residential Code? Or is it the 2019 Code? I note that page 22 of the packet does not include dates. What should those be?

This will be the 2018 NC Existing Building Code. The effective date will be 1/1/2019.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Acknowledgements and Preface

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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In reviewing these rules, the staff determined that the following technical changes need to be made:

On Page 3, should the Commissioner information be updated?

The upfront pages are not part of the rule and will be updated with current BCC/Staff information.

On Pages 17-18 of the packet, since you are deleting Chapters 34-43, should they be deleted here as well?

On Page 18 of the packet, for "Chapter 46" I recommend stating "identified by <u>any</u> governmental agency (state <u>or</u> federal)"

Also, you have "hazard area" (singular) followed by several "areas" (plural). Should "hazard area" be plural as well?

I take it from the strikethroughs on Pages 19-21 that you are not incorporating any of the Appendices from the IRC? However, it appears that you are retaining many of the appendices. Please only strike what you are removing and add those that you are adopting.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, R102.7, R103, R104, R105, R106, R107, R108, R109, R110, R111, R112, R113, R114

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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In reviewing these rules, the staff determined that the following technical changes need to be made:

I take it that when you are referring to the Administrative Code and Policies you are referring to this volume of the NC Building Code?

Correct.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 1

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>*R101.1:*</u> Please insert the appropriate dates.

R101.1 Title.

These provisions shall be known as the <u>North Carolina</u> Residential Code for One- and Twofamily Dwellings-of [NAME OF JURISDICTION], and shall be cited as such and will be referred to herein as "this code." <u>These regulations were adopted by the North Carolina Building Code</u> <u>Council on June 13, 2017 to be effective January 1, 2019</u>. <u>References to the International</u> <u>Codes shall mean the North Carolina Codes. The North Carolina Amendments to the</u> <u>International Codes are underlined</u>.

<u>R101.2.1</u>: Why are the terms "coastal high hazard" and "ocean hazard areas" italicized? I don't see that these terms are defined in this code.

These terms are defined in NC Chapter 46.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 2

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

When you publish, please be sure that the terms are in alphabetical order.

Acknowledged.

In "Accepted Engineering Practice" I recommend deleting "That which" or stating "Practices that conform..."

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

And does your regulated public know what these tests or standards are?

Yes. Engineering terminology.

In "Access to" I recommend deleting "That which" or replacing it with "Access that enables..."

ACCESS (TO). Access that enables a device, 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.

In "Accessible" why is "ACCESSIBLE" in all caps on the second line?

ACCESSIBLE. Signifies access that requires the removal of an access panel or similar removable obstruction. For energy purposes, <u>accessible</u> means admitting close approach as a result of not being guarded by locked doors, elevation or other effective means (see "accessible, <u>readily").</u>

Also, shouldn't the cross-reference be to "ready access (to)," which is the defined term on Page 67 of the packet?

"Accessible, readily" is also a defined term.

In "Accessory Building" on the third line, replace "which" with "that" before "is detached"

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% of its exterior walls are enclosed. Examples of accessory buildings are garages, storage buildings, workshops, boat houses, treehouses, etc.

In "Adapter Fitting," I take it your regulated public knows what is "suitable" and "proper"?

Yes. Plumbing terminology.

In "Addition" and elsewhere where the term is used, what does "for energy purposes"? I am sure your regulated public knows, but I do not.

Yes. When applying the energy provisions of the Codes.

In "Alternative Engineered Design" who will determine compliance with this intent? A code official?

Compliance with the Code is "approved" by the code official.

You are defining "Bed and Breakfast Home" That term is defined in G.S. 130A-247 and this does not track it exactly. Is this not a concern, given the use of the term in G.S. 143-138, as well as other parts of this Code?

No. The Residential Code only addresses construction standards. The "food and drink" limits are regulated by other agencies.

Do you not also need to define "bed and breakfast inn," again based upon G.S. 143-138 and other parts of this Code.

No. A "bed and breakfast inn" will be regulated by the Building Code as a Group R-1 (boarding house, hotel, motel).

In "BPI Envelope Professional" does your regulated public know how to sign up for and take the exams, and what a current certification is?

It is a certification level offered by the Building Performance Institute. Training and certification information is available at their website.

In "Brazed Joint' replace "which" with "that"

[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.

In the exception to "Building Drain," should it be "considered to be the building drain"?

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

The definition of "Cistern" does not meet the definition in G.S. 143-138(b12), which states:

(b12) Cisterns. - The Code may include rules pertaining to the construction or renovation of residential or commercial buildings and structures that permit the use of cisterns to provide water for flushing toilets and for outdoor irrigation. No State, county, or local building code or regulation shall prohibit the use of cisterns to provide water for flushing toilets and for outdoor irrigation. As used in this subsection, "cistern" means a storage tank that is watertight; has smooth interior surfaces and enclosed lids; is fabricated from nonreactive materials such as reinforced concrete, galvanized steel, or plastic; is designed to collect rainfall from a catchment area; may be installed indoors or outdoors; and is located underground, at ground level, or on elevated stands.

Is this a concern here?

No. "Cistern" has a limited application in this code.

On Page 49, should there be two definitions of "clothes dryer"? Should the first be deleted?

The first definition has been deleted.

In the second definition, in Type 1, what is "usually the smallest unit physically and in output"? Does your regulated public know?

Yes. Fuel Gas appliance terminology.

In "Cross Connection" what is "questionable safety"? does your regulated public know? Also, insert a comma after "safety" In addition, should be "a chemical" or "chemical(s)"?

Yes. Plumbing and ICC terminology. Singular.

In "Discrete Product" please delete "but no limited to" unless you need to retain the term to be consistent with the rest of the code.

Standard IMC terminology.

In "Environmental Air" replace "which" with "that" and insert an "or" after "bathroom exhaust"

Standard IMC terminology.

In "Equipment, Existing" replace "which" with "that" before "was legally"

Standard IMC terminology.

You have defined "F-Factor" twice on pages 54 and 55. Do you need to retain it both places?

The first definition has been deleted.

In "Family" what is the purpose of defining the term? Is it to help define "one or two family home"?

Yes.

In "Fiber-Cement Siding" replace "which" with "that" after "Additives"

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 nonasbestos 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.

In "Fireplace" why are you defining "Masonry Chimney" here? I note you already defined the term differently on Page 49 of the packet. Which controls?

Both definitions are needed. The first one is for a chimney only. The second one is in conjunction with a fireplace.

In "Smoke Chamber" replace "which" with "that"

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.

In "Fully Enclosed Attic Floor System" replace "which" with "that"

[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.

In "HERS Rater" does your regulated public know how to sign up for and take the training and what a current certification is?

