2012 NC Building Code
1008.1.10 Panic and fire exit hardware. (150310 Item B-18)

1008.1.10 Panic and fire exit hardware. Doors serving a Group H occupancy and doors serving rooms or spaces with an *occupant load* of 50 or more in a Group A or E occupancy shall not be provided with a latch or lock unless it is panic hardware or *fire exit hardware*.

Exception: A main *exit* of a Group A occupancy in compliance with Section 1008.1.9.3, Item 2.

Electrical rooms with equipment rated ~~1,200~~ 800 amperes or more and over 6 feet (1829 mm) wide that contain overcurrent devices, switching devices or control devices with *exit* or *exit access* doors shall be equipped with panic hardware or *fire exit hardware*. The doors shall swing in the direction of egress travel.

The delayed effective date of this Rule is April 1, 2016.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

[Note: This Rule will also be printed in the 2012 NC Fire Code, Section 1008.1.10, Panic and fire exit hardware.]

2012 NC Building Code
1018.1 Construction, corridors; 712.4 Continuity. (150310 Item B-3)

1018.1 Construction. *Corridors* shall be fire-resistance rated in accordance with Table 1018.1. The *corridor* walls required to be fire-resistance rated shall comply with Section 709 for *fire partitions*.
~~**Exceptions:**~~
~~1. A *fire-resistance rating* is not required for *corridors* in a Group E occupancy where each room that is used for instruction has at least one door opening directly to the exterior and rooms for assembly purposes have at least one-half of the required *means of egress* doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.~~
~~2. A *fire-resistance rating* is not required for *corridors* contained within a Group R dwelling or sleeping unit.~~
~~3. A *fire-resistance rating* is not required for *corridors* in *open parking garages*.~~
~~4. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group B which is a space requiring only a single *means of egress* complying with Section 1015.1.~~

TABLE 1018.1 CORRIDOR FIRE-RESISTANCE RATING *(footnotes a through e remain unchanged)*

f. Exit access corridors are not required to be rated on any single tenant floor or in any single tenant space if ~~1-hour fire-resistance-rated tenant demising walls are provided between all tenants spaces and~~ 1-hour fire-resistance-rated floor/ceiling assemblies are provided in multistory buildings and fire partitions are provided between other tenant spaces on the same floor. The structure supporting such floor/ceiling assemblies and fire partitions is not required to be rated in Types IIB, IIIB and VB construction.
g. A fire-resistance rating is not required for corridors in a Group E occupancy if each room that is used for instruction has at least one door opening directly to the exterior and rooms for assembly purposes have at least one-half of the required means of egress doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
h. A fire-resistance rating is not required for corridors contained within a Group R dwelling or sleeping unit.
i. A fire-resistance rating is not required for corridors in open parking garages.
j. A fire-resistance rating is not required for corridors in an occupancy in Group B which is a space requiring only a single means of egress complying with Section 1015.1.

(Insert footnote references as required in the table. Footnote f for Group B, g for Group E, h for Group R, i for Group S, j for Group B)

712.4 Continuity. Assemblies shall be continuous without openings, penetrations or joints except as permitted by this section and Sections 708.2, 713.4, 714 and 1022.1. Skylights and other penetrations through a fire-resistant-rated roof deck or slab are permitted to be unprotected, provided that the structural integrity of the fire-resistant-rated roof assembly is maintained. Unprotected skylights shall not be permitted in roof assemblies required to be fire-resistance rated in accordance with Section 705.8.6. The supporting construction shall be protected to afford the required *fire-resistance rating* of the *horizontal assembly* supported.
Exceptions:
1. In buildings of Type IIB, IIIB, or VB construction, the construction supporting the *horizontal assembly* is not required to be fire-resistance-rated at the following:
~~1.~~ 1.1. Horizontal assemblies at the separations of incidental uses as specified by Table 508.2.5, provided the required *fire-resistance rating* does not exceed 1 hour.
~~2.~~ 1.2. Horizontal assemblies at the separation of *dwelling units* and *sleeping units* as required by Section 420.3.
~~3.~~ 1.3. Horizontal assemblies as *smoke barriers* constructed in accordance with Section 710.

