

## **NC State Building Codes Amendments - Effective 1/1/2017**

**(adopted September 2015 through June 2016)**

**(Note: some amendments may indicate earlier effective dates)**

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The following pages represent a summary of the Building Code Council adopted amendments that have been approved by the Rules Review Commission.

2012 NC Building, Energy Conservation, Fire, Fuel Gas, Mechanical, Plumbing, Residential Codes (based on the 2009 International Codes)

2014 NC Electrical Code (based on the 2014 NEC)

2015 NC Existing Building Code (based on the 2012 IEBC)

These amendments revise, delete or add to the adopted NC Code.

2012 NC Building Code  
 Table 508.4 Required Separation of Occupancies. (150310 Item B-1)

**TABLE 508.4  
 REQUIRED SEPARATION OF OCCUPANCIES**

OCCUPANCY	A <sup>d</sup>	B	E	F-1	F-2	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R	S-1	S-2 <sup>b</sup>	U
B	S	1	2 <sup>c</sup>	1	2	1	NP	2	1	1	1	2	1	1	1	1	<u>2</u> <sub>1</sub>	1	1
	NS	2	2 <sup>c</sup>	2	3	2	NP	3	2	2	2 <sup>a</sup>	2	NP	2	2	2	2	<u>3</u> <sub>2</sub>	2
M	S	1	1	1	2	1	NP	2	1	1	1	2	1	1	2 <sup>c</sup>	1	<u>2</u> <sub>1</sub>	1	1
	NS	2	2	2	3	2	NP	3	2	2	2 <sup>a</sup>	2	NP	2	2	2 <sup>c</sup>	2	<u>3</u> <sub>2</sub>	2
S-1	S	1	<u>2</u> <sub>1</sub>	1	2	1	NP	2	1	1	1	2	1	1	<u>2</u> <sub>1</sub>	1	3 <sup>e</sup>	1	1
	NS	2	<u>3</u> <sub>2</sub>	2	3	2	NP	3	2	2	2	NP	2	2	<u>3</u> <sub>2</sub>	2	3 <sup>e</sup>	2	2

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

**706.2 Structural stability.** *Fire walls* shall have sufficient structural stability under fire conditions to allow collapse of construction on either side without collapse of the wall for the duration of time indicated by the required *fire-resistance rating*.

**Exception:** For *fire walls* separating Group R-2 from Group S-2 buildings of different construction types per footnotes c and d of Table 706.4, the structural wall of the S-2 building shall be permitted to serve as the *fire wall* between the Group R-2 and Group S-2 buildings and shall be permitted to be laterally supported by floor construction of the same rating as the wall.

**706.3 Materials.** *Fire walls* shall be of any approved noncombustible materials.

**Exception:** Buildings of Type V construction.

**706.4 Fire-resistance rating.** *Fire walls* shall have a *fire-resistance rating* of not less than that required by Table 706.4.

**TABLE 706.4  
 FIRE WALL FIRE-RESISTANCE RATINGS**

<b>GROUP</b>	<b>FIRE-RESISTANCE RATING (hours)</b>
A, B, E, H-4, I, R-1, R-2 <sup>c,d</sup> , U	3 <sup>a</sup>
F-1, H-3 <sup>b</sup> , H-5, M, S- 1	3
H-1, H-2	4 <sup>b</sup>
F-2, S-2 <sup>c,d</sup> , R-3, R-4	2

a. In Type II or V construction, walls shall be permitted to have a 2-hour fire-resistance rating.

b. For Group H-1, H-2, or H-3 building, also see Sections 415.4 and 415.5.

c. Where *fire walls* are used to separate R-2 buildings of Type V construction from S-2 buildings of Type IB construction, a 2 hour exterior wall of the Type IB S-2 structure shall be permitted to satisfy the requirements of Section 706.2 and Table 706.4 without requiring a *fire wall* on the R-2 building. The floor construction of the S-2 structure shall have a fire-resistance rating equal to or greater than the exterior walls of the S-2 structure when the floor provides lateral stability to the vertical construction.

