

NC State Building Codes Amendments

(adopted September 2017 through June 2018, Effective 1/1/2019)

(adopted September 2018 through June 2019, Effective 1/1/2020)

(adopted September 2019 through July 2020, Effective 1/1/2021)

(Note: some amendments may indicate earlier effective dates)

(Note: includes identified NC Errata)

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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.

2018 NC Building Code (based on the 2015 International Building Code)
effective 1/1/2019

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

2018 NC Building Code
101.2 Scope, 202 Definitions, Farm Building. (161213 Item B-7)

101.2 Scope. The provisions of this code shall apply to the construction, *alteration*, relocation, enlargement, replacement, *repair*, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exceptions: If any of the following apply the building or structure is exempt from the provisions of this code:

1. Detached one- and two-family *dwelling*s and multiple single-family *dwelling*s (*townhouses*) not more than three *stories above grade plane* in height with a separate *means of egress*, and their accessory structures not more than three *stories above grade plane* in height, shall comply with the *International Residential Code*.

~~2. Farm *buildings* located outside of the buildings rules jurisdiction of any municipality.~~

~~**Exception:** All buildings used for sleeping purposes shall conform to the provisions of the technical codes.~~

2. Farm buildings not used for:

a. Sleeping purposes; or

b. Storage of hazardous materials in excess of those listed in Tables 307.1(1) and 307.1(2) within the building rules jurisdiction of any municipality.

3. The design construction, location, installation or operation of equipment for storing, handling and transporting liquefied petroleum gases for fuel purposes up to the outlet of the first stage pressure regulator, anhydrous ammonia or other liquid fertilizer.

4. The design construction, location, installation or operation of equipment or facilities of a public utility, as defined in **N.C.G.S.** 62-3, or electric or telephone membership corporation, including without limitation poles, towers and other structures supporting electric or communication lines from the distribution network up to the meter location.

Note: All *buildings* owned and operated by a public utility or an electric or telephone membership corporation shall meet the provisions of this code.

5. The storage and handling of substances governed by the Hazardous Chemicals Right to Know Act in **N.C.G.S. Chapter 95, Article 18.**

SECTION 202 DEFINITIONS

FARM BUILDING. Any *building* not used for sleeping purposes that is not accessed by the general public and is used primarily for a **farm** purpose. **Farm** purposes includes structures or *buildings* for equipment, storage and processing of agricultural products or commodities such as: crops, fruits, vegetables, ornamental or flowering plants, dairy, timber, livestock, poultry and all other such forms of agricultural products by the specific farm on which the structure or *building* is located. **Farm** purposes do not include structures or *buildings* for uses such as education facilities, research facilities, or aircraft hangers.

The delayed effective date of this Rule is January 1, 2019.

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

(Note: The remainder is part of the 2018 Code adoption package.)

July 14, 2020

2018 NC Building Code

ERRATA – correct as shown

TEMPORARY OVERFLOW SHELTER. A shelter that provides Temporary Overflow accommodations from an approved homeless shelter in accordance with Section 427.

2018 NC Building Code
312.1, H101.2, H109.2, Ground Signs. (180911 Item B-15)

312.1 General.

Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirements of this code commensurate with the fire and life hazard incidental to their occupancy. Group U shall include, but not be limited to, the following:

- Agricultural buildings
- Aircraft hangars, accessory to a one- or two-family residence (see Section 412.5)
- Barns
- Carports
- Fences and ground signs more than 6 feet (1829 mm) in height
- Grain silos, accessory to a residential occupancy
- Greenhouses
- Livestock shelters
- Photovoltaic panel system* (mounted at grade)
- Private garages
- Retaining walls
- Sheds
- Stables
- Tanks
- Towers

The delayed effective date of this Rule is January 1, 2020.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2018 NC Building Code

ERRATA – correct as shown

428.2.4 Heating Appliances. Unvented fuel-fired heaters and portable electric heaters shall be prohibited.

428.3.9 Heating Appliances. Unvented fuel-fired heaters, floor furnaces, and portable electric heaters shall not be installed.

