

# SUBMISSION FOR PERMANENT RULE

2018 NC Mechanical Code

Table 403.3.1.1 Minimum Ventilation Rates. (191210 Item B-1)

**TABLE 403.3.1.1  
MINIMUM VENTILATION RATES**

OCCUPANCY CLASSIFICATION	OCCUPANT DENSITY #/1000 FT <sup>2 a</sup>	PEOPLE OUTDOOR AIRFLOW RATE IN BREATHING ZONE, R <sub>p</sub> CFM/PERSON	AREA OUTDOOR AIRFLOW RATE IN BREATHING ZONE, R <sub>a</sub> CFM/FT <sup>2 a</sup>	EXHAUST AIRFLOW RATE CFM/FT <sup>2 a</sup>
<b>Correctional facilities</b>				
Booking/waiting	50	7.5	0.06	—
Cells				
without plumbing fixtures	25	5	0.12	—
with plumbing fixtures <sup>g</sup>	25	5	0.12	1.0
Day room	30	5	0.06	—
Dining halls (see food and beverage service)	—	—	—	—
Guard stations	15	5	0.06	—
<b>Dry cleaners, laundries</b>				
Coin-operated dry cleaner	20	15	—	—
Coin-operated laundries	20	7.5	0.06	—
Commercial dry cleaner	30	30	—	—
Commercial laundry	10	25	—	—
Storage, pick up	30	7.5	0.12	—
<b>Education</b>				
Art classroom	20	10	0.18	0.7
Auditoriums	150	5	0.06	—
Classrooms (ages 5-8)	25	7.5	—	—
Classrooms (age 9 plus)	35	7.5	—	—
Computer lab	25	10	0.12	—
Corridors (see public spaces)	—	—	—	—
Day care (through age 4)	25	10	0.18	—
Lecture classroom	65	7.5	0.06	—
Lecture hall (fixed seats)	150	7.5	0.06	—
Locker/dressing rooms <sup>g</sup>	—	—	—	0.25
Media center	25	10	0.12	—
Multiuse assembly	100	7.5	0.06	—
Music/theater/dance	35	10	0.06	—
Science laboratories	25	10	0.18	—
Smoking lounges <sup>b</sup>	70	60	—	—
Sports locker rooms <sup>g</sup>	—	—	—	0.5
Wood/metal shops <sup>g</sup>	20	10	0.18	0.5
<b>Food and beverage service</b>				
Bars, cocktail lounges	100	7.5	0.18	—
Cafeteria, fast food	100	7.5	0.18	—
Dining rooms	70	7.5	0.18	—
Kitchens (cooking) <sup>b</sup>	—	—	—	0.7
<b>Hotels, motels, resorts and dormitories</b>				
Bathrooms/toilet—private <sup>g</sup>		—	—	25/50 <sup>f</sup>
Bedroom/living room		5	0.06	—

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Conference/meeting		5	0.06	—
Dormitory sleeping areas		5	0.06	—
Gambling casinos		7.5	0.18	—
Lobbies/prefunction		7.5	0.06	—
Multipurpose assembly		5	0.06	—
<b>Offices</b>				
Conference rooms	50	5	0.06	—
Main entry lobbies	10	5	0.06	—
Office spaces	5	5	0.06	—
Reception areas	30	5	0.06	—
Telephone/data entry	60	5	0.06	—
<b>Private dwellings, single and multiple</b>				
Garages, common for multiple units <sup>b</sup>	—	—	—	0.75
<u>Garages, below dwelling units</u>	—	—	—	<u>100 cfm per car</u>
Kitchens <sup>b</sup>	—	—	—	25/100 <sup>f</sup>
Living areas <sup>c</sup>	Based upon number of bedrooms. First bedroom, 2; each additional bedroom, 1	0.35 ACH but not less than 15 cfm/person	—	—
Toilet rooms and bathrooms <sup>g</sup>	—	—	—	25/50 <sup>f</sup>
<b>Public spaces</b>				
Corridors	—	—	0.06	—
Courtrooms	70	5	0.06	—
Elevator car	—	—	—	1.0
Legislative chambers	50	5	0.06	—
Libraries	10	5	0.12	—
Museums (children's)	40	7.5	0.12	—
Museums/galleries	40	7.5	0.06	—
Places of religious worship	120	5	0.06	—
Shower room (per shower head) <sup>g</sup>	—	—	—	50/20 <sup>f</sup>
Smoking lounges <sup>b</sup>	70	60	—	—
Toilet rooms — public <sup>g</sup>	—	—	—	50/70 <sup>e</sup>
<b>Retail stores, sales floors and showroom floors</b>				
Dressing rooms	—	—	—	0.25
Mall common areas	40	7.5	0.06	—
Sales	15	7.5	0.12	—
Shipping and receiving	—	—	0.12	—
Smoking lounges <sup>b</sup>	70	60	—	—
Storage rooms	—	—	0.12	—
Warehouses (see storage)	—	—	—	—
<b>Specialty shops</b>				
Automotive motor-fuel dispensing stations <sup>b</sup>	—	—	—	1.5
Barber	25	7.5	0.06	0.5
Beauty salons <sup>b</sup>	25	20	0.12	0.6
Nail salons <sup>b,h</sup>	25	20	0.12	0.6
Embalming room <sup>b</sup>	—	—	—	2.0
Pet shops (animal areas) <sup>b</sup>	10	7.5	0.18	0.9
Supermarkets	8	7.5	0.06	—
<b>Sports and amusement</b>				