d. Where *fire walls* are used to separate R-2 buildings of Type III construction from S-2 buildings of Type IA construction, a 3 hour exterior wall of the Type IA S-2 structure shall be permitted to satisfy the requirements of Section 706.2 and Table 706.4 without requiring a *fire wall* on the R-2 building. The floor construction of the S-2 structure shall have a fire-resistance rating equal to or greater than the exterior walls of the S-2 structure when the floor provides lateral stability to the vertical 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 Building Code

1007.7 Exterior area for assisted rescue. (150310 Item B-2)

**1007.7 Exterior area for assisted rescue.** The exterior area for assisted rescue must be open to the outside air and meet the requirements of Section 1007.6.1. Separation walls shall comply with the requirements of Section 705 for *exterior walls*. Where walls or openings are between the area for assisted rescue and the interior of the building, the building *exterior walls* within 10 feet (3048 mm) horizontally of a nonrated wall or unprotected opening shall have a *fire resistance rating* of not less than 1 hour. Openings within such *exterior walls* shall be protected by opening protectives having a *fire protection rating* of not less than 3/4 hour. This construction shall extend vertically from the ground to a point 10 feet (3048 mm) above the floor level of the area for assisted rescue or to the roof line, whichever is lower.

**Exception:** Areas for assisted rescue that are located 10 feet (3048 mm) or more from the exterior face of a building are not required to be separated from the building by fire-resistance rated walls or protected openings.

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 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 ~~4,200~~ 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.]**

**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.

2012 NC Building Code

1109.2.1 Family or assisted-use toilet and bathing rooms. (151215 Item B-3)

**1109.2.1 Family or assisted-use toilet and bathing rooms.** In assembly and mercantile occupancies, an *accessible* family or assisted-use toilet room shall be provided where an aggregate of six or more male and female water closets is required. In buildings of mixed occupancy, only those water closets required for the assembly or mercantile occupancy shall be used to determine the family or assisted-use toilet room requirement. In recreational facilities where separate-sex bathing rooms are provided, an *accessible* family or assisted-use bathing room shall be provided. Fixtures located within family or assisted-use toilet and bathing rooms shall be included in determining the number of fixtures provided in an occupancy.

**Exceptions:**

1. Where each separate-sex bathing room has only one shower or bathtub fixture, a family or assisted-use bathing room is not required.
2. In an assembly occupancy that meets the definition of a nightclub in 902.1, the family or assisted-use toilet room is not 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 Building Code

1109.14 Recreational and sports facilities. (150310 Item B-4)

**1109.14 Recreational and sports facilities.** Recreational and sports facilities shall be provided with *accessible* features in accordance with Sections 1109.14.1 through 1109.14.4.

**Exception:** Swimming pools for single or multiple Group R-2 and Group R-3 occupancy buildings intended for use by residents only.

**1109.14.1 Facilities serving a single building.** In Group R-2 and R-3 occupancies where recreational facilities are provided serving a single building containing *Type A units* or *Type B units*, 25 percent, but not less than one, of each type of recreational facility shall be *accessible*. Every recreational facility of each type on a site shall be considered to determine the total number of each type that is required to be *accessible*.

**1109.14.2 Facilities serving multiple buildings.** In Group R-2 and R-3 occupancies on a single *site* where multiple buildings containing *Type A units* or *Type B units* are served by recreational facilities, 25 percent, but not less than one, of each type of recreational facility serving each building shall be *accessible*. The total number of each type of recreational facility that is required to be *accessible* shall be determined by considering every recreational facility of each type serving each building on the site.

**1109.14.3 Other occupancies.** All recreational and sports facilities not falling within the purview of Section 1109.14.1 or 1109.14.2 shall be *accessible*.

The delayed effective date of this Rule is January 1, 2017.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.