TABLE 504.4^{a,b}
ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE

OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION									
	SEE FOOTNOTES	TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	B		A	B
A-1	NS	UL	5	3	2	3	2	3	2	1
	S	UL	6	4	3	4	3	4	3	2
A-2	NS	UL	11	3	2	3	2	3	2	1
	S	UL	12	4	3	4	3	4	3	2
A-3	NS	UL	11	3	2	3	2	3	2	1
	S	UL	12	4	3	4	3	4	3	2
A-4	NS	UL	11	3	2	3	2	3	2	1
	S	UL	12	4	3	4	3	4	3	2
A-5	NS	UL	UL	UL	UL	UL	UL	UL	UL	UL
	S	UL	UL	UL	UL	UL	UL	UL	UL	UL
B	NS	UL	11	5	3	5	3	5	3	2
	S	UL	12	6	4	6	4	6	4	3
E	NS	UL	5	3	2	3	2	3	1	1
	S	UL	6	4	3	4	3	4	2	2
F-1	NS	UL	11	4	2	3	2	4	2	1
	S	UL	12	5	3	4	3	5	3	2
F-2	NS	UL	11	5	3	4	3	5	3	2
	S	UL	12	6	4	5	4	6	4	3
H-1	NS ^{c, d}	1	1	1	1	1	1	1	1	NP
	S									
H-2	NS ^{c, d}	UL	3	2	1	2	1	2	1	1
	S									
H-3	NS ^{c, d}	UL	6	4	2	4	2	4	2	1
	S									
H-4	NS ^{c, d}	UL	7	5	3	5	3	5	3	2

	S	UL	8	6	4	6	4	6	4	3
H-5	NS ^{c, d}	4	4	3	3	3	3	3	3	2
	S									
I-1 Condition 1	NS ^{d, e}	UL	9	4	3	4	3	4	3	2
	S	UL	10	5	4	5	4	5	4	3
I-1 Condition 2	NS ^{d, e}	UL	9	4	3	4	3	4	3	2
	S	UL	10	5						
I-2	NS ^{d, f}	UL	4	2	1	1	NP	1	1	NP
	S	UL	5	3						
I-3	NS ^{d, e}	UL	4	2	1	2	1	2	2	1
	S	UL	5	3	2	3	2	3	3	2
I-4	NS ^{d, g}	UL	5	3	2	3	2	3	1	1
	S	UL	6	4	3	4	3	4	2	2
M	NS	UL	11	4	2	4	2	4	3	1
	S	UL	12	5	3	5	3	5	4	2
R-1	NS ^{d, h}	UL	11	4	4	4	4	4	3	2
	S13R	4	4							
	S	UL	12	5	5	5	5	5	4	3
R-2	NS ^{d, h}	UL	11	4	4	4	4	4	3	2
	S13R	4	4							
	S	UL	12	5	5	5	5	5	4	3
R-3	NS ^{d, h}	UL	11	4	4	4	4	4	3	3
	S13R	4	4							
	S	UL	12	5	5	5	5	5	4	4
R-4	NS ^{d, h}	UL	11	4	4	4	4	4	3	2
	S13R	4	4							
	S	UL	12	5	5	5	5	5	4	3
S-1	NS	UL	11	4	2	3	2	4	3	1
	S	UL	12	5	3 4	4	3	5	4	2
S-2	NS	UL	11	5	3	4	3	4	4	2
	S	UL	12	6	4	5	4	5	5	3
U ⁱ	NS	UL	5	4	2	3	2	4	2	1
	S	UL	6	5	3	4	3	5	3	2

Note: UL = Unlimited; NP = Not Permitted; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2.

- a. See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.
- b. See Section 903.2 for the minimum thresholds for protection by an *automatic sprinkler system* for specific occupancies.
- c. New Group H occupancies are required to be protected by an *automatic sprinkler system* in accordance with Section 903.2.5.
- d. The NS value is only for use in evaluation of existing *building height* in accordance with the *International Existing Building Code*.
- e. New Group I-1 and I-3 occupancies are required to be protected by an *automatic sprinkler system* in accordance with Section 903.2.6. For new Group I-1 occupancies, Condition 1, see Exception 1 of Section 903.2.6.
- f. New and existing Group I-2 occupancies are required to be protected by an *automatic sprinkler system* in accordance with Section 903.2.6 and Section 1103.5 of the *International Fire Code*.
- g. For new Group I-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.
- h. New Group R occupancies are required to be protected by an *automatic sprinkler system* in accordance with Section 903.2.8.
- i. See Table C102.1 in Appendix C for Group U agricultural buildings.

The delayed effective date of this Rule is January 1, 2021.