Yes. The Residential Energy Services Network is recognized by the federal government for verification of building energy performance. Training and certification information is available on their website.

In "Infrared Radiant Heater" replace "which" with "that" And consider stating "These heaters shall be either the vented or unvented type"

[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. These heaters are of either the vented or unvented type.

In "Joint, Plastic Adhesive," "Joint, Plastic Solvent Cement," and "Joint, Soldered," replace "which" with "that"

Standard IMC terminology.

In "Labeled" how will the Building Code Council approve these laboratories, agencies, or organizations? Please note G.S. 143-139.1, requiring the Council to adopt rules to set those requirements.

Deleted reference to BCC approval. The statute below applies to manufactured buildings. LABELED. <u>Appliances, Eequipment</u>, materials or products to which have been affixed a *label*, seal, symbol or other identifying *mark* of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the <u>appliance</u>, *equipment*, material or product meets identified standards or has been tested and found suitable for a specified purpose.

§ 143-139.1. Certification of manufactured buildings, structures or components by recognized independent testing laboratory; minimum standards for modular homes.

Certification. - The State Building Code may provide, in circumstances deemed (a) appropriate by the Building Code Council, for testing, evaluation, inspection, and certification of buildings, structures or components manufactured off the site on which they are to be erected, by a recognized independent testing laboratory having follow-up inspection services approved by the Building Code Council. Approval of such buildings, structures or components shall be evidenced by labels or seals acceptable to the Council. All building units, structures or components bearing such labels or seals shall be deemed to meet the requirements of the State Building Code and this Article without further inspection or payment of fees, except as may be required for the enforcement of the Code relative to the connection of units and components and enforcement of local ordinances governing zoning, utility connections, and foundations permits. The Building Code Council shall adopt and may amend from time to time such reasonable and appropriate rules and regulations as it deems necessary for approval of agencies offering such testing, evaluation, inspection, and certification services and for overseeing their operations. Such rules and regulations shall include provisions to insure that such agencies are independent and free of any potential conflicts of interest which might influence their judgment in exercising their functions under the Code. Such rules and regulations may include a schedule of reasonable fees to cover administrative expenses in approving and overseeing operations of such agencies and may require the posting of a bond or other security satisfactory to the Council guaranteeing faithful performance of duties under the Code.

The Building Code Council may also adopt rules to insure that any person that is not licensed, in accordance with G.S. 87-1, and that undertakes to erect a North Carolina labeled manufactured modular building, meets the manufacturer's installation instructions and applicable provisions of the State Building Code. Any such person, before securing a permit to erect a modular building, shall provide the code enforcement official proof that he has in force for each modular building to be erected a \$5,000 surety bond insuring compliance with the regulations of the State Building Code governing installation of modular buildings.

Further, where will this list be kept? How can the public and code officials see it? Is it the link provided in Third-Party Certification Agency?

A link is provided on the NCDOI webpage for acceptable 3rd party agencies.

In "Laundry Tray" when you publish, to be consistent, please use a period instead of a semicolon after the term and begin the sentence with a capital "A"

[RP] LAUNDRY TRAY. A fixed tub with running water and drainpipe for washing clothes and other household linens, also called set tub.

In "Natural Ventilation" when you publish, please be sure to insert a period at the end of the sentence.

The sentence will end in a period.

In the term "On-Site Renewable Energy" is the term hyphenated? It is on the first sentence but not on the fourth line. I note that the IRC hyphenates "on-site" for "On-Site Nonpotable Water Reuse System." Please be consistent.

Hyphen added for consistency.

On Page 65 of the packet, do you need to define "Piping" twice? If you need to retain it, make sure you insert a period at the end of the Tubing in "[RM] Piping"

The first definition has been deleted.

In "Plumbing Appliance," the first new sentence seems incomplete. Do you mean "These include water or drain-connected..."?

[RP] PLUMBING APPLIANCE. An energized household *appliance* with plumbing connections, such as a dishwasher, food waste disposer, clothes washer or water heater. These include water or drain-connected devices intended to perform a special function. 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.

In "Pollution" what do you wish to state - "but" or "[and]"? I note that IRC states "and"

POLLUTION. A low-hazard or non-health hazard <u>An</u> impairment of the quality of the potable water to a degree that does not create a hazard to the public health <u>and but</u> that does adversely and unreasonably affect the aesthetic qualities of such potable water for domestic use.

In "Potable Water" does your regulated public know what these standards are? Are you including them as the appendices as set forth in G.S. 143-138(b7)(3)?

Standard IPC terminology. The water supply is regulated by various other agencies. The code regulated the piping that carries the potable water.

(b7) Appendices. - For the information of users thereof, the Code shall include as appendices the following:

(3) Any rules relating to sanitation adopted by the Commission for Public Health which the Building Code Council believes pertinent.

In "Regulator" is "Multistage" going to be an adjustable regulator? Should there be a 3 in front of it?

No. It is a separate category from Adjustable and Nonadjustable. Bold added to Multistage.

In "Sewage" did you intend to delete the first sentence, given the language you've added? If not, then the first part of the second sentence is redundant and should be removed.

The first sentence has been deleted.

In "Skylight" consider stating "The glazing material in skylights..."

Standard IRC terminology.

In "Solar Energy Source" consider stating "A source of thermal..."

[RE] SOLAR ENERGY SOURCE. A source of thermal, chemical, or electrical energy derived from direct conversion of incident solar radiation at the building site.

In "Solar Heat Gain Coefficient" replace "which" with "that" on Page 72 of the packet.

[RE] SOLAR HEAT GAIN COEFFICIENT (SHGC). The solar heat gain through a fenestration

or glazing assembly relative to the incident solar radiation (Btu/h • ft • °F). 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 x SC.

In "Spillproof Vacuum Breaker" please confirm it should read "between and including ..."

Correct.

In "Story, Attic" replace "which" with "that"

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.

In "Supply Air" I suggest you delete "That" and begin the sentence "Air delivered..."

Standard IMC terminology.

In "Sweep" you refer to "bend" and "elbow" but you deleted these terms in this chapter. Please delete them here.

[RP] SWEEP. A <u>cast iron</u> 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").

In "Thermostat" "Electric switch type" should the "the" before "flow of gas" be "by"? If not, isn't a word missing? The sentence reads oddly.

Standard IFGC terminology.

In "Unit Heater" consider replacing "in which" with "where"

Standard IMC terminology.

In the definition of "Vent," I take it your regulated public is familiar with these types of vents?

Standard IFGC terminology.

In "Visible Transmittance" I believe there be a period instead of a comma after "light" and before "Visible Transmittance" And then please remove the comma after "Visible Transmittance" on the second line. Or, delete the term altogether on that line. "...visible light, includes ..."