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(D)
- (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<sup>2</sup> (60 ft<sup>2</sup>) 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**

Service or Feeder Rating (Amperes)	Conductor (AWG or kcmil)	
	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.

2014 NC Electrical Code

210.12 (B) Branch Circuit Extensions or Modifications – Dwelling Units. (151215 Item B-9)

**210.12 Arc-Fault Circuit-Interrupter Protection.**

**(B) Branch Circuit Extensions or Modifications – Dwelling Units.**

In any of the areas specified in 210.12(A), where branch-circuit wiring is modified, replaced, or extended, the branch circuit shall be protected by one of the following:

- (1) A listed combination-type AFCI located at the origin of the branch circuit.
- (2) A listed outlet branch-circuit type AFCI located at the first receptacle outlet of the existing branch circuit.

*Exception: AFCI protection shall not be required where the extension of the existing conductors is not more than ~~1.8 m (6 ft)~~ 15.24 m (50 ft) and does not include any additional outlets or devices.*

The delayed effective date of this Rule is January 1, 2017.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.



2014 NC Electrical Code

300.9 Raceways in Wet Locations Above Grade. (150915 Item B-3)

**300.9 Raceways in Wet Locations Above Grade.** Where raceways are in wet locations above grade, the interior of these raceways shall be considered to be a wet location. Insulated conductors and cables installed in raceway in wet locations above grade shall comply with 310.10(C).

**Exception:** The raceway shall not be considered a wet location if:

- (1) The section of raceway routed in a wet location above grade does not exceed 1500 mm (5 ft) in length;
- (2) Any fittings or conduit bodies are watertight and listed for use in wet locations; and
- (3) Raceway is open at its termination point in a dry location.

The delayed effective date of this Rule is January 1, 2017.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2014 NC Electrical Code

338.10 (B) (4) Installation Methods for Branch Circuits and Feeders. (151215 Item B-8)

**338.10 Uses Permitted.**

**(B) Branch Circuits or Feeders**

**(4) Installation Methods for Branch Circuits and Feeders.**

(a) *Interior Installations.* In addition to the provisions of this article, Type SE service entrance cable used for interior wiring shall comply with the installation requirements of Part II of Article 334, excluding 334.80.

~~Where installed in thermal insulation the ampacity shall be in accordance with the 60°C (140°F) conductor temperature rating. The maximum conductor temperature rating shall be permitted to be used for ampacity adjustment and correction purposes, if the final derated ampacity does not exceed that for a 60°C (140°F) rated conductor.~~

For Type SE cable with ungrounded conductor sizes 10 AWG and smaller, where installed in thermal insulation, the ampacity shall be in accordance with 60°C (140°F) conductor temperature rating.

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
<b>Roofs</b>						
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- <u>wood framing</u>	U-0.027	<del>U-0.041</del> U-0.027	<del>U-0.021</del> U-0.024	<del>U-0.021</del> U-0.024	<del>U-0.021</del> U-0.024	<del>U-0.021</del> U-0.024
<u>Attic and other – steel framing</u>	<u>U-0.035</u>	<u>U-0.035</u>	<u>U-0.029</u>	<u>U-0.029</u>	<u>U-0.029</u>	<u>U-0.029</u>
<b>Walls, Above Grade</b>						
Mass	U-0.123	U-0.104	U-0.104	U-0.090	U-0.090	<del>U-0.060</del> 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
<b>Walls, Below Grade</b>						
Below-grade wall <sup>a</sup>	C-0.119	C-0.119	C-0.119	C-0.092	C-0.119	C-0.092
<b>Floors</b>						
Mass	U-0.064	U-0.064	U-0.057	U-0.051	U-0.057	U-0.051
<u>Joist / Framing-wood</u>	U-0.033	U-0.033	<del>U-0.027</del> U-0.026	<del>U-0.027</del> U-0.026	<del>U-0.027</del> U-0.026	<del>U-0.027</del> U-0.026
<u>Joist / Framing-steel</u>	<u>U-0.032</u>	<u>U-0.032</u>	<u>U-0.032</u>	<u>U-0.032</u>	<u>U-0.032</u>	<u>U-0.032</u>
<b>Slab-on-Grade Floors</b>						
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	<del>F-0.688</del> 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.