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

TABLE 508.4
REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

OCCUPANCY	A ^d	B ^e	E	F-1	F-2	H-1	H-2	H-3	H-4	H-5	I-1 ^a	I-2	I-3	I-4	M	R ^a	S-1	S-2 ^b	U	
A ^d	S	2 ^{d,f}	1	1	1	N	NP	3	2	2	2	1	2	1	1	1	1	N	N	
	NS	2 ^{d,f}	2	2	2	1	NP	4	3	3	3	2	NP	2	2	2	2	2	1	1
B ^e	S	1	2 ^d	1	2	1	NP	2	1	1	1	2	1	1	1	1	1	1	1	1
	NS	2	2 ^d	2	3	2	NP	3	2	2	2	2	NP	2	2	2	2	2	2	2
E	S	1	1	2 ^d	1	N	NP	3	2	2	2	1	2	1	1	1	1	1	N	N
	NS	2	2	2 ^d	2	1	NP	4	3	3	3	2	NP	2	2	2	2	2	1	1
F-1	S	1	2	1	3 ^d	1	NP	2	1	1	1	2	1	1	2	1	2	1	1	
	NS	2	3	2	3 ^d	2	NP	3	2	2	2	2	NP	2	3	2	3	2	2	
F-2	S	N	1	N	1	2 ^d	NP	3	2	2	2	1	2	1	1	1 ^c	1	1	1	
	NS	1	2	1	2	2 ^d	NP	4	3	3	3	2	NP	2	2	2 ^c	2	2	2	
H-1	S	NP	NP	NP	NP	4 ^d	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
	NS	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
H-2	S	3	2	3	2	3	NP	4 ^d	1	1	1	3	3	3	2	3	2	3	3	
	NS	4	3	4	3	4	NP	NP	NP	NP	NP	NP	NP	NP	3	NP	3	4	4	
H-3	S	2	1	2	1	2	NP	1	3 ^d	1	1	2	2	2	1	2	1	2	2	
	NS	3	2	3	2	3	NP	NP	NP	NP	NP	NP	NP	NP	2	NP	2	3	3	
H-4	S	2	1	2	1	2	NP	1	1	2 ^d	1	2	2	2	1	2	1	2	2	
	NS	3	2	3	2	3	NP	NP	NP	NP	NP	NP	NP	NP	2	NP	2	3	3	
H-5	S	2	1	2	1	2	NP	1	1	1	2 ^d	2	2	2	1	2	1	2	2	
	NS	3	2	3	2	3	NP	NP	NP	NP	NP	NP	NP	NP	2	NP	2	3	3	
I-1 ^a	S	1	1	1	1	1	NP	3	2	2	2	2 ^d	2	1	1	1	1	1	1	
	NS	2	2	2	2	2	NP	NP	NP	NP	NP	2 ^d	NP	2	2	2	NP	2	2	
I-2	S	2	2	2	2	2	NP	3	2	2	2	2	2 ^d	2	2	2	2	2	2	
	NS	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
I-3	S	1	1	1	1	1	NP	3	2	2	2	1	2	2 ^d	1	1	1	1	1	
	NS	2	2	2	2	2	NP	NP	NP	NP	NP	2	NP	NP	2	NP	2	2	2	
I-4	S	1	1	1	1	1	NP	3	2	2	2	1	2	1	2 ^d	1	1	1	1	
	NS	2	2	2	2	2	NP	NP	NP	NP	NP	2	NP	2	NP	2	2	2	2	
M	S	1	1	1	2	1	NP	2	1	1	1	2	1	1	2 ^d	1	1	1	1	
	NS	2	2	2	3	2	NP	3	2	2	2	2	NP	2	2 ^d	2	2	2	2	
R ^a	S	1	1	1	1	1 ^c	NP	3	2	2	2	1	2	1	1	1	2 ^{d,g}	1	1 ^c	
	NS	2	2	2	2	2 ^c	NP	NP	NP	NP	NP	NP	NP	NP	2	2 ^{d,g}	2	2 ^c	2 ^c	
S-1	S	1	1	1	2	1	NP	2	1	1	1	2	1	1	1	1	3 ^d	1	1	
	NS	2	2	2	3	2	NP	3	2	2	2	2	NP	2	2	2	3 ^d	2	2	
S-2 ^b	S	N	1	N	1	1	NP	3	2	2	2	2	1	1	1	1 ^c	1	2 ^d	1	
	NS	1	2	1	2	2	NP	4	3	3	3	3	NP	2	2	2 ^c	2	2 ^d	2	
U	S	N	1	N	1	1	NP	3	2	2	2	1	2	1	1	1 ^c	1	1	1 ^d	
	NS	1	2	1	2	2	NP	4	3	3	3	2	NP	2	2	2 ^c	2	2	1 ^d	

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

N = No separation requirement.