[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.

In "Wall, Above-Grade" should "above grade" on the first line be hyphenated to be consistent?

Added hyphen for consistency.

In "Windborne Debris Region," please capitalize "Waterway" in "Intracoastal Waterway"

Capitalized Waterway.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 3

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>Table R301.2(1):</u> Why do you need Footnote b on Page 81? If you need it, don't you need to insert the date?

It is needed. The date varies by the date that the jurisdiction entered the plan.

Figure 301.2(7): On Page 92 of the packet, what are you doing? Renumbering this figure?

Yes. The figure is renumbered.

<u>R301.2.1.2:</u> In Exception 2, I recommend you insert a comma after "protected" on the third line.

Comma added.

<u>Table R301.2.1.2:</u> Given the changes you are making to remove the requirement of "anchors" do you need to amend Footnote d?

No. This footnote applies to attachment to masonry walls.

<u>R302.1.1:</u> On the sixth line, the sentence beginning "Vents shall be either..." seems incomplete. Is "nominal" the correct term to use? Please note the same question for R302.2.5.

It is correct in both sections.

<u>R302.2.6:</u> Delete the "and" at the end of 1.

Deleted "and" from #1.

<u>R302.2.7:</u> Should Appendix K be added to the preface?

Not necessary. The preface is not part of the code.

Table R302.6: Should the footnote "a" be somewhere in the Table, or at the top with the name?

Added footnote reference to the heading.

<u>R308.4.2</u>: In Exceptions, you renumbered number 4 in the IRC as number 5. Are you adding a new four, or is the renumbering a typographical error?

Autonumbering. Corrected to #4.

<u>R311.6.1:</u> Why use both "nominal" and "minimum" Why not just use one term?

R311.6.1 Interior egress doors.

All doors providing egress from habitable rooms shall have nominal dimensions of 2 feet 6 inches (782 mm) width by 6 feet 8 inches (2032 mm) height. Interior egress doors shall be readily openable from the side from which egress is to be made without the use of a key or special knowledge or effort.

<u>R315.2.1 and 315.2.2:</u> What about combustion heaters, in accordance with G.S. 143-138(b2)? I know the language is permissive, but wanted to make sure that it was not intended to be addressed here.

The term appliance covers combustion heaters.

R317.1.4: Delete the "and" at the end of Exceptions 2a through b

Deleted "and" from 2a and 2b.

<u>R318.2</u>: Does your regulated public know what these standards are? And are these the standards of the NC Structural Pest Control Act in G.S. 106, Article 4C? Should you state that here?

Coordinated language with the Building Code.

R318.2 Chemical termiticide soil treatment.

Chemical termiticide treatment shall include soil treatment or field-applied wood treatment. The concentration, rate of application and method of treatment of the chemical termiticide shall be in strict accordance with the termiticide *label* and applied according to the rules adopted by the North Carolina Structural Pest Control Committee (02 NCAC 34).

<u>318.4.1:</u> Should Appendix O be added to the preface?

Not necessary. The preface is not part of the code.

318.4.4: Replace "which" with "that"

R318.4.4 Slab on grade (structural).

<u>All slabs</u> that distribute the wall loads to the foundation shall be insulated as specified in this section. Foam plastic shall be installed along the vertical edge and underneath grade as specified in Appendix O, Figure O-3.

<u>321.1:</u> Does this need to be amended to state that these standards do not apply to the elevators exempted by G.S. 143-138(c1), or is that known to your regulated public?

No. This statute exemption is not necessary for dwellings.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 4

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>R403.1:</u> Should Appendix Q be added to the preface?

Not necessary. The preface is not part of the code.

<u>*R*403.1.6:</u> When you publish, be sure to insert a period after "corner." Please note the same for *R*403.1.6.1, 2 and 3.

Sentences will end in periods.

<u>Figure R403.1.9:</u> Consider deleting "but not limited to" If you need to keep something, why not state "Examples include adjacent building..."

Standard ICC terminology.

<u>R404.4:</u> The sentence that begins "In addition" is incomplete. If it meets the following, then what? Is it that they must be designed with a safety factor of 1.5? If so, then please insert a comma after "addition," replace "which" with "that" and begin the last sentence "shall be designed..."

Retaining walls that are not laterally supported at the top and that retain in excess of 48 inches (1219 mm) of unbalanced fill shall be designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. In addition, any retaining wall that meets the following shall be designed.

<u>*R406.1:*</u> On the second line, it appears you misspelled "dampproofed"

Well darn, changed to dampproofed.

<u>408.1.4, R409.2.4, R409.8.2:</u> Consider deleting "but not limited to" unless it will conflict with the IRC and NC Code.

Deleted "but not limited to" in these sections.

409.2.2.1: What is an "energy penalty"? Does your regulated public know?

Yes. There is no penalty in either prescriptive or calculated thermal performance because of the required termite inspection gap.

R409.7: Replace "which" with "that"

R409.7 Combustion air.

The air sealing requirements of a closed crawl space may result in a foundation that cannot provide adequate combustion air for fuel-burning appliances; therefore, fuel-burning appliances located in the crawl space such as furnaces and water heaters shall obtain combustion air from outdoors as per the North Carolina Mechanical Code.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 5

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

Figure R502.2: What are you doing here? Who is the note for?

Staff note deleted.

<u>Figure R502.8:</u> I just want to be clear – you will be renaming Figure 502.8 in the IRC Figure 502.8.1?

Correct.

<u>R502.11.1:</u> I know this is IRC language, but should this read "registered design professional"?

R502.11.1 Design.

Wood trusses shall be designed in accordance with approved engineering practice. The design and manufacture of metal-plate-connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared by a registered design professional.

<u>R506:</u> Should Appendix M be added to the preface?

Not necessary. The preface is not part of the code.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 6

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>Table 602.3(1):</u> In Footnote c, Page 254 of the packet, what are these codes? Specifically, the "Standard" or "Uniform" building codes? Does your regulated public know?

These legacy codes now exist only as the IRC.

c. This fastener, in the quantity or spacing shown in the rightmost column, comprises the most stringent fastening of the connection listed in the International Residential Code.

And will an "R" be added to the front of the name?

Yes. The prefix R will be added to the table.

<u>Table 602.3(1), Continued:</u> In Footnote a, Page 255 of the packet, you are not going to have a footnote a? Is that what you mean by "deleted"?

Yes. The placeholder will remain to avoid cross-reference issues.

Between Footnotes f and g, what about regions with an ultimate wind speed between 121 and 129 mph? As a practical matter, does this not need to be addressed?