## SUBMISSION FOR PERMANENT RULE

Bowling alleys (seating areas)	40	10	0.12	—
Disco/dance floors	100	20	0.06	—
Game arcades	20	7.5	0.18	—
Gym, stadium, arena (play area)	—	—	0.30	—
Health club/aerobics room	40	20	0.06	—
Health club/weight room	10	20	0.06	—
Ice arenas without combustion engines	—	—	0.30	0.5
Spectator areas	150	7.5	0.06	—
Swimming pools (pool and deck area)	—	—	0.48	—
<b>Storage</b>				
Repair garages, enclosed parking garages <sup>b,d</sup>	—	—	—	0.75
Warehouses	—	—	0.06	—
<b>Theaters</b>				
Auditoriums (see education)	—	—	—	—
Lobbies	150	—	0.06	—
Stages, studios	70	—	0.06	—
Ticket booths	60	5	0.06	—
<b>Transportation</b>				
Platforms	100	7.5	0.06	—
Transportation waiting	100	7.5	0.06	—
<b>Workrooms</b>				
Bank vaults/safe deposit	5	5	0.06	—
Computer (without printing)	4	5	0.06	—
Copy, printing rooms	4	5	0.06	0.5
Darkrooms	—	—	—	1.0
Meat processing <sup>c</sup>	10	15	—	—
Pharmacy (prep. area)	10	5	0.18	—
Photo studios	10	5	0.12	—

For SI: 1 cubic foot per minute =  $0.0004719 \text{ m}^3/\text{s}$ , 1 ton = 908 kg, 1 cubic foot per minute per square foot =  $0.00508 \text{ m}^3/(\text{s} \cdot \text{m}^2)$ ,  $^{\circ}\text{C} = [(^{\circ}\text{F}) - 32]/1.8$ , 1 square foot =  $0.0929 \text{ m}^2$ .

- a. Based upon *net occupiable floor area*.
- b. Mechanical exhaust required and the recirculation of air from such spaces to other spaces is prohibited. Recirculation of air that is contained completely within such spaces shall not be prohibited (see Section 403.2.1, Item 3).
- c. Spaces unheated or maintained below 50°F are not covered by these requirements unless the occupancy is continuous.
- d. Ventilation systems in enclosed parking garages shall comply with Section 404.
- e. Rates are per water closet or urinal. The higher rate shall be provided where the exhaust system is designed to operate intermittently. The lower rate shall be permitted only where the exhaust system is designed to operate continuously while occupied.
- f. Rates are per room unless otherwise indicated. The higher rate shall be provided where the exhaust system is designed to operate intermittently. The lower rate shall be permitted only where the exhaust system is designed to operate continuously while occupied.
- g. Mechanical exhaust is required and recirculation to other spaces is prohibited except that recirculation shall be permitted where the resulting supply airstream consists of not more than 10 percent air recirculated from these spaces. Recirculation of air that is contained completely within such spaces shall not be prohibited (see Section 403.2.1, Items 2 and 4).
- h. For nail salons, each manicure and pedicure station shall be provided with a *source capture system* capable of exhausting not less than 50 cfm per station. Exhaust inlets shall be located in accordance with Section 502.20. Where one or more required source capture systems operate continuously during occupancy, the exhaust rate from such systems shall be permitted to be applied to the exhaust flow rate required by Table 403.3.1.1 for the nail salon.
- i. *Commentary: Refer to design guidelines, NC Department of Public Instruction School Planning, Z9.5 American National Standard for Laboratory Ventilation.*
- j. If the tenants of the dwelling have exclusive use of the garage below, no exhaust is required.