NP = Not permitted.

a See Section 420.

b. The required separation from areas used only for private or pleasure vehicles shall be reduced by 1 hour but not to less than 1 hour.

c. See Section 406.3.4.

d. Separation is not required between occupancies of the same classification unless fire area separation is required.

e. See Section 422.2 for ambulatory care facilities.

f. A-1, A-2, A-3, A-4 & A-5 must be separated by the designated fire-resistance rating unless they are to be nonseparated mixed use.

g. R-1, R-2, R-3 & R-4 must be separated by the designated fire-resistance rating unless they are to be nonseparated mixed use.

510.2 Horizontal building separation allowance. A building shall be considered as separate and distinct buildings for the purpose of determining area limitation, continuity of *fire walls*, limitations of number of *stories* and the type of construction where all of the following conditions are met:

1. The buildings are separated with a *horizontal assembly* having a *fire-resistance rating* of not less than 3 hours.
2. The building below the *horizontal assembly* is Type IA construction.
3. *Shaft, stairway, ramp* and escalator enclosures through the *horizontal assembly* shall have not less than 2-hour *fire-resistance rating* with opening protectives in accordance with Section 716.5.

Exception: Where the enclosure walls below the *horizontal assembly* have not less than a 3-hour *fire-resistance rating* with opening protectives in accordance with Section 716.5, the enclosure walls extending above the *horizontal assembly* shall be permitted to have 1-hour *fire-resistance rating*, provided:

1. The building above the *horizontal assembly* is not required to be Type I construction;
 2. The enclosure connects fewer than four *stories*; and
 3. The enclosure opening protectives above the *horizontal assembly* have a *fire-resistance rating* of not less 1 hour.
4. The building or buildings above the *horizontal assembly* shall be permitted to have multiple Group A occupancy uses, each with an *occupant load* of less **than** 300, or Group B, M, R or S occupancies.
 5. The building below the *horizontal assembly* shall be protected throughout by an *approved automatic sprinkler* system in accordance with Section 903.3.1.1, and shall be permitted to be any occupancy allowed by this code except Group H.
 6. The maximum *building height* in feet (mm) shall not exceed the limits set forth in Section 504.3 for the building having the smaller allowable height as measured from the *grade plane*.

TABLE 602
FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON
FIRE SEPARATION DISTANCE^{a,d,g}

FIRE SEPARATION DISTANCE = X (feet)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP H ^e	OCCUPANCY GROUP F-1, M, S-1 ^f	OCCUPANCY GROUP A, B, E, F-2, I, R ⁱⁱ , S-2, U ^h
$X < 5^b$	All	3	2	1
$5 \leq X < 10$	IA	3	2	1
	Others	2	1	1
$10 \leq X < 30$	IA, IB	2	1	1 ^c
	IIB, VB	1	0	0
	Others	1	1	1 ^c
$X \geq 30$	All	0	0	0

For SI: 1 foot = 304.8 mm.

- a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
- b. See Section 706.1.1 for party walls.
- c. Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.
- d. The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.
- e. For special requirements for Group H occupancies, see Section 415.6.
- f. For special requirements for Group S aircraft hangars, see Section 412.4.1.
- g. Where Table 705.8 permits nonbearing exterior walls with unlimited area of unprotected openings, the required fire-resistance rating for the exterior walls is 0 hours.
- h. For a building containing only a Group U occupancy private garage or carport, the exterior wall shall not be required to have a fire-resistance rating where the fire separation distance is 5 feet (1523 mm) or greater.
- i. For Group R-3 detached one- and two-family dwellings of any construction type and not more than three stories above grade plane in height with a separate means of egress, a fire separation distance of 5 feet or less shall be 1-hour fire-resistant rated and shall be 0-hour fire-resistant rated for distances greater than 5 feet.
- j. For Group R-3 attached one- and two-family dwellings of any construction type separated with fire walls complying with Section 706, containing no other occupancy classification, and not more than three stories above grade plane in height with a separate means of egress, a fire separation distance of 5 feet or less shall be 1-hour fire-resistant rated and shall be 0-hour fire-resistant rated for distances greater than 5 feet.

The delayed effective date of this Rule is January 1, 2021.