The NC Residential Code is prescriptive, so each County is assigned a single wind speed (120, 130, 140, 150). There are no prescriptive wind speeds within the range.

And will an "R" be added to the front of the name?

Yes. The prefix R will be added to the table.

Figure R602.3(2): So that I'm clear, this is being adopted verbatim from the IRC?

Yes, with the addition of footnote i.

<u>R602.10:</u> What do you mean by number 4? What part of the IRC, since you are not adopting any of Section 602.10 from the 2015 IRC?

The 2015 IRC R602.10 (specifically) is an acceptable alternate.

Also, remove the "or" at the end of 3, and insert an "or" and comma at the end of 4. (Also, consider replacing the commas at the ends of 1-4 with semicolons)

R602.10 Wall bracing.

Buildings, and portions thereof, shall be braced in accordance with one or more of the following sections using bracing materials and methods complying with Section R602.10.1 and load path detailing in accordance with Section R602.10.4:

- 1. Isolated panel bracing in accordance with Section R602.10.2;
- 2. Continuous sheathing in accordance with Section R602.10.3;
- 3. Engineered design in accordance with Section R602.10.5;
- 4. 2015 International Residential Code (IRC), Section R602.10; or
- 5. <u>SR-102 as published by APA, The Engineered Wood Association with limitations</u> indicated in this document.

<u>*R602.10.2.2*</u>: In 5, what part of the 2015 IRC are you referring to?

5. Detached garages or storage buildings connected to the house with a covered walk-way shall be considered separate buildings. Houses with skewed wings shall be designed in accordance with Section R602.10.3, Section R602.10.5, or the 2015 International Residential Code (Section R602.10).

<u>*R602.10.3.1*</u>: In 2, isn't "Eave to ridge" hyphenated?

Hyphens added.

<u>*R602.10.3.2:*</u> In 5, remove the hyphens from "deemed to comply"

Hyphens deleted.

<u>Figure R602.10.3(2)</u>: So that I'm clear – are the figure notes on Page 310 applicable to Figures R602.10.3(2)a through c?

Correct.

In Footnote 5, is the Figure going to have "a" in parenthesis? It isn't in parenthesis in this packet. I note that Footnote 6 uses parentheses for (b) but not (c). Please just be consistent. If you do use parentheses, please also do this in the Code itself.

Parentheses removed.

<u>*R602.10.4.1:*</u> Consider stating on the third line "... accordance with Sections R4504.1 and R4508."

R602.10.4.1 Wind uplift load path.

Framing connections to transfer roof uplift forces shall comply with Section R602.3.5 and Section R802.11. In the 130 mph (58 m/s) wind zone provide uplift anchorage in accordance with Sections R4508 and R4504.1.

<u>*R602.12.5:*</u> On Page 323 of the packet, did you intend to also delete 3?

Yes. Deleted.

<u>R606.7.1:</u> Should "two story" and "two and one-half story" be "stories"?

R606.7.1 Pier cap.

Hollow piers shall be capped with 4 inches (102 mm) of *solid masonry* or concrete, a masonry cap block, or shall have cavities of the top course filled with concrete or grout. for one story and 8 inches (203 mm) of solid masonry or concrete for two stories and two and one-half stories or shall have cavities of the top course filled with concrete or grout or other approved methods.

Table R606.12.2.1: In the Footnotes, can you delete "NP" since you removed it from the table?

Deleted NP note.

<u>Tables in R608:</u> Given the deletions and renumbering of the tables, please ensure cross-references in the footnotes are still correct.

Cross-referenced.

<u>*R608.10:*</u> Did you intend to delete "framing" after "wood"? That doesn't appear to be consistent with prior deletions, so I wanted to check.

"Framing" will not be deleted.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 7

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>Table R702.3.5</u>: Just so I'm clear, the "c" footnote will be removed from the Column "Size of Nails for Application to Wood Framing"?

Correct. Deleted from the heading.

<u>Table R702.3.6:</u> Will "b" be removed from the column "Shear Value (plf of ceiling)"?

Correct. Deleted from the heading.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 8

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

Figure R802.3.1: Who is this note for on Page 439 of the packet? The publisher?

Yes. Staff note to publisher.

<u>R802.10.2</u>: I know this is IRC language, but should it read "registered design professional"? If not, what professional?

R802.10.2

Design.

Wood trusses shall be designed in accordance with accepted engineering practice. The design and manufacture of metal-plate-connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared by a *registered design professional*.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 9

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>R904.4:</u> Given the amendment here, when will this be required? Does your regulated public know?

Yes. The product test standards require this, as well as the code for applications such as high wind zones.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 10

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

Figure R1001.1: Who is this note for on Page 475 of the packet? The publisher?

Yes. Staff note to publisher.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 11

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

N1101.13: In 4, what is "REScheck"?

This is a standard energy compliance software package used by the US DOE.

N1101.14: I suggest inserting "and the" before "U-factors"

Added as suggested.

Should Appendix E be added to the preface?

Not necessary. The preface is not part of the code.

Table N1102.1.2: In Footnote a, replace "which" with "that"

Standard ICC terminology.

In Footnote c, delete the errant quotation mark at the end of the line.

Errant quotation mark deleted.

In Footnote d, for consistency with line 3, I suggest inserting a comma after "grade" on the second line.

Comma added.

You deleted Footnote e on Page 506 of the packet, but "e" is still used in the Column "Glazed Fenestration SHGC. Should it be deleted there?

Correct. Deleted from the heading.

Table N1101.1.4: In Footnote d, what is a "REScheck"?

This is a standard energy compliance software package used by the US DOE.

<u>N1102.2.4</u>: Should there be a word after "R-5" like "value" or "insulation value"?

No. Standard IECC terminology.

<u>N1102.2.5</u>: I suggest putting the new language in a list. Also, consider stating "meeting the following:" If you do not want to do a list, please be consistent and either separate all types of walls by periods or semicolons.

Punctuated to match the NC Residential Energy Code section.

<u>N1102.2.8:</u> In the Exception, should this read "An enclosed floor cavity... with an enclosed..."?

Changed to match the NC Residential Energy Code section.

<u>N1102.2.9</u>: Should Appendix O be added to the preface?

Not necessary. The preface is not part of the code.

<u>N1102.2.11:</u> What is an "energy penalty"? Does your regulated public know?

Yes. There is no penalty in either prescriptive or calculated thermal performance because of the required termite inspection gap.

In 2, what is the "North Carolina-specific version of RESCHECK"? Why is it the term in all caps here?

US DOE produces state-specific versions of the program where the state Code differs from the IECC and still complies with the federal energy mandates.