*(Note this is a companion change to a previous U-factor change, to Table 502.1.2)*

**TABLE 502.2(1)  
BUILDING ENVELOPE REQUIREMENTS – OPAQUE ASSEMBLIES**

Climate Zone	3		4		5	
	All Other	Group R	All Other	Group R	All Other	Group R
<b>Roofs</b>						
Insulation entirely above deck	R - 25 ci	R-25 ci	R - 30 ci	R-30 ci	R - 30 ci	R-30 ci
Metal buildings (with R-5 thermal blocks) <sup>ab</sup>	R-10 + R-19 FC	R-10 + R-19 FC	R-19 + R-11 Ls	R-19 + R-11 Ls	R-19 + R-11 Ls	R-19 + R-11 Ls
Attic and other - wood framing	R-38	R-38	R-42	R-42	R-42	R-42
Attic and other - steel framing	R-38	R-38	R-49	R-49	R-49	R-49
<b>Walls, Above Grade</b>						
Mass	R-7.6 ci	R-9.5 ci	R-9.5 ci	R-11.4 ci	R-11.4 ci	R-15 ci
Metal building <sup>b</sup>	R-0+R-13 ci	R-0 + R-19 ci	R-0 + R-15.8 ci	R-0 + R-19 ci	R-0 + R-19 ci	R-0 + R-19 ci
Metal framed	R-13 + 7.5 ci	R- 13 + R-7.5 ci	<del>R-13 + R-10 ci</del> R-13 + R-7.5ci	<del>R-13 + R-12.5 ci</del> R-13 + R-7.5ci	R-13 + R-12.5 ci R-13 + R-7.5ci	<del>R-13 + R-15 ci</del> R-13 + R-10ci
Wood framed and other	R-13 + R-3.8 ci or R-20	<del>R-19, R-13 + R-5, or R-15 + R-3.8</del> R-13 + R-3.8 ci or R-20	R-13 + R-7.5 ci R-13 + R-3.8ci or R-20	<del>R-19, R-13 + R-5, or R-15 + R-3.8</del> R-13 + R-3.8 ci or R-20	R-13 + R-10 ci R-13 + R-3.8 ci or R-20	<del>R-19, R-13 + R-5, or R-15 + R-3.8</del> R-13 + R-7.5ci or R-20 + R- 3.8ci
<b>Walls, Below Grade</b>						
Below-grade wall <sup>c</sup>	R-7.5 ci	R-7.5 ci	R-7.5 ci	R-10 ci	R-7.5 ci	R-10 ci
<b>Floors</b>						
Mass	R-12.5 ci	R-12.5 ci	R-14.6 ci	R-16.7 ci	R-14.6 ci	R-16.7 ci
Joist / Framing	R-30 <sup>e</sup>	R-30 <sup>e</sup>	R-38	R-38	R-38	R-38
<b>Slab-on-Grade Floors<sup>a</sup></b>						
Unheated slabs	NR	R-10 for 24 in.	R-15 for 24 in.	R-15 for 24 in.	R-15 for 24 in.	R-20 for 24 in.
Heated slabs	R-15 for 24 in.	R-15 for 24 in.	R-20 for 24 in.	R-20 for 48 in.	R-20 for 48 in.	R-20 for 48 in.
<b>Opaque Doors</b>						
Swinging	U - 0.70	U - 0.50	U - 0.50	U - 0.50	U - 0.50	U - 0.50
Roll-up or sliding	U - 0.50	U - 0.50	U - 0.50	U - 0.50	U - 0.50	U - 0.50

The delayed effective date of this Rule is January 1, 2016.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2015 NC Existing Building Code

101.11. Accessibility for detached one- and two-family dwellings and townhouses. (150915 Item B-1)

**101.11. Accessibility for detached one- and two-family dwellings and townhouses.** In detached one- and two-family dwellings and townhouses, where there are four or more dwelling units or sleeping units in a single structure, the provisions for accessibility of this code for Group R-3 shall apply.