2. Horizontal assemblies constructed solely for the purpose of satisfying the requirements of footnote f of Table 1018.1.

The delayed effective date of this Rule is January 1, 2017.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

TABLE 502.1.2
BUILDING ENVELOPE REQUIREMENTS OPAQUE ELEMENT, MAXIMUM U-FACTORS

Climate Zone	3		4		5	
	All Other	Group R	All Other	Group R	All Other	Group R
Roofs						
X Insulation entirely above deck	U-0.039	U-0.039	U-0.032	U-0.032	U-0.032	U-0.032
Metal buildings	U-0.041	U-0.041	U-0.037	U-0.037	U-0.037	U-0.037
Attic and other-wood framing	U-0.027	~~U-0.041~~ U-0.027	~~U-0.021~~ U-0.024	~~U-0.021~~ U-0.024	~~U-0.021~~ U-0.024	~~U-0.021~~ U-0.024
Attic and other – steel framing	U-0.035	U-0.035	U-0.029	U-0.029	U-0.029	U-0.029
Walls, Above Grade						
Mass	U-0.123	U-0.104	U-0.104	U-0.090	U-0.090	~~U-0.060~~ U-0.071
Metal building	U-0.094	U-0.072	U-0.060	U-0.050	U-0.050	U-0.050
Metal framed	U-0.064	U-0.064	U-0.064	U-0.064	U-0.064	U-0.055
Wood framed and other	U-0.064	U-0.064	U-0.064	U-0.064	U-0.064	U-0.051
Walls, Below Grade						
Below-grade wall[a]	C-0.119	C-0.119	C-0.119	C-0.092	C-0.119	C-0.092
Floors						
Mass	U-0.064	U-0.064	U-0.057	U-0.051	U-0.057	U-0.051
Joist / Framing-wood	U-0.033	U-0.033	~~U-0.027~~ U-0.026	~~U-0.027~~ U-0.026	~~U-0.027~~ U-0.026	~~U-0.027~~ U-0.026
Joist / Framing-steel	U-0.032	U-0.032	U-0.032	U-0.032	U-0.032	U-0.032
Slab-on-Grade Floors						
Unheated slabs	F-0.730	F-0.540	F-0.520	F-0.520	F-0.520	F-0.510
Heated slabs	F-0.860	F-0.860	~~F-0.688~~ F-0.843	F-0.688	F-0.688	F-0.688

a. When heated slabs are placed below-grade, below grade walls must meet the *F*-factor requirements for perimeter insulation according to the heated slab-on-grade construction.

The delayed effective date of this Rule is January 1, 2017.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2012 NC Fire Code
505.1.1 Suite/Room identification. (150609 Item B-3)

505.1.1 Suite/Room identification. Where numerical addresses are posted to identify suites or rooms within buildings, the first digit of the suite or room number shall match the floor number signage.

The delayed effective date of this Rule is January 1, 2017.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2012 NC Fire Code
902 Definitions. (150609 Item B-4)

Section 902 Definitions

Night Club. ~~An establishment meeting all of the following~~ An A-2 occupancy meeting all of the following conditions:

1. ~~Has a posted capacity or occupant load that exceeds one occupant per 15 square foot (1.39m^2) net~~ The aggregate floor area of concentrated use and standing space that is used for dancing or viewing of performers exceeds 10 percent of the Group A-2 fire area, excluding adjacent lobby areas ; and

2. Provides live or recorded entertainment by performing artist; and

3. ~~Serves~~ Allows alcoholic ~~beverages~~ beverage consumption.

The delayed effective date of this Rule is January 1, 2017.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

[Note: This Rule will also be printed in the 2012 NC Building Code, Section 902 Definitions.]