<u>N1102.4.2.1</u>: I thought the certificate in Appendix E-1 was a sample certificate? So, is the certificate required by the Appendix or by N1101.14?

Appendix E is adopted as part of the code. E-1 is required. E-3 is a sample.

<u>N1102.4.2.2:</u> I take it that numbers 1 and 2 on Page 515 of the packet are the "Test Criteria" referenced on page 516? If so, why not name them that on Page 515?

Correct. Added "Test Criteria" heading above numbers 1 and 2.

Table N1102.4.2: In "Ceiling/Attic" delete the comma before "(for example,..)"

Comma deleted.

<u>N1102.4.5 and N1102.4.6</u>: So that I'm clear, you are deleting what was originally N1102.4.4 and making what was N1102.4.5 into N1102.4.6?

Correct.

N1103.3.1: Should there be a word after "R-8" and "R-4" like "value" or "insulation value"?

No. Standard IECC terminology.

<u>N1103.3.2:</u> When you publish, please be sure to change it to "Exception:"

Maintain plural since item "2. <u>Deleted</u>." is published.

<u>N1103.3.3</u>: On Page 521 of the packet, third paragraph, where does the end quotation go after "Total duct leakage test"? You are missing one.

"Total duct leakage"

<u>N1103.3.3.1:</u> This sentence appears to be incomplete. Are you missing a verb? I note that N1103.3.3.2 is written in an active voice and is clear; perhaps that would be a good model for this rule?

N1103.3.3.1 Total duct leakage.

Total duct leakage shall be less than or equal to 5 CFM (12 L/min) per 100 ft² (9.29 m²) of conditioned floor area served by that system when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure.

<u>N1103.10.2</u>: Is the term "constantly burning"?

Correct.

<u>N1106:</u> Will the language on Pages 530-531 be superseded by the language in the separately filed petition?

Correct. The individual amendment will be correlated with the package.

<u>N1106.5:</u> When you published the rulemaking petition in the NC Register, you allowed a "RESNET certified home energy rater" to do this as well. Did you decide after publication to not proceed with that part of the petition?

"HERS rater" is the same as "RESNET certified home energy rater." It was changed for consistency.

<u>N1107.1</u>: So that I'm clear – only 1107.1 has a subsection in this part of the code. I take it that this is necessary? I ask because this is the first time I've noticed the language.

Correct, but the added sentence is not necessary and has been deleted.

<u>N1109.1.1:</u> In Exception 2, is the space required that required by this code? Is it clear to your regulated public?

Yes.

N1109.2: What does this mean? Does your regulated public know?

This is similar to the USDOJ disproportionality rule (for accessibility upgrades). It allows small projects to proceed without energy compliance upgrades. Projects larger than the \$10000 threshold require progressive energy compliance equal to 10% of the project cost.

And how does this interact with G.S. 143-138(b5)?

The Statute exclusion applies to single-family residential construction. This Section applies to building code residential.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, N1106.1, N1106.2, and N1106.5

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

Please verify that these changes are what is intended for the Code, rather than the version of these rules beginning on Page 530 of the packet.

<u>N1106.2:</u> In the Exception, should "R-4" have a word or words after it?

No. Standard IECC terminology.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 13

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>M1307.1:</u> What are terms of approval? Does your regulated public know? Also, please insert an "and" before "in accordance"

Yes. Standard IMC terminology.

<u>M1307.3.1:</u> Is this R304.4?

No. The cross-reference to the Mechanical Code would be 303.4, if identified by committee.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 14

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>M1401.3:</u> In the additional language, I think you can more clearly state what is not required (right now, you "nor" and "shall not"). Consider removing the "nor" before "ACCA manual S"

For permitting, inspections, certificate of compliance or certificate of occupancy, verification of Calculations for HVAC Systems - ACCA Manual D, ACCA Manual J, ACCA Manual S calculation submittals and review shall not be required.

M1411.3: Should the first added sentence read "... high-level switch that shall shut off..."?

Replaced "and" with "that" as suggested.

<u>M1411.3.1:</u> In 1a, what is the term here? "under air handler"? Is any of that hyphenated? And should it be "<u>the</u> auxiliary pan..."?

Added "the" as suggested.

<u>M1416</u>: In the note at the beginning of the chapter, you state that the section numbers appearing in parentheses after the section number are from the Mechanical Code. But that is not correct here, as you are repeating another section of the Residential Code. So, do you need to repeat it here to help your regulated public use the Code? If so, please consider amending your note on page 553 of the packet.

Modified informational note to also indicate Residential Code R-section references.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 15

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>M1502.4.3</u>: I recommend stating "within the room where the appliance..."

M1502.4.3 (504.8.3) Transition duct.

Transition ducts used to connect the dryer to the exhaust *duct system* shall be a single length that is *listed* and *labeled* in accordance with UL 2158A. Transition ducts shall be not greater than 8 feet (2438 mm) in length. Transition ducts shall not be concealed within construction and must remain entirely within the room where the appliance is located.

M1502.4.6: Is this part of 504.8.5 of the Mechanical Code?

Yes. The cross-reference to the Mechanical Code would be 504.8.5, if identified by committee.

Also, I believe the first bullet should begin with "Labels" (plural) to be consistent with the language below.

Plural added.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 16

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>M1601.4.1</u>: Are the new Exceptions on Page 571 of the packet exceptions to the exception 2 above? Or are they in addition?

Exceptions:

- 1. Spray polyurethane foam shall be permitted to be applied without additional joint seals.
- 2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.
- 3. For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams and locking-type joints and seams of other than the snap-lock and button-lock types. Deleted.
- <u>4. Continuously welded joints and seams in ducts.</u>
- 5. Ducts exposed within the conditioned space that the ducts serve shall not be required to be sealed.

<u>M1601.4.6:</u> Should the new language end with "cooling <u>equipment.</u>"? And so that I'm clear – the addition of heating equipment in an unconditioned basement will not require insulation?

Correct.

Replacement or addition of cooling equipment to existing ductwork located in an attic shall require the ductwork to be insulated. Replacement of heating or the addition of cooling equipment in a crawl space or conditioned basements shall not require the existing ductwork to be insulated. Unconditioned basement ductwork shall require insulation with the addition of cooling equipment.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 18

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>Table M1803.2:</u> I know this is IRC language but in order to be consistent, consider stating "6 to 10" and "Over 10 to 16."

Standard IRC language.

<u>Table M1803.3.5:</u> In System C, when you publish, please be sure there is no hyphen in "thickness"

Hyphen deleted.

<u>M1804.2.6:</u> Since you are deleting 1 through 7, to what "following requirements" are you referring? If it's M1804.2.6.1 through 6.3, please state that here.

M1804.2.6 Mechanical draft systems.