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

2018 NC Building Code
714.4.2 Membrane penetration. (190312 Item B-2)

714.4.2 Membrane penetrations.

Penetrations of membranes that are part of a *horizontal assembly* shall comply with Section 714.4.1.1 or 714.4.1.2. Where floor/ceiling assemblies are required to have a *fire-resistance rating*, recessed fixtures shall be installed such that the required *fire resistance* will not be reduced.

Exceptions:

7. The ceiling membrane of 1- and 2-hour *fire-resistance-rated horizontal assemblies* is permitted to be interrupted with the double wood top plate of a wall assembly ~~that is sheathed with Type X gypsum wallboard~~, provided that all penetrating items through the double top plate are protected in accordance with Section 714.4.1.1 or 714.4.1.2 and the ceiling membrane is tight to the top plate. For 2-hour fire-resistance-rated horizontal assemblies the wall assembly must be sheathed with Type X gypsum wallboard.

The delayed effective date of this Rule is January 1, 2021.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

July 14, 2020

2018 NC Building Code
901.1 Scope. (161213 Item B-6)

901.1 Scope. ~~The provisions of this chapter shall specify where fire protection systems are required and shall apply to the design, installation, inspection, operation, testing and maintenance of all *fire protection systems*.~~

901.1 Scope. The provisions of the *International Building Code* shall specify where *fire protection systems* are required. The provisions of the *International Fire Code* shall determine the design, installation, inspection, operation, testing and maintenance of all *fire protection systems*.

The delayed effective date of this Rule for the 2018 NC Building Code is January 1, 2019.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

(Note: Also printed in 2018 Fire Prevention Code, Section 901.1.)

903.2.8 Group R. An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*, except as provided for in Section 903.2.8.5.

Exceptions:

1. An *automatic sprinkler system* is not required in new adult and child day care facilities located in existing Group R-3 and R-4 occupancies.
2. An *automatic sprinkler system* is not required in *temporary overflow shelters*.
3. An *automatic sprinkler system* is not required in camping units located within a campground where all of the following conditions exist.
 - 3.1. The camping unit is limited to one story in height.
 - 3.2. The camping unit is less than 400 square feet (37 m²) in area.
 - 3.3. The camping unit does not have a kitchen.
4. An automatic sprinkler system is not required in an *open air camp cabin* that complies with the following:
 - 4.1. The *open air camp cabin* shall have at least two remote unimpeded exits. Lighted exit signs shall not be required.
 - 4.2. The *open air camp cabin* shall not be required to have plumbing or electrical systems, but if the cabin has these systems, then the provisions of the code otherwise applicable to those systems shall apply.
 - 4.3. Smoke **alarms** and portable fire extinguishers may be required as otherwise provided in the code.
5. An *automatic sprinkler system* is not required in the following Group R-3 buildings not more than three stories above grade plane in height with a separate *means of egress*:
 - 5.1. Detached one- and two-family *dwellings*.
 - 5.2. Attached one- and two-family *dwellings* separated with fire walls complying with Section 706 and containing no other occupancy classification.

The delayed effective date of this Rule is January 1, 2021.

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

905.3.1 Height. Class III standpipe systems shall be installed throughout buildings where ~~the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of the fire department vehicle access, or where the floor level of the lowest story is located more than 30 feet (9144 mm) below the heights level of fire department vehicle access.~~ any of the following exist:

1. Four or more stories are above or below grade plane.
2. The floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of the fire department vehicle access.
3. The floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.

Exceptions:

1. Class I standpipes are allowed in *buildings* equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.
2. Class I standpipes are allowed in Group B and E occupancies.
- ~~2~~ 3. Class I manual standpipes are allowed in *open parking garages* where the highest floor is located not more than 150 feet (45720 mm) above the lowest level of fire department vehicle access.
- ~~3~~ 4. Class I manual dry standpipes are allowed in *open parking garages* that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.5.
- ~~4~~ 5. Class I standpipes are allowed in *basements* equipped throughout with an *automatic sprinkler system*.
6. Class I standpipes are allowed in buildings where occupant-use hose lines will not be utilized by trained personnel or the fire department.
- ~~5~~ 7. In determining the lowest level of fire department vehicle access, it shall not be required to consider either of the following:
 - 5.7.1 Recessed loading docks for four vehicles or less.
 - 5.7.2 Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

The delayed effective date of this Rule is January 1, 2021.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2018 NC Building Code
915 Carbon Monoxide Alarm and Detection Systems. (180612 Item B-5)

915.1.1 Where required. Carbon monoxide detection shall be provided in Group A-2, I-1, I-2, I-4 and R occupancies and in classrooms in Group E occupancies in the locations specified in Section 915.2 where any of the conditions in Sections 915.1.2 through 915.1.6 exist.