2012 NC Mechanical Code
312.1 Load calculations. (150609 Item B-5)

312.1 Load calculations. Heating and cooling system design loads for the purpose of sizing systems, appliances and *equipment* shall be determined in accordance with the procedures described in the ASHRAE/ACCA Standard 183. Alternatively, design loads shall be determined by an *approved* equivalent computation procedure, using the design parameters specified in Chapter 3 of the *International Energy Conservation Code.*

For one- and two-family dwellings and townhouses, heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J, or other approved heating and cooling calculation methodologies.

For permitting, inspections, certificate of compliance or certificate of occupancy, verification of Calculations for HVAC Systems - ACCA Manual D, ACCA Manual J nor ACCA Manual S calculation submittals and review shall not be required.

The delayed effective date of this Rule is January 1, 2017.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2012 NC Plumbing Code
605.4 Water distribution pipe. (150609 Item B-1)

605.4 Water distribution pipe. Water distribution pipe shall conform to NSF 61 and shall conform to one of the standards listed in Table 605.4. ~~All~~ Hot water distribution pipe and tubing shall have a minimum pressure rating of 100 psi (690 kPa) at 180°F (82°C). Cold water distribution pipe and tubing shall have a minimum pressure rating of 160 psi (1100 kPa) at 73.4°F (23°C).

The delayed effective date of this Rule is January 1, 2017.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

NC Register - August 17, 2015

(The proponent submitted the adopted modification to eliminate the proprietary "Aquatherm" language.)

605.4.1. Aquatherm green pipe with blue strip (SDR 11) shall be allowed in the North Carolina Plumbing Code for cold water potable water system applications including inside the building.

2014 NC Electrical Code
2014 NEC with NC Amendments. (150609 Item B-6)

This Rule was adopted to update the NC Electrical Code to the 2014 National Electrical Code edition. NC amendments to the 2014 NEC are attached.

The delayed effective date of this Rule is April 1, 2016.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

Article 10 - ADMINISTRATIVE SECTION

10.1 TITLE

These Administrative Regulations along with the requirements included in the 2014 Edition of the National Electrical Code (NFPA-70 - 2014) as adopted by the North Carolina Building Code Council on December 15, 2015, to be effective April 1, 2016, with the following amendments:
(1) 110.26(E)(2)
(2) 210.8(A)(3) (Exception No. 2)
(3) 210.8(A)(7)
(4) 210.8(D)
(5) 210.12(A)
(6) 210.52(I)
(7) 250.50
(8) 250.53(A)(2) (Exception No. 2)
(9) 310.15(B)(7)
(10) 334.15(C)
(11) 404.2(C)(8)
(12) 406.4(D)
(13) 422.5
shall be known as the North Carolina Electrical Code, may be cited as such or as the State Electrical Code, and will be referred to herein as "the code" or "this code".

10.2 SCOPE

Article 80, Administration and Enforcement, of the code is hereby not adopted and does not apply for this code. For Scope and Exceptions to Applicability of Technical Codes, refer to the North Carolina Administrative Code and Policies.

10.3 PURPOSE

The purpose of the code is to provide minimum standards, provisions, and requirements of safe and stable design, methods of construction, and uses of materials in buildings or structures hereafter erected, constructed, enlarged, altered, repaired, moved, converted to other uses, or demolished and to regulate the electrical systems, equipment, maintenance, use, and occupancy of all buildings or structures. All regulations contained in this code have a reasonable and substantial connection with the public health, safety, morals, or general welfare, and their provisions shall be construed liberally to those ends.

10.4 ADMINISTRATION

For administrative regulations pertaining to inspection (rough-ins and finals), permits, and Certificates of Electrical Compliance, see local ordinances and the North Carolina Administrative Code and Policies. When the provisions of other codes are determined to be contrary to the requirements of this code, this code shall prevail.