Mechanical draft systems shall comply with UL 378 and shall be installed in accordance with their *listing*, the manufacturer's instructions and, except for direct-vent *appliances*, the following requirements: Sections M1804.2.6.1 through M1804.2.6.3.

<u>M1804.2.6.1 and M1804.2.6.2</u>: The language in these rules mirror each other substantially, but in some you use "at least" and in the corresponding part of the other rule "less than." Is there a reason for this?

Changed "at least" to "not less than" in 3 locations.

M1804.2.6.3: Considering inserting an "a" or "both a"

No change.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant
AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 21

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

M2102.1: Please insert a space between "solvent" and "cemented"

Editorial. Space added.

<u>M2102.6:</u> Should line 3 read "press joints" since that is the term used in Section M2102.6.3?

Standard IMC language.

<u>M2102.8:</u> Is "heat fusion" one word (see this rule) or is it hyphenated? (See M2102.8.1 and M2102.12.1.) Please be consistent.

Hyphen added.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 22

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>M2201.5:</u> I know this is IRC language, but who will predetermine this safe level? The code official? The registered design professional? Does your regulated public know?

The registered design professional in conjunction with the manufacturer.

M2202.4: State "only outside and underground."

Standard IMC language.

<u>M2203.2:</u> I am just checking – did you intend to refer to "od tubing" on the third line of the new text?

Spelled out "outside diameter."

<u>M2203.2.1:</u> In the Exception, please insert a space between "above" and "ground"

Hyphen added for consistency.

M2203.2.3, M2204.3, and M2204.5: Is the term "fuel-oil-burning" hyphenated? It's not "fuel oil"?

Hyphenated as shown.

<u>M2203.5:</u> Who will determine the sufficiency of the termination of the pipe above ground? The registered design professional, based upon guidance in this code?

The registered design professional and manufacturer in conjunction with the code official based on local snow and ice accumulation.

<u>M2205.3</u>: Who determines this safe level? Is it the manufacturer of the tank?

The registered design professional in conjunction with the manufacturer.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 24

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>G2401.2:</u> So that I'm clear, how will the code official determine if this is in the public interest of health, safety and welfare? Or is this intended to convey that it will meet the intent of the code?

Standard IFGC language. It is intended to convey that it will meet the intent of the code.

<u>G2408.3</u>: In the Exception, please verify you meant G2406.4 and not G2406.6.

Exception: The requirements of this section shall not apply where the *appliances* are protected from motor vehicle impact and installed in accordance with Section G2408.2 <u>and G2406.6</u>.

<u>G2419.2:</u> How will the gas company make the determination and convey it that the location is acceptable? Is this on a case-by-case basis?

The LP gas company installations the tanks as required by the NCDOAg.

<u>G2413:</u> What is a "qualified agency"? Does your regulated public know?

Yes. It would usually be an approved 3rd party agency, but could also be a registered design professional.

<u>G2417.1:</u> Please publish the citation as "N.C.G.S."

G2417.1 (406.1) General.

Prior to acceptance and initial operation, all *piping* installations shall be visually inspected and pressure tested to determine that the materials, design, fabrication and installation practices comply with the requirements of this code.

(See N.C.G.S. 143-139.3 for alternate inspection of liquefied propane gas piping systems for residential structures.)

<u>G2417.4.1:</u> In the Exception, either make "system" plural or change "are" to "is"

Added plural.

<u>G2417.7.1.1.1</u>: What is "constantly attended"? Does your regulated public know?

Yes. Someone is present during the purging process.

In the Exception, replace the semicolon after "outdoors" with a comma.

Change "effected" to "affected"

End the sentence after "lines." Then state "Quantities of ... "

Exception: If the line pressure cannot be vented to the <u>outdoors</u>, the building and all <u>affected</u> spaces shall be evacuated of personnel not involved with purging the gas lines. Quantities of flammable gas shall not exceed 25 percent of the lower explosive limit (1.0-percent fuel/air mixture for natural gas or 0.6-percent fuel/air mixture for LP-gas) as measured by a combustible gas detector, all ignition sources shall be eliminated, and adequate ventilation to prevent accumulation of flammable gases shall be provided.

<u>G2417.7.4</u>: What is this training? Does your regulated public know?

Yes. Purging operations are done by industry personnel.

<u>G2421.6:</u> I do not see that there is a Section 416 in the NC Mechanical Code.

The reference note at the beginning of Chapter 24 is to the NC fuel Gas Code.

<u>G2421.6.3.4</u>: In 1, who are "authorized personnel"? Will that vary on a case-by-case basis? And who is required to instruct them regarding the importance of leaving the shutoff valve open?

Maintenance is done by industry personnel.

G2425.4: Should Appendix B be added to the preface?

Not necessary. The preface is not part of the code.

<u>G2427:</u> Are you adding to the code the figures on Page 637 of the packet? I don't see them in the IRC.

Yes.

<u>G2439.7.5</u>: In the first bullet, should this be "Labels" to be consistent with the next bullet?

Plural added.

And are there any requirements for tags at all?

The section requires either a label on the duct or a tag attached to the duct.

<u>G2439.7.7:</u> In the Exception, insert a comma after "grade" before "an areaway"

Comma added.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 25

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>P2501.1:</u> Is "fuel-gas-fired" hyphenated like that?

Yes.

<u>P2501.3 – P2501.5</u>: I am simply curious here, but I haven't seen language like this for the other chapters incorporating other codes. Is there a reason you inserted it here?

This is the first Plumbing Chapter in the Residential Code. The plumbing committee felt that these administrative items need to be reinforced here.

P2502.3: Are you relying upon G.S. 143-139 to state that this is unlawful?

Also 143-138(b) specifically cites Use and Occupancy for contents of the code.

P2502.6: Chapter 44 of what? Is this addressed by P2502.9?

Standard references are to "this code" unless another code is listed.

<u>P2503.3:</u> What is "reasonable" in this context of advance notice?

Standard IPC language. It is usually the minimum time that the jurisdiction requires to schedule the inspection.

On the second line, you refer to the test in P2503.4, but you are deleting that. Should it read "P2503.5"?

Revised to P2503.5.

<u>P2504:</u> Again, I'd like to just understand why this is being added here, when it is not for the other chapters. If you need to retain it, don't you want to put in parentheses that you are reciting Section 105 of the Plumbing Code?

This is the first Plumbing Chapter in the Residential Code. The plumbing committee felt that these administrative items need to be reinforced here. The cross-reference to the Plumbing Code would be 105, if identified by committee.

<u>P2504.1:</u> So that I'm clear, you are delegating a waiver of the entire Residential Code to a code official, or just the plumbing portion? And the code official will know the intent and be able to make this determination? And will this be done in advance? Does it need to be requested of the code official, or is it done after?