The delayed effective date of this Rule is January 1, 2017.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.

**2015** NC Existing Building Code  
 407.1 Conformance. (150915 Item B-2)

**[B] 407.1 Conformance.**

No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, unless such building is made to comply with the requirements of the *International Building Code* for such division or group of occupancy. Subject to the approval of the building official, the use or occupancy of *existing buildings* shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all of the requirements of this code for those groups, provided the new or proposed use is ~~of equal or lesser hazard~~ less hazardous, based on ~~Table 407.1~~ life and fire risk, than the existing use.

**Table 407.1**  
**Relative Occupancy Hazard**

<b>Life and Fire Risk Hazard</b>	<b>Occupancy Category</b>
1 (highest)	H 1, H 2, H 3
2	A 1, A 2 (w/ nightclub), H 4, F 1, I 3, M, S 1
3	A 2 (w/o nightclub), A 3, A 5, B, F 2, I 2, R 1, S 2
4	A 4, E, I 1, R 2 greater than two stories in height or greater than 4 dwelling units
5 (lowest)	R 2 two stories or less in height and four dwelling units or less, R 3, R 4, U, One and Two Family Dwellings.

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  
308.1.6.3 Sky lanterns. (150310 Item B-5)

**308.1.6.3 Sky lanterns.** A person shall not release or cause to be released an untethered *sky lantern*.

**Add the following to Section 202 General Definitions:**

**SKY LANTERN.** An unmanned device with a fuel source that incorporates an open flame in order to make the device airborne.

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<sup>2</sup>) 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  
202 General definitions. (151215 Item B-5)

~~**INDIRECT WASTE RECEPTOR.** A plumbing fixture designed to collect and dispose of liquid waste from other plumbing fixtures, plumbing equipment or appliances that are required to discharge to the drainage system through an air gap. The following types of fixtures fall within the classification of indirect liquid waste receptors: floor sinks, mop receptors, service sinks and standpipe drains with integral air gaps.~~

**WASTE RECEPTOR.** A floor sink, standpipe, hub drain or a floor drain that receives the discharge of one or more indirect waste pipes.

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

307.2.1.1, 701.7, 715.6, 802.1.5 Condensate drains. (150915 Item B-4)

**307.2.1.1 Condensing furnaces and boilers.** Where condensate drains from condensing furnaces or boilers are installed in locations subject to freezing, the condensate drain lines in attics shall be freeze protected in accordance with the manufacturer's recommendations

**701.7 Connections.** Direct connection of a condensate drain, a steam exhaust blow-off or drip pipe shall not be made with the building drainage system.

**715.6 Crawl Spaces.** All hub drains or floor drains installed in crawl spaces shall be protected from backflow into the building by a check valve or back-water valve installed in the lateral serving the said hub drain or floor drain.

**802.1.5 Non-potable clear-water waste.** Where devices and equipment such as process tanks, filters, condensate drains, drips and boilers discharge non-potable water to the building drainage system, the discharge shall be through an indirect waste pipe by means of an air break or air gap.

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

416.5 Tempered water for public hand-washing facilities. (151215 Item B-1)

**416.5 Tempered water for public hand-washing facilities. Deleted.** When hot water is provided to a public hand-washing facility, such water shall be tempered water delivered through an *approved* water-temperature limiting device that conforms to ASSE 1070 or CSA B125.3.

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.**

2012 NC Residential Code  
R102.7 Existing structures. (150310 Item B-9)

**R102.7 Existing structures.** For requirements of existing structures, refer to the North Carolina Administration and Enforcement Requirements Code and the North Carolina Existing Building Code.