915.1.2 Fuel-burning appliances and fuel-burning fireplaces. Carbon monoxide detection shall be provided in Group A-2 occupancies, dwelling units, sleeping units and classrooms that contain a fuel-burning appliance or a fuel-burning fireplace.

915.1.3 Forced air furnaces. Carbon monoxide detection shall be provided in Group A-2 occupancies, dwelling units, sleeping units and classrooms served by a fuel-burning, forced air furnace.

915.4.1 Power source. Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than that required for overcurrent protection.

Exceptions:

1. Where installed in buildings without commercial power, battery-powered carbon monoxide alarms shall be an acceptable alternative.
2. In A-2 occupancies the carbon monoxide detector shall be permitted to be battery-powered.

The delayed effective date of this Rule is January 1, 2020.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

[Note: This Rule will also be printed in the 2018 NC Fire Code, 915 Carbon Monoxide Alarm and Detection Systems.]

2018 NC Building Code
1009.7.2 Separation. (180911 Item B-2)

1009.7.2 Separation.

(no change to subsection)

Exceptions:

1. 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.
2. The fire-resistance rating and opening protectives are not required in the exterior wall where the building is equipped throughout with an automatic sprinkler system installed in accordance with section 903.3.1.1 or 903.3.1.2.

The delayed effective date of this Rule is January 1, 2020.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

[Note: This Rule will also be printed in the 2018 NC Fire Code, 1009.7.2 Separation.]

2018 NC Building Code
1010.1.9.11 Stairway doors. (180313 Item B-10)

[BE] 1010.1.9.11 Stairway doors.

Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.

Exceptions:

1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.
2. This section shall not apply to doors arranged in accordance with Section 403.5.3 of the International Building Code.
3. ~~In stairways serving not more than four stories, doors are permitted to be locked from the side opposite the egress side, provided they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon a signal from the fire command center, if present, or a signal by emergency personnel from a single location inside the main entrance to the building.~~
3. Stairway exit doors are permitted to be locked from the side opposite the egress side, provided that they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon a signal from the fire command center, if present, or a signal by emergency personnel from a single location inside the main entrance to the building and upon activation of the fire alarm if present.
4. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group B, F, M and S occupancies where the only interior access to the tenant space is from a single exit stairway where permitted in Section 1006.3.2.
5. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the dwelling unit is from a single exit stairway where permitted in Section 1006. 3.2.
6. ~~In other than high rise, stairways serving floors above a 3 hour horizontal building separation, doors are permitted to be locked from the side opposite the egress side, provided they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon activation of the building fire alarm system.~~

The delayed effective date of this Rule is January 1, 2020.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

[Note: This Rule will also be printed in the 2018 NC Fire Prevention Code, 1010.1.9.11 Stairway doors.]

July 14, 2020

TABLE 1020.1
CORRIDOR FIRE-RESISTANCE RATING^k

(The table remains unchanged; only footnote f is affected)

- 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 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.

2018 NC Building Code

1107.6.2.2.1 Type A units. (161213 Item B-11)

(See also 190910 Item B-2 below for further amendment to this section)

1107.6.2.2.1 Type A units.

In Group R-2 occupancies containing ~~11 or more~~ **than 15** *dwelling units or sleeping units*, at least **5 percent** but not less than one of the units shall be a *Type A unit*. ~~For a site with more than 100 units, at least 2 percent of the number of units exceeding 100 shall be Type A units.~~ All Group R-2 units on a *site* shall be considered to determine the total number of units and the required number of *Type A units*. *Type A units* shall be dispersed among the various classes of units. Bedrooms in monasteries and convents shall be counted as *sleeping units* for the purpose of determining the number of units. Where the *sleeping units* are grouped into suites, only one *sleeping unit* in each suite shall count towards the number of required *Type A unit*

Exceptions:

1. The number of *Type A units* is permitted to be reduced in accordance with Section 1107.7.
2. *Existing structures* on a *site* shall not contribute to the total number of units on a *site*.

The delayed effective date of this Rule is January 1, 2019.

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

(Note: The remainder is part of the 2018 Code adoption package.)

(Note: Also “more than 15” correlation with 2018 Existing Building Code adoption package, 806.1.8.)