10.5 DEFINITION

Unless the context indicates otherwise, whenever the word "building" is used in this chapter, it shall be deemed to include the word "structure" and all installations such as plumbing systems, heating systems, cooling systems, electrical systems, elevators, and other installations which are parts of, or are permanently affixed to, the building or structure.

10.6 APPLICATION OF CODE TO EXISTING BUILDINGS

For requirements of existing structures, refer to the North Carolina Administrative Code and Policies.

10.7 SERVICE UTILITIES

10.7.1 Connection of Service Utilities – No person shall make connections from a utility, source of energy, fuel, or power to any building or system which is regulated by the technical codes until approved by the Inspection Department and a Certificate of Compliance is issued (General Statute 143-143.2)

10.7.2 Authority to disconnect Service Utilities – The Inspection Department shall have the authority to require disconnecting a utility service to the building, structure, or system regulated by the technical codes in case of emergency or where necessary to eliminate an imminent hazard to life or property. The Inspection Department shall have the authority to disconnect a utility service when a building has been occupied prior to Certificate of Compliance or entry into the building for purposes of making inspections cannot be readily granted. The Inspection Department shall notify the serving utility and whenever possible the owner or occupant of the building, structure, or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant shall be notified in writing within eight (8) working hours (General Statutes 143-143.2, 153A-365, 153A-366, 160A-425 and 160A-426).

10.8 TEMPORARY POWER

10.8.1 Scope. The provisions of this section apply to the utilization of portions of the wiring system within a building to facilitate construction.

10.8.2 Provisions for Temporary Power. The Code enforcement official shall give permission and issue a permit to energize the electrical service when the provisions of 10.8 and the following requirements have been met:

1) The service wiring and equipment, including the meter socket enclosure, shall be installed, the service wiring terminated, and the service equipment covers installed.
2) The portions of the electrical system that are to be energized shall be complete and physically protected.
3) The grounding electrode system shall be complete.
4) The grounding and the grounded conductors shall be terminated in the service equipment.
5) At least one receptacle outlet with ground fault circuit interrupter protection for personnel shall be installed with the circuit wiring terminated.
6) The applicable requirements of the North Carolina Electrical Code apply.

10.8.3 Uses Prohibited. In no case shall any portion of the permanent wiring be energized until the portions have been inspected and approved by an electrical Code Enforcement Official. Failure to comply with this section may result in disconnection of power or revocation of permit.

10.8.4 Application for Temporary Power. Application for temporary power shall be made by and in the name of the applicant. The application shall explicitly state the portions of the energized electrical system, mechanical system, or plumbing system for which application is made, and its intended use and duration.

10.8.5 Security and Notification. The applicant shall maintain the energized electrical system or that portion of the building containing the energized electrical system in a secured and locked manner or under constant supervision to exclude unauthorized personnel. The applicant shall alert personnel working in the vicinity of the energized electrical system to its presence.

10.9 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, 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.

AMENDMENT 110.26(E)(2)

(2) Outdoor. ~~Outdoor installations shall comply with 110.26(E)(2)(a) and (b).~~
~~(a) *Installation Requirements.*~~ Outdoor electrical equipment shall be installed in suitable enclosures and shall be protected from accidental contact by unauthorized personnel, ~~or~~ by vehicular traffic, or by accidental spillage or leakage from piping systems. The working clearance space shall include the zone described in 110.26(A). No architectural appurtenance or other equipment shall be located in this zone.
~~(b) *Dedicated Equipment Space*. The space equal to the width and depth of the equipment, and extending from grade to a height of 1.8 m (6 ft) above the equipment, shall be dedicated to the electrical installation. No piping or other equipment foreign to the electrical installation shall be located in this zone.~~

AMENDMENT 210.8(A)(3)

210.8 (A) (3) Outdoors
Exception No. 1 to (3): Receptacles that are not readily accessible and are supplied by a branch circuit dedicated to electric snow-melting, deicing, or pipeline and vessel heating equipment shall be permitted to be installed in accordance with 426.28 or 427.22, as applicable.