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 R302.6**  
**DWELLING/GARAGE SEPARATION**

<b>SEPARATION</b>	<b>MATERIAL</b>
From the residence and attics	Not less than 1/2-inch gypsum board or equivalent applied to the garage side
From all habitable rooms above the garage <sup>a</sup>	Not less than 5/8-inch X-gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation	Not less than 1/2-inch gypsum board or equivalent
Garages located less than 3 feet from a dwelling unit on the same lot	Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area

For SI: 1 inch – 25.4 mm, 1 foot – 304.8mm

Footnote: a. For dwelling units constructed prior to the 2012 code edition effective date (January 1, 2012), 1/2" or greater existing gypsum on the bottom side of the garage ceiling shall be acceptable. Joints shall be taped.

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 Residential Code  
R308.4 Hazardous Locations. (150310 Item B-11)

**R308.4 Hazardous Locations.** The following shall be considered specific hazardous locations for the purposes of glazing:

7. Glazing adjacent to stairways, landings and ramps within 36 inches (914 mm) horizontally of a walking surface when the exposed surface of the glazing is less than 60 inches (1524 mm) above the plane of the adjacent walking surface.

**Exception:**

1. When a rail is installed on the accessible side(s) of the glazing 34 to 38 inches (864 to 965 mm) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (730 N/m) without contacting the glass and be a minimum of 1½ inches (38 mm) in cross sectional height.

2. Where a change in elevation of a walking surface is 8¼ inches or less at an exterior door.

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 Residential Code

R311.4 Vertical egress. (150310 Item B-12)

**R311.4 Vertical egress.** ~~Egress from habitable levels including habitable attics and basements not provided with an egress door in accordance with Section R311.2 shall be by a ramp in accordance with Section R311.8 or a stairway in accordance with Section R311.7. Deleted.~~

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 Residential Code


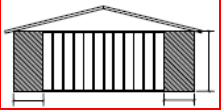
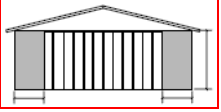
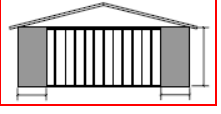
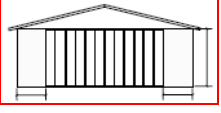
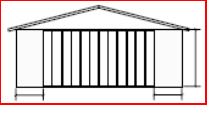
R408.2 Ground vapor retarder. (150310 Item B-13)

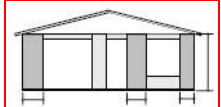
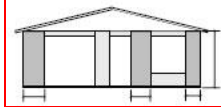
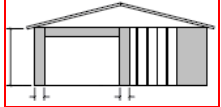
**R408.2 Ground vapor retarder.** When required by Section 408.1.1 Exception, a minimum 6-mil (0.15 mm) polyethylene vapor retarder or equivalent shall be installed to nominally cover all exposed earth in the crawl space, with joints lapped not less than 12 inches. Where there is no evidence that the groundwater table can rise to within 6 inches (152 mm) of the floor of the crawl space, it is acceptable to puncture the ground vapor retarder at low spots to prevent water puddles from forming on top of the vapor retarder due to condensation. ~~Install a drain to daylight or sump pump at each low spot. Crawl space drains shall be kept separate from roof gutter drain systems and foundation perimeter drains.~~

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 R602.10.1**  
**BRACING METHODS<sup>1,2</sup>**