1107.6.2.2.1. Type A Units. In Group R-2 occupancies containing more than ~~15~~ 20 *dwelling units* or *sleeping units*, at least 5 percent but not less than one of the units shall be a *Type A unit*. All Group R-2 units on a *site* shall be considered to determine the total number of units and the required number of *Type A units*. *Type A units* shall be dispersed among the various classes of units. Bedrooms in monasteries and convents shall be counted as *sleeping units* for the purpose of determining the number of units. Where the *sleeping units* are grouped into suites, only one *sleeping unit* in each suite shall count towards the number of required *Type A units*.

Exceptions:

1. The number of *Type A units* is permitted to be reduced in accordance with Section 1107.7.
2. *Existing structures* on a *site* shall not contribute to the total number of units on a *site*.
3. For a *site* with more than 100 units, at least 2 percent of the number of units exceeding 100 shall be *Type A units*.

The delayed effective date of this Rule is January 1, 2021.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2018 NC Building Code
1301.1.1 Criteria. (170613 Item B-6)

1301.1.1 Criteria. Buildings shall be designed and constructed in accordance with the *International Energy Conservation Code*.

Exception: Per G.S. 143-138 (b18), no energy conservation code provisions shall apply to any structure for which the primary occupancy classification is Group F, S, or U. This exclusion shall apply to the entire building area.

The delayed effective date of this Rule is January 1, 2019.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2018 NC Building Code
1705.4 Masonry construction. (180612 Item B-2)

1705.4 Masonry construction.

Exception: Special inspections and tests shall not be required for:

4. Non-load bearing masonry partition walls and screens as determined and designated as such by the registered design professional in or added to the construction documents.

The delayed effective date of this Rule is January 1, 2020.

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

July 14, 2020

2018 NC Building Code

Table 2902.1 Minimum Number of Required Plumbing Fixtures. (191210 Item B-17 and B-19)

(Only affected portions of the table are displayed here. Other portions of the table are unchanged by this amendment.)

**[P] TABLE 2902.1
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES**

NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (URINALS: SEE SECTION 419.2 OF THE INTERNATIONAL PLUMBING CODE)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAIN (SEE SECTION 410 OF THE INTERNATIONAL PLUMBING CODE)	OTHER
				MALE	FEMALE	MALE	FEMALE			
2	Business (see sections 403.2.403.3 and 403.3.3.1)	B	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 <u>30</u> for the first 50 <u>30</u> and 1 per 50 for the remainder exceeding 50 <u>30</u>		1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80		—	1 per 100	1 service sink ^o
6	Mercantile (see sections 2902.2.2902.3 and 2902.3.3.2)	M	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500		1 per 750		—	100 - 1,000 1 greater than 1,000 require 1 more for each additional 1,000	1 service sink ^{e,o}

- a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by this code.
- b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.
- c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient *sleeping units* shall be permitted, provided that each patient *sleeping unit* has direct access to the toilet room and provisions for privacy for the toilet room user are provided.
- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. The number of fixtures provided shall be based on either the capacity of the church sanctuary or the church educational building (including fellowship halls and multiple purpose rooms), whichever is larger and within 300 feet (91.44 m).
- f. For attached one- and two-family dwellings, one automatic clothes washer connection shall be required per 20 dwelling units.
- g. A mop receptacle with a water supply, or a hose bib and floor drain, may be used in lieu of a service sink.
- h. A can wash may be used in lieu of a service sink.
- i. See Section 2902.9 for additional information on plumbing fixtures for schools.
- j. When the rearrangement of an area or space increases the occupant content, the plumbing facilities shall be increased in accordance with this code.
- k. For baseball stadiums, the number of fixtures shall be reduced by 50 percent.
- l. Service sink may be omitted when located within a single-family dwelling.
- m. Self-service mini-storage facilities without an office area are exempt.
- n. Unheated storage buildings which are used periodically are not required to have toilet rooms.

- o. For business and mercantile occupancies with an occupant load of ~~25~~ 30 or fewer, service sinks shall not be required.
- p. See section 2902.7 for adjustments in occupant count.

The delayed effective date of this Rule is January 1, 2021.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2018 NC Building Code

Table 2902.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES. (180911 Item B-19)
 (Only affected portions of the table are displayed here. Other portions of the table are unchanged by this amendment.)