Exception No. 2 to (3): A single outlet receptacle supplied by a dedicated branch circuit which is located and identified for specific use by a sewage lift pump.

AMENDMENT 210.8(A)(7)

210.8(A) (7) Sinks — located in areas other than kitchens where receptacles are installed within 1.8 m (6 ft) of the outside edge of the sink.

AMENDMENT 210.8(D)

~~**210.8 (D) Kitchen Dishwasher Branch Circuit.** GFCI protection shall be provided for outlets that supply dishwashers installed in dwelling unit locations.~~

AMENDMENT 210.12

210.12 Arc-Fault Circuit-Interrupter Protection. Arc-fault circuit-interrupter protection shall be provided as required in 210.12(A) (B), and (C). The arc-fault circuit interrupter shall be installed in ~~a readily~~ an accessible location.
(A) Dwelling Units. All 120-volt, single-phase, 15- and 20-ampere branch circuits supplying outlets or devices installed in dwelling unit ~~kitchens,~~ family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, ~~laundry areas,~~ or similar rooms or areas shall be protected by any of the means described in 210.12(A)(1) through (6):

AMENDMENT 210.52(I)

210.52 (I) Foyers. Foyers that are not part of a hallway in accordance with 210.52(H) and that have an area that is greater than 5.6 m^2 (60 ft^2) shall have at least one receptacle~~(s) located in each wall space 900 mm (3 ft) or more in width. Doorways, door-side windows that extend to the floor, and similar openings shall not be considered wall space~~.

AMENDMENT 250.50

250.50 Grounding Electrode System. All grounding electrodes as described in 250.52(A)(1) through (A)(7) that are available ~~present~~ at each building or structure served shall be bonded together to form the grounding electrode system. Where none of these grounding electrodes exist, one or more of the grounding electrodes specified in 250.52(A)(4) through (A)(8) shall be installed and used.

AMENDMENT 250.53(A)(2)

250.53 (A) (2)
Exception No. 1: If a single rod, pipe, or plate grounding electrode has a resistance to earth of 25 ohms or less, the supplemental electrode shall not be required.

Exception No. 2: The supplemental ground electrode shall not be required at temporary electrical service installation (saw service pole) at a construction site for one and two-family residences, provided the temporary electrical service does not exceed 150 volts to ground or 100A.

AMENDMENT 310.15(B)(7)

310.15 (B) (7) 120/240-Volt, Single-Phase Dwelling Services and Feeders.
~~For one-family dwellings and the individual dwelling units of two-family and multifamily dwellings, service and feeder conductors supplied by a single-phase, 120/240-volt system shall be permitted be sized in accordance with 310.15(B)(7)(1) through (4).~~
~~(1) For a service rated 100 through 400 A, the service conductors supplying the entire load associated with a one-family dwelling, or the service conductors supplying the entire load associated with an individual dwelling unit in a two-family or multifamily dwelling, shall be permitted to have an ampacity not less than 83 percent of the service rating.~~
~~(2) For a feeder rated 100 through 400 A, the feeder conductors supplying the entire load associated with a one-family dwelling, or the feeder conductors supplying the entire load associated with an individual dwelling, unit in a two-family or multifamily dwelling, shall be permitted to have an ampacity not less than 83 percent of the feeder rating.~~
~~(3) In no case shall a feeder for an individual dwelling unit be required to have an ampacity greater than that specified in 310.15(B)(7)(1) or (2).~~
~~(4) Grounded conductors shall be permitted to be sized smaller than the ungrounded conductors, provided that the requirements of 220.61 and 230.42 for service conductors or the requirements of 215.2 and 220.61 for feeder conductors are met.~~
~~Informational Note No. 1: The conductor ampacity may require other correction or adjustment factors applicable to the conductor installation.~~
~~Informational Note No. 2: See Example D7 in Annex D.~~