## **SUBMISSION FOR PERMANENT RULE**

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

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

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 NC Energy Conservation Code, C401.2

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

**PLEASE NOTE:** *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*You are amending the 2018 Code, correct? If so, please update the date on the first line.*

*Consider ending (1) through (3) with semicolons, not periods, and inserting an "or" at the end of (3).*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020

# SUBMISSION FOR PERMANENT RULE

2017 NC Energy Conservation Code  
C401.2 Application. (191210 Item B-3)

## C401.2 Application

Commercial buildings shall comply with one of the following:

1. The requirements of ANSI/ASHRAE/IESNA 90.1.
2. The requirements of Sections C402 through C405. In addition, commercial buildings shall comply with Section C406 and tenant spaces shall comply with Section C406.1.1.
3. The requirements of Sections C402.5, C403.2, C404, C405.2, C405.3, C405.5, C405.6 and C407. The building energy cost shall be equal to or less than 85 percent of the standard reference design building.
4. ~~North Carolina specific~~ COMcheck keyed to the 2018 IECC or ASHRAE 90.1—~~2013 2016 COMcheck~~ shall be permitted to demonstrate compliance with this code.

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

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 NC Energy Conservation Code, R401.2

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*You are amending the 2018 Code, correct? Please update the date on the first line.*

*Consider ending (1) through (3) with semicolons, not periods, and inserting an "or" at the end of (3).*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020

## **SUBMISSION FOR PERMANENT RULE**

2017 NC Energy Conservation Code  
R401.2 Application. (191210 Item B-3)

### **R401.2 Compliance.**

Projects shall comply with one of the following:

1. Sections R401 through R404.
2. Section R405 and the provisions of Sections R401 through R404 labeled “Mandatory.”
3. An energy rating index (ERI) approach in Section R406.
4. ~~North Carolina specific~~ REScheck keyed to the 2018 IECC shall be permitted to demonstrate compliance with this code. Envelope requirements may not be traded off against the use of high efficiency heating or cooling equipment. No tradeoff calculations are needed for required termite inspection and treatment gaps.

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



## SUBMISSION FOR PERMANENT RULE

2018 NC Residential Code  
R102.5 Appendices. (191210 Item B-4)

**R102.5 Appendices.** Provisions in the appendices shall not apply unless specifically referenced in the code text ~~adopting ordinance~~.

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

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 NC Residential Code, R311.2

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*What is an interior egress door?*

*Since "readily openable" was already in the Code, I take it your regulated public knows what that means?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020

## SUBMISSION FOR PERMANENT RULE

2018 NC Residential Code

R311.2 Egress Door. (191210 Item B-9)

**R311.2 Egress door.** Not less than one exterior egress door shall be provided for each *dwelling* unit. The egress door shall be side-hinged, and shall provide a clear width of not less than 32 inches (813 mm) where measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The clear height of the door opening shall be not less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Other exterior doors shall not be required to comply with these minimum dimensions. ~~Egress doors shall be readily openable from inside the dwelling.~~ All interior egress doors and a minimum of one exterior egress door shall be readily openable from the side from which egress is to be made without the use of a key or special knowledge or effort.

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

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

## SUBMISSION FOR PERMANENT RULE

2018 NC Residential Code

R311.7.4 Walkline. (191210 Item B-12)

**R311.7.4** Walkline.~~Deleted~~ The walkline across winder treads shall be concentric to the curved direction of travel through the turn and located 12 inches (305 mm) from the side where the winders are narrower. The 12 inch (305 mm) dimension shall be measured from the widest point of the clear stair width at the walking surface of the winder. If winders are adjacent within the flight, the point of the widest clear stair width of the adjacent winders shall be used.

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

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

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 NC Residential Code, R311.7.5.2.1

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Just so I'm clear – the intent is for the second sentence to read, “Winder treads shall have a minimum tread depth of 4 inches (102 mm) at any point.”?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020

## SUBMISSION FOR PERMANENT RULE

2018 NC Residential Code

R311.7.5.2.1 Winder Treads. (191210 Item B-12)

**R311.7.5.2.1** Winder treads. Winder treads shall have a minimum tread depth of ~~not less than~~ 9 inches (229 mm) measured ~~between the vertical planes of the foremost projection of adjacent treads at the intersection with the~~ walkline as above a point 12 inches (305 mm) from the side where the treads are narrower. Winder treads shall have a minimum tread depth of ~~not less than~~ 4 inches (102 mm) at any point ~~within the clear width of the stair~~. Within any flight of stairs, the ~~largest~~ greatest winder tread depth at the 12 inch (305 mm) walkline shall not exceed the smallest ~~winder tread~~ by more than 3/8 inch (9.5 mm).