Standard ICC language. This approval is for a specific item. It can be done in advance, or as soon as the conflict is identified. The appropriate code official does this for all codes.

On the fourth line, replace "letter" with "application"

Standard ICC language.

<u>P2505.1 – P2505.4</u>: Don't you want to indicate this is a recitation of Section 110 of the Plumbing Code?

The cross-reference to the Plumbing Code would be 110, if identified by committee.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 26

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

P2603.5: Do you want to note that this is Section 305.4 of the Plumbing Code?

The cross-reference to the Plumbing Code would be 305.4, if identified by committee.

<u>P2607.1 and P2607.2</u>: Please confirm that you are cross-referencing the correct portion of the Plumbing Code.

Correct.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 27

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>P2702.1:</u> Please confirm that you are cross-referencing the correct portion of the Plumbing Code.

Correct.

<u>P2706.1:</u> Is this not 802.3 of the Plumbing Code? If it is, should the exception be reworded to match that in the Plumbing Code?

The cross-reference to the Plumbing Code would be 802.3, if identified by committee. The exception in this code is more inclusive.

P2708.2: What is "least dimension"?

Openings are not always round. This would be the smallest dimension if it is oval or rectangular.

P2723.1: Isn't this 712.4.1 of the Plumbing Code?

The cross-reference to the Plumbing Code would be 712.4.1, if identified by committee.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 28

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

P2801.6: Isn't this Section 504.7 of the Plumbing Code?

The cross-reference to the Plumbing Code would be 504.7, if identified by committee.

Are you trying to say that (a) through (d) are locations where water leakage will cause damage? If so, state that. If you mean it as an additional location, insert an "or" before "a location"

Where a storage tank-type water heater or a hot water storage tank is installed in: (a) remote locations such as a suspended ceiling, (b) attics, (c) above occupied spaces, (d) unventilated crawl spaces, or (e) a location where water leakage from the tank will cause damage to primary structural members, the tank or water heater shall be installed in a galvanized steel or aluminum pan having a material thickness of not less than 0.0236 inch (0.6010 mm) (No. 24 gage for steel or No. 26 gage for aluminum), or other pans approved for such use.

<u>P2801.7:</u> You deleted Section 502.5 of the Plumbing Code. Please check the cross-reference.

Deleted cross-reference.

<u>P2801.12.4</u>: Who determines the impossibility? The individual installing or the code official?

Approval is by the code official. It is impossible if it can't drain by gravity, automatic lift or sump.

<u>P2804.8:</u> Why do you need this? Do you need to recite it for the ease of your regulated public?

Yes. There have been problems with water heaters without proper safety devices/settings.

Assuming you need to keep it, should this be named "North Carolina General Statutes"

Where you state "G.S." please either state "N.C.G.S." or "North Carolina General Statute"

The name of G.S. 66-27.1 is "Certain automatic hot water tanks or heaters to have approved relief valves; installation or sale of unapproved relief valves forbidden."

P2804.8 (501.9) Safety Features of Hot Water Heaters.

The following is a reprint of N.C.G.S. 66-27.1, "Certain automatic hot water tanks or heaters to have approved relief valves; installation or sale of unapproved relief valves forbidden."

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 29

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>P2910.2.3.1 and P2910.2.3.2</u>: Please end each of the items in the list with punctuation. While I'd prefer semicolons, if you want to be consistent with the rest of the code and use periods, that is fine, too.

Periods added.

And in P2910.2.3.1, item 4, there is a period in "e.g."

Period added.

<u>P2911.10:</u> In the Exception, isn't "sillcocks" one word? You use it as one word earlier in this Chapter.

Corrected to one word.

<u>P2912.3:</u> What is "undesirable" material? Does your regulated public know?

P2912.3 (1303.3) Debris excluders.

Downspouts and leaders shall be connected to a roof washer and shall be equipped with a debris excluder or equivalent device to prevent the contamination of collected rainwater with leaves, sticks, pine needles and similar <u>undesirable</u> material. Debris excluders and equivalent devices shall be self-cleaning.

<u>P2912.13:</u> In the Exception, isn't "sillcocks" one word? You use it as one word earlier in this Chapter.

Corrected to one word.

<u>P2912.15.6</u>: You deleted Section P2910.11. Should there be a different cross-reference here?

Delete to coordinate with P2503.8.

P2912.15.6 Inspection and testing of backflow prevention assemblies. Deleted.

The testing of backflow preventers and backwater valves shall be conducted in accordance with Section P2503.8.

<u>P2913.2:</u> In the Exception, isn't "sillcocks" one word? You use it as one word earlier in this Chapter.

Corrected to one word.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 30

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>P3001.2:</u> In the Note, what are "abnormally low temperatures" and "extended periods"? Does your regulated public know?

This note is provided as guidance that the Code minimum will not prevent freezing in extended extreme conditions.

<u>P3010.8:</u> You deleted P2503.4. Please insert a correct cross-reference.

Delete to coordinate with P2503.8. P3010.8 Pressure testing. Deleted.

The replacement piping system and the connections to the replacement piping shall be tested in accordance with Section P2503.4.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 31

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>P3102.1:</u> Consider replacing "in which" with "where" before "is installed"

Retain language for consistency with plumbing code.

And I take it your regulated public will be able to determine "directly as possible" on a case-bycase basis?

Correct.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 32

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>P3201.2:</u> It appears that the cross-references you are inserting for the Plumbing Code are a bit off. For example, the cross reference to P3201.2.1 is 1002.4.1. Please verify these.

Cross-references have been coordinated with Plumbing Code.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 45

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

Table R4502(b): In Footnote (e)(3)(i), please insert the semicolon before the "or"

Semicolon inserted.

<u>R4504.2.2:</u> You refer to Figure R4504.2(d). However, I do not see this Figure in pages 951-955 of the Packet – I see (a) through (c) and (e) and (f). It appears to be missing.

Figures (d) and (e) are both on page 954.

<u>Table R4508.2:</u> In Footnote a, isn't this addressed by R4501.2? If not, should it read "Alternate <u>construction</u>" or "Alternate <u>design</u>"?

This table is prescriptive design, so the alternate would be design also.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Chapter 46

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

Chapter 46 is an existing NC Chapter that has been used successfully for 20+ years in conjunction with local floodplain management regulations (GS 143-138(e)). The BCC is authorized to set minimum standards, but the local jurisdiction can establish higher standards for the purpose of flood insurance rating.

<u>R4602:</u> In "Base Flood Elevation" please replace "which" with "that"

Changed to "that" as requested.