Table 2902.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES

NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (URINALS: SEE SECTION 419.2 OF THE INTERNATIONAL PLUMBING CODE)	LAVATORIES	BATHTUBS/SHOWERS	DRINKING FOUNTAIN (SEE SECTION 410)	OTHER
2	Business (See Sections 2902.2, 2902.3, and 2902.3.2.2)	B	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50	1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80	—	1 per 100 ^q	1 service sink ^o

q. For business occupant loads of 25 or fewer, drinking fountains shall not be required.

The delayed effective date of this Rule is January 1, 2020.
 The Statutory authority for Rule-making is G. S. 143-136; 143-138.

[Note: This Rule will also be printed in the 2018 NC Plumbing Code, Table 403.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES.]

2018 NC Building Code

ERRATA – line up the columns for “water closets, lavatories, drinking fountains” as shown
 (Only affected portions of the table are displayed here. Other portions of the table are unchanged by this amendment.)

TABLE 2902.1
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^{a, b}

NO.	CLASSIFI- CATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (URINALS: SEE SECTION 419.2)		LAVATORIES	BATHTUBS/ SHOWERS	DRINKING FOUNTAIN (SEE SECTION 410)	OTHER
3	Educational	E ^b	K-8	1 per 25	1 per 25	1 per 60	—	1 per 100	—
			9-12	1 per 30	1 per 25	1 per 100			
			Teacher/staff	1 per 30	1 per 25	1 per 100			

2018 NC Building Code

2902.1.1 Fixture calculations. (170912 Item B-2)

2902.1.1 Fixture calculations.

To determine the occupant load of each sex, the total occupant load shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the occupant load of each sex in accordance with Table 403.1. Fractional numbers resulting from applying the fixture ratios of Table 403.1 shall be rounded up to the next whole number. For calculations involving multiple *occupancies*, such fractional numbers for each *occupancy* shall first be summed and then rounded up to the next whole number.

Exceptions:

1. The total occupant load shall not be required to be divided in half where *approved* statistical data indicates a distribution of the sexes of other than 50 percent of each sex.
2. In buildings that contain dwellings or sleeping units that have a pool dedicated to the residents, a percentage reduction of the total required fixtures provided for a pool and pool deck without bleachers and grandstands may be taken equal to the percentage of ~~total~~ residential units whose entries fall within a 500 feet foot horizontal travel distance of the pool deck. In multi-story structures, the residential units located not more than one story above or below the pool and pool deck may be included in the percentage. Travel from the pool to the required toilet facilities shall be on an accessible route.

The delayed effective date of this Rule is January 1, 2019.

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

(Note: Also printed in 2018 Plumbing Code, Section 403.1.1, Exception 2.)

2018 NC Building Code
2902.2 Separate Facilities. (191210 Item B-15)

[P] 2902.2 Separate facilities.

Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for *dwelling units* and *sleeping units*.
2. Separate facilities shall not be required in business occupancies with a total occupant load, including both employees and customers, of 30 or fewer. Separate facilities shall not be required in all other structures or tenant spaces with a total occupant load, including employees and customers, of 25 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or less.
4. Except as provided in Section 405.3.2 of the North Carolina Plumbing Code.
5. Where the code requires only one toilet facility for each sex, two unisex facilities may be substituted for separate sex facilities.

The delayed effective date of this Rule is January 1, 2021.

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

July 14, 2020

2018 NC Building Code
2902.6 Small Occupancies. (191210 Item B-13)

[P] 2902.6 Small occupancies. Drinking fountains shall not be required for an occupant load of ~~45~~ 30 or fewer.

The delayed effective date of this Rule is January 1, 2021.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

July 14, 2020

SECTION H101 GENERAL

H101.2 Signs exempt from permits. The following signs are exempt from the requirements to obtain a *permit* before erection:

1. Nonilluminated wall signs.
2. Temporary signs.
3. Signs erected by transportation authorities.
4. Projecting signs not exceeding 6 square feet (0.56 m²).
5. The changing of moveable parts of an approved sign that is designed for such changes, or the repainting or repositioning of display matter shall not be deemed an alteration.
6. Ground signs less than 6 feet (1829 mm) in height above finished grade.

SECTION H109 GROUND SIGNS

H109.2 Required Clearance. The bottom coping of every ground sign shall be not less than 3 feet (914 mm) above the ground or street level, which space can be filled with platform decorative trim or light wooden construction.

Exception: Signs that have a solid base of masonry, steel or similar material, commonly known as monument signs.

The delayed effective date of this Rule is January 1, 2020.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.