Replace with 2011 NEC text & table:

310.15 (B) (7) 120/240-Volt, 3-Wire, Single-Phase Dwelling Services and Feeders. For individual dwelling units of one-family, two-family, and multifamily dwellings, conductors, as listed in Table 310.15(B)(7), shall be permitted as 120/240-volt, 3-wire, single-phase service-entrance conductors, service-lateral conductors, and feeder conductors that serve as the main power feeder to each dwelling unit and are installed in raceway or cable with or without an equipment grounding conductor. For application of this section, the main power feeder shall be the feeder between the main disconnect and the panelboard that supplies, either by branch circuits or by feeders, or both, all loads that are part of or associated with the dwelling unit. The feeder conductors to a dwelling unit shall not be required to have an allowable ampacity rating greater than their service-entrance conductors. The grounded conductor shall be permitted to be smaller than the ungrounded conductors, provided the requirements of 215.2, 220.61, and 230.42 are met.

Table 310.15(B)(7) Conductor Types and Sizes for 120/240-Volt, 3-Wire, Single-Phase Dwelling Services and Feeders. Conductor Types RHH, RHW, RHW-2, THHN, THHW, THW, THW-2, THWN, THWN-2, XHHW, XHHW-2, SE, USE, USE-2

	Conductor (AWG or kcmil)	
Service or Feeder Rating (Amperes)	Copper	Aluminum or Copper-Clad Aluminum
100	4	2
110	3	1
125	2	1/0
150	1	2/0
175	1/0	3/0
200	2/0	4/0
225	3/0	250
250	4/0	300
300	250	350
350	350	500
400	400	600

AMENDMENT 334.15(C)

334.15 (C) In Unfinished Basements ~~and Crawl Spaces.~~ Where cable is run at angles with joists in unfinished basements, ~~and crawl spaces,~~ it shall be permissible to secure cables not smaller than two 6 AWG or three 8 AWG conductors directly to the lower edges of the joists. Smaller cables shall be run either through bored holes in joists or on running boards. Nonmetallic-sheathed cable installed on the wall of an unfinished basement shall be permitted to be installed in a listed conduit or tubing or shall be protected in accordance with 300.4. Conduit or tubing shall be provided with a suitable insulating bushing or adapter at the point the cable enters the raceway. The sheath of the nonmetallic-sheathed cable shall extend through the conduit or tubing and into the outlet or device box not less than 6 mm (1⁄4 in.). The cable shall be secured within 300 mm (12 in.) of the point where the cable enters the conduit or tubing. Metal conduit, tubing, and metal outlet boxes shall be connected to an equipment grounding conductor complying with the provisions of 250.86 and 250.148.

AMENDMENT 404.2(C)(8)

Article 404.2(C)
(8) Where installed in residential one- and two- family dwellings

AMENDMENT 406.4(D)

406.4 (D) Replacements. Replacement of receptacles shall comply with 406.4(D)(1) through (D)(6), as applicable. Arc-fault circuit-interrupter type and ground-fault circuit-interrupter type receptacles shall be installed in ~~a readily~~ an accessible location.

(4) Arc-Fault Circuit-Interrupter Protection. Where a receptacle outlet is supplied by a branch circuit that requires arc-fault circuit-interrupter protection as specified elsewhere in this *Code*, a replacement receptacle at this outlet shall be one of the following:
(1) A listed outlet branch-circuit type arc-fault circuit-interrupter receptacle
(2) A receptacle protected by a listed outlet branch-circuit type arc-fault circuit-interrupter type receptacle
(3) A receptacle protected by a listed combination type arc-fault circuit-interrupter type circuit breaker
Exception: Non-grounding type receptacles.

AMENDMENT 422. 5

422.5 Ground-Fault Circuit-Interrupter (GFCI) Protection. The device providing GFCI protection required in this article shall be readily accessible.
Exception: For one- and two-family residences, the device providing the GFCI protection required in this article shall be accessible.