Method	Minimum Brace Material Thickness or Size	Minimum Brace Panel Length or Brace Angle	Connection Criteria		<i>Illustration of Bracing Method (illustrates method only, not location)</i>
			Fasteners	Spacing	
LIB Let-in Bracing	1x4 wood brace (or approved metal brace installed per manufacturer instructions)	45° angle for maximum 16"oc stud spacing <sup>3</sup>	2-8d common nails or 3-8d (2-1/2" long x 0.113" dia.) nails	Per stud and top and bottom plates	
DWB Diagonal wood boards	3/4" (1" nominal)	48"	2-8d (2-1/2" long x 0.113" diameter) or 2 - 1-3/4" long staples	Per stud and top and bottom plates	
WSP Wood structural panel	3/8"	48" <sup>4</sup>	6d common nail or 8d (2-1/2" long x 0.113" diameter) nail	6" edges 12" field	
SFB Structural Fiberboard Sheathing	1/2"	48" <sup>4</sup>	1-1/2" long x 0.120" dia. Galvanized roofing nails	3" edges 6" field	
GB Gypsum Board Installed on both sides of wall	1/2"	96" for use with R602.10.2 48" for use with R602.10.3	Min. 5d cooler nails or #6 screws	7" edges 7" field	
PCP Portland cement plaster	3/4" (maximum 16"oc stud spacing)	48"	1-1/2" long, 11 gage, 7/16" diameter head nails or 7/8" long, 16 gage staples	6" o.c. on all framing members	

CS-WSP <sup>5</sup> Continuously sheathed WSP	3/8"	24" adjacent to window not more than 67% of wall height; 30" adjacent to door or window greater than 67% and less than 85% of wall height. 48" for taller openings.	Same as WSP	Same as WSP	
CS-SFB <sup>5</sup> Continuously sheathed SFB	1/2"		Same as SFB	Same as SFB	
PF Portal Frame <sup>6,7,8</sup>	7/16"	See Figure R602.10.1	See Figure R602.10.1	See Figure R602.10.1	

**Table Notes:**

1. Alternative bracing materials and methods shall comply with Section 105 of the North Carolina Administrative Code and Policies, and shall be permitted to be used as a substitute for any of the bracing materials listed in Table R602.10.1 provided at least equivalent performance is demonstrated. Where the tested bracing strength or stiffness differs from tabulated materials, the bracing amount required for the alternative material shall be permitted to be factored to achieve equivalence.
2. All edges of panel-type wall bracing shall be attached to framing or blocking, except GB bracing horizontal joints shall not be required to be blocked when joints are finished.
3. Two LIB braces installed at a 60° angle shall be permitted to be substituted for each 45° angle LIB brace.
4. For 8-foot or 9-foot wall height, brace panel minimum length shall be permitted to be reduced to 36-inch or 42-inch length, respectively, where not located adjacent to a door opening. A braced wall panel shall be permitted to be reduced to a 32-inch length when studs at each end of the braced wall panel are anchored to foundation or framing below using hold-down device with minimum 2,800 lbs. design tension capacity. For detached single story garages and attached garages supporting roof only, a minimum 24-inch brace panel length shall be permitted on one wall containing one or more garage door openings.
5. Bracing methods designated CS-WSP and CS-SFB shall have sheathing installed on all sheathable surfaces above, below, and between wall openings.
6. For purposes of bracing in accordance with Section R602.10.2, two portal frame brace panels with wood structural panel sheathing applied to the exterior face of each brace panel as shown in Figure R602.10.1 shall be considered equivalent to one braced wall panel.
7. Structural fiberboard (SFB) shall not be used in portal frame construction.
8. No more than three portal frames shall be used in a single building elevation.
9. CS-WSP and CS-SFB cannot be mixed on the same story.

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 Residential Code

R703.7.4.2 Air space. (151215 Item B-2)

**R703.7.4.2 Air space.** The veneer shall be separated from the sheathing by an air space of a minimum of a nominal 1 inch (25 mm) but not more than 4 ½ inches (114 mm). An air space that provides drainage and contains mortar from construction shall be permitted.

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 Residential Code

R703.12. Adhered stone or masonry veneer installation. (150310 Item B-15)

**R703.12. Adhered stone or masonry veneer installation.** Adhered stone or masonry veneer shall be installed in accordance with the manufacturer's instructions. Protection against the accumulation of water in the exterior wall assembly shall be provided in accordance with Section R703.6 of this code.

The delayed effective date of this Rule is January 1, 2017.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.