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

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

## SUBMISSION FOR PERMANENT RULE

2018 NC Residential Code

R311.7.5.3 Nosings. (191210 Item B-10)

**R311.7.5.3 Nosings.** The radius of curvature at the nosing shall be not greater than 9/16 inch (14 mm). A nosing projection not less than 3/4 inch (19 mm) and not more than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing projection shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm) between two stories, including the nosing at the level of floors and landings. Beveling of nosings shall not exceed 1/2 inch (12.7 mm).

**Exceptions:**

1. A nosing projection is not required where the tread depth is not less than 11 inches (279 mm).
2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.

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

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

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 NC Residential Code, R312.1.2

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Since you are adding language to permit the open risers that prevent the passage of the four inch sphere to R312.2.1, I do not think you need to add Exception 3, as that just recites that new language. It strikes me as duplicative.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020



## SUBMISSION FOR PERMANENT RULE

2018 NC Residential Code  
R312.1.2 Height. (191210 Item B-10)

**R312.1.2 Height.** Required *guards* at open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than 36 inches (914 mm) in height as measured vertically above the adjacent walking surface or the line connecting the leading edges of the treads. Open risers are permitted, provided that the opening between treads does not permit the passage of a 4-inch diameter (102 mm) sphere.

**Exceptions:**

1. *Guards* on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the treads.
2. Where the top of the *guard* serves as a handrail on the open sides of stairs, the top of the *guard* shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) as measured vertically from a line connecting the leading edges of the treads.
3. Open risers that prevent the passage of a 4-inch (102 mm) diameter sphere.

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

## SUBMISSION FOR PERMANENT RULE

2018 NC Residential Code

R312.1.3 Opening Limitations. (191210 Item B-10)

**R312.1.3 Opening limitations.** Required *guards* shall not have openings from the walking surface to the required *guard* height that allow passage of a sphere 4 inches (102 mm) in diameter.

**Exceptions:**

1. The triangular openings at the open side of stair, formed by the riser, tread and bottom rail of a *guard*, shall not allow passage of a sphere 6 inches (153 mm) in diameter.
2. *Guards* on the open side of stairs shall not have openings that allow passage of a sphere 4 3/8 inches (111 mm) in diameter.
3. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.

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

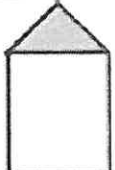
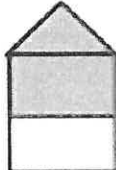
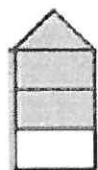
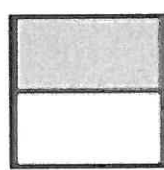
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

# SUBMISSION FOR PERMANENT RULE

2018 NC Residential Code

Table R602.3(5) Size, Height and Spacing of Wood Studs. (191210 Item B-7)

**TABLE R602.3(5)**  
**SIZE, HEIGHT AND SPACING OF WOOD STUDS<sup>a,d</sup>**

STUD SIZE (inches)	BEARING WALLS					NONBEARING WALLS	
	Laterally unsupported stud height <sup>a</sup> (feet)	Maximum spacing when supporting a roof-ceiling assembly or a habitable attic assembly, only (inches)	Maximum spacing when supporting one floor, plus a roof-ceiling assembly or a habitable attic assembly (inches)	Maximum spacing when supporting two floors, plus a roof-ceiling assembly or a habitable attic assembly (inches)	Maximum spacing when supporting one floor height <sup>a</sup> (inches)	Laterally unsupported stud height <sup>a</sup> (feet)	Maximum spacing (inches)
							
2 × 3 <sup>b</sup>	—	—	—	—	—	10	16
2 × 4	10	24 <sup>c</sup>	16 <sup>c</sup>	e d	24	14	24
3 × 4	10	24	24	16	24	14	24
2 × 5	10	24	24	—	24	16	24
2 × 6	10	24	24	16	24	20	24