And how is this peak water elevation established by the Council? In the Code?

This is established by local mapping through the flood insurance program. The BCC set the 1% return flood as the minimum standard.

For "Coastal High Hazard Area" how is this approval sought and upon what basis is it given?

This is established by local mapping through the flood insurance program. The BCC has set additional construction requirements in FEMA A-Zones and V-Zones.

In "Flood Plain" what do you mean by "of record"? Do you mean that there is a record that in the past the land was flooded? I think you can say this more clearly.

This is established by local mapping through the flood insurance program. Actual or statistical record.

And upon what grounds is this approval given? How is it sought?

The BCC has set additional construction requirements in FEMA Flood Plains.

In "Lowest Floor" please move the colon after "floor" to behind "provided" and consider ending 1 with a semicolon, not a comma.

Colon moved and semicolon added.

In "Ocean Hazard Area" upon what grounds is this approval given? How is it sought?

This is established by local mapping through the flood insurance program. The BCC has set additional construction requirements in FEMA A-Zones and V-Zones.

Please replace "which" with "that'

Changed to "that" as requested.

R4603.4: Consider replacing "least" with "less" in "whichever is least."

Retain "least."

On that same line, replace "which" with "that" after "Structures within Ocean Hazard Areas"

Changed to "that" as requested.

<u>R4604.2:</u> In the Exception, replace "which" with "that'

Changed to "that" as requested.

<u>R4605.5</u>: It appears you need to add ASTM A 123 to Chapter 44.

Added ASTM A123 Title and Reference to Chapter 44.

R4605.6: In 2, please replace "which" with "that"

Changed to "that" as requested.

<u>R4605.8:</u> Will "accessory structures" be italicized when this is published, as it is in R101.2.2?

Italics added.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Appendices

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

So that I'm clear, you are adopting the following Appendices from the IRC:

A, B, C, E, G, K, M (rewritten for NC), N, O (rewritten for NC), and P.

Correct.

You are adopting Appendices Q, V, and W altogether.

Correct.

And you are deleting the following Appendices from the IRC:

D, F, H, I, J, L, R, S, T, and U.

Correct.

Is this correct?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Appendix E

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

Table N1102.4.2: In "Ceiling/Attic" delete the comma before "(for example,...)"

Comma deleted.

<u>N1102.4.2</u>: Please end the sentence with a period, not a colon.

Sentences end with periods.

<u>N1102.4.2.2</u>: (Both places used in this Appendix) This language is not the same as N1102.4.2.2 on Page 515 of the packet. On Page 515, the "when tested with a blower door fan..." is confined to 2. Shouldn't the language be the same both places? I also note that Pages 1028 and 1036 only refers to ASTM E779-03, and Page 516 refers to ASTM E779 or E 1827.

Line break added on page 515 to apply to both.

I take it that the difference in numbers between Page 1036 and other places in the Code is because this addresses higher efficiency?

Correct.

<u>N1103.3.3.1:</u> (Both places used in this Appendix) This sentence appears to be incomplete. Are you missing a verb? I note that N1103.3.3.2 is written in an active voice and is clear; perhaps that would be a good model for this rule?

Added "shall be" in both sections.

N1103.3.3.1 Total Duct leakage. Total duct leakage shall be less than or equal to 5 CFM (12 L/min) per 100 ft² (9.29 m²) of conditioned floor area served by that system when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure.

Table E-4A: In Footnote a, replace "which" with "that"

Changed to "that" as requested.

In Footnote c, delete the errant quotation mark at the end of the line.

Quotation mark deleted.

In Footnote d, for consistency with line 3, I suggest inserting a comma after "grade" on the second line.

Comma added.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Appendix M

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

AM 101.1: Please replace "which" with "that"

Changed to "that" as requested.

<u>AM 103.1:</u> The first sentence is missing a word. Consider stating "... the structure to which <u>it</u> is attached..."

Added "it is" as requested.

<u>Figure AM112.1:</u> I am simply curious here – why are the footnotes asterisks, rather than letters as they are elsewhere in the Code?

It was probably provided by an outside source.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Appendix Q

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

Should this Appendix have a name?

It has never had one and the detail titles are explanatory.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Appendix V

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

What is the authority for the Code to govern design and construction of pools? Are you relying upon the following portion of G.S. 143-138(b)?

Also, buildings and structures. The pool itself is a retaining structure. The fence around the pool creates egress safety concerns and ingress hazards for children. The pump suction outlets create entrapment hazards. The electrical connections create shock hazards, particularly if not bonded properly.

(b) Contents of the Code. - The North Carolina State Building Code, as adopted by the Building Code Council, may include reasonable and suitable classifications of buildings and structures, both as to use and occupancy; general building restrictions as to location, height, and floor areas; rules for the lighting and ventilation of buildings and structures; requirements concerning means of egress from buildings and structures; requirements concerning means of ingress in buildings and structures; rules governing construction and precautions to be taken during construction; rules as to permissible materials, loads, and stresses; rules governing chimneys, heating appliances, elevators, and other facilities connected with the buildings and structures; rules governing plumbing, heating, air conditioning for the purpose of comfort cooling by the lowering of temperature, and electrical systems; and such other reasonable rules pertaining to the construction of buildings and structures and the installation of particular facilities therein as may be found reasonably necessary for the protection of the occupants of the building or structure, its neighbors, and members of the public at large.

AV101.2: In the Exception, replace "which" with "that"

Changed to "that" as requested.

AV102: In "Barrier" please replace "which" with "that"

Changed to "that" as requested.

In "Residential" in "That which is" what is "that"? Does your regulated public know?

Yes. Standard ICC terminology.

In "Swimming Pool, Indoor" and "Swimming Pool, Outdoor" please replace "which" with "that"

Changed to "that" as requested.

AV103.2: Please hyphenate "Above-ground"

Hyphen added.

AV105.2: Please replace "which" with "that" here, in 1, 3, 6, 9.2 and 10.2.

Changed to "that" as requested.

In 4, 5, 6, and 7, is this 1 and ¾ inches? As written right now, it looks like 13/4.

1¾ inches

In 9, please delete the "or" at the end of 9.1.

AV105.5: Replace "which" with "that"

Changed to "that" as requested.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant

AGENCY: NC Building Code Council

RULE CITATION: NC Residential Code, Appendix W

DEADLINE FOR RECEIPT: Wednesday, September 6, 2017

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 call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

<u>Table W-2:</u> In the column "Span (ft)" you have a Footnote 6, but there is not a corresponding footnote under the Table. Should this be deleted? Or should the "Span, L" language be denoted as Footnote 6?

Denoted as footnote 6.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina

Barry Gupton, PE Chief Code Consultant