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

- Listed heights are distances between points of lateral support placed perpendicular to the plane of the wall. Bearing walls shall be sheathed on not less than one side or bridging shall be installed not greater than 4 feet apart measured vertically from either end of the stud. Increases in unsupported height are permitted where in compliance with Exception 2 of Section R602.3.1 or designed in accordance with accepted engineering practice.
- Shall not be used in exterior walls.
- A habitable attic assembly supported by 2 × 4 studs is limited to a roof span of 32 feet. Where the roof span exceeds 32 feet, the wall studs shall be increased to 2 × 6 or the studs shall be designed in accordance with accepted engineering practice.
- ~~One half of the studs interrupted by a wall opening shall be placed immediately outside the jack studs on each side of the opening as king studs to resist wind loads. King studs shall extend full height from sole plate to top plate of the wall.~~
- ~~2 × 4 studs at 12 inches maximum spacing are permitted in accordance with Table R4505(b).~~

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

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

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 NC Residential Code, Table R602.7.5

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Please correct the citation and name of the Rule on the second line.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020

# SUBMISSION FOR PERMANENT RULE

2018 NC Residential Code

Table R602.3(5) Size, Height and Spacing of Wood Studs. (191210 Item B-7)

**TABLE R602.7.5**  
**MINIMUM NUMBER OF FULL HEIGHT KING STUDS**  
**AT EACH END OF HEADERS IN EXTERIOR WALLS**

HEADER SPAN (feet)	MAXIMUM STUD SPACING (inches) [per Table R602.3(5)]	
	16	24
≤3'	1	1
4'	2	1
8'	3	2
12'	5	3
16'	6	4

HEADER SPAN (feet)	MINIMUM NUMBER OF FULL HEIGHT STUDS (King)
Up to 3'	<u>1</u>
>3' to 6'	<u>2</u>
>6' to 9'	<u>3</u>
>9' to 12'	<u>4</u>
>12' to 15'	<u>5</u>

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

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

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 NC Residential Code, R703.8.2.1

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

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In reviewing this Rule, the staff recommends the following technical changes be made:

*R703.8.2.1: Please be sure when you publish this Rule that “approved” and “building official” stay italicized.*

*Figure R703.8.2.1: So that I’m clear – is the only change to this Figure to make the lines for counter flashing and base flashing bold? And should “counter flashing” be two words?*

*From what you published, it appears that you intended to add language under “Fasteners” to state “per R703.8.2.1” Did the agency decide to not make this change?*

*Figure R703.8.2.2: So that I’m clear – is the only change to this Figure to make the lines for counter flashing and base flashing bold? And should “counter flashing” be two words?*

*From what you published, it appears that you intended to add language under “Fasteners” to state “per R703.8.2.1” Did the agency decide to not make this change?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020

# SUBMISSION FOR PERMANENT RULE

2018 NC Residential Code

R703.8.2.1 Support by Steel Angle. (191210 Item B-11)

**R703.8.2.1 Support by steel angle.** A minimum 6-inch by 4-inch by 5/16-inch (152 mm by 102 mm by 8 mm) steel angle, with the long leg placed vertically, shall be anchored to double 2-inch by 4-inch (51 mm by 102 mm) wood studs at a maximum on-center spacing of 16 inches (406 mm). Anchorage of the steel angle at every double stud spacing shall be a minimum of not less than two 7/16-inch diameter (11 mm) by 4-inch (102 mm) lag screws for wood construction at every double stud or shall be a minimum of two 7/16-inch diameter (11.1 mm) by 4 inches (102 mm) lag screws into solid double blocking with each pair of lag screws spaced at horizontal intervals not to exceed 16 inches (406 mm). The steel angle shall have a minimum clearance to underlying construction of 1/16 inch (1.6 mm). Not less than A minimum of two-thirds the width of the masonry veneer thickness shall bear on the steel angle. Flashing and weep holes shall be located in the masonry veneer in accordance with Figure R703.8.2.1. The maximum height of masonry veneer above the steel angle support shall be 12 feet 8 inches (3861 mm). The airspace separating the masonry veneer from the wood backing shall be in accordance with Sections R703.8.4 and R703.8.4.2. The method of support for the masonry veneer on ~~wood construction~~ steel angle shall be constructed in accordance with Figure R703.8.2.1.

The maximum slope of the roof construction without stops shall be 7:12. Roof construction with slopes greater than 7:12 but not more than 12:12 shall have stops of a minimum 3-inch by 3-inch by 1/4-inch (76 mm by 76 mm by 6.4 mm) steel plate welded to the angle at 24 inches (610 mm) on center along the angle or as approved by the building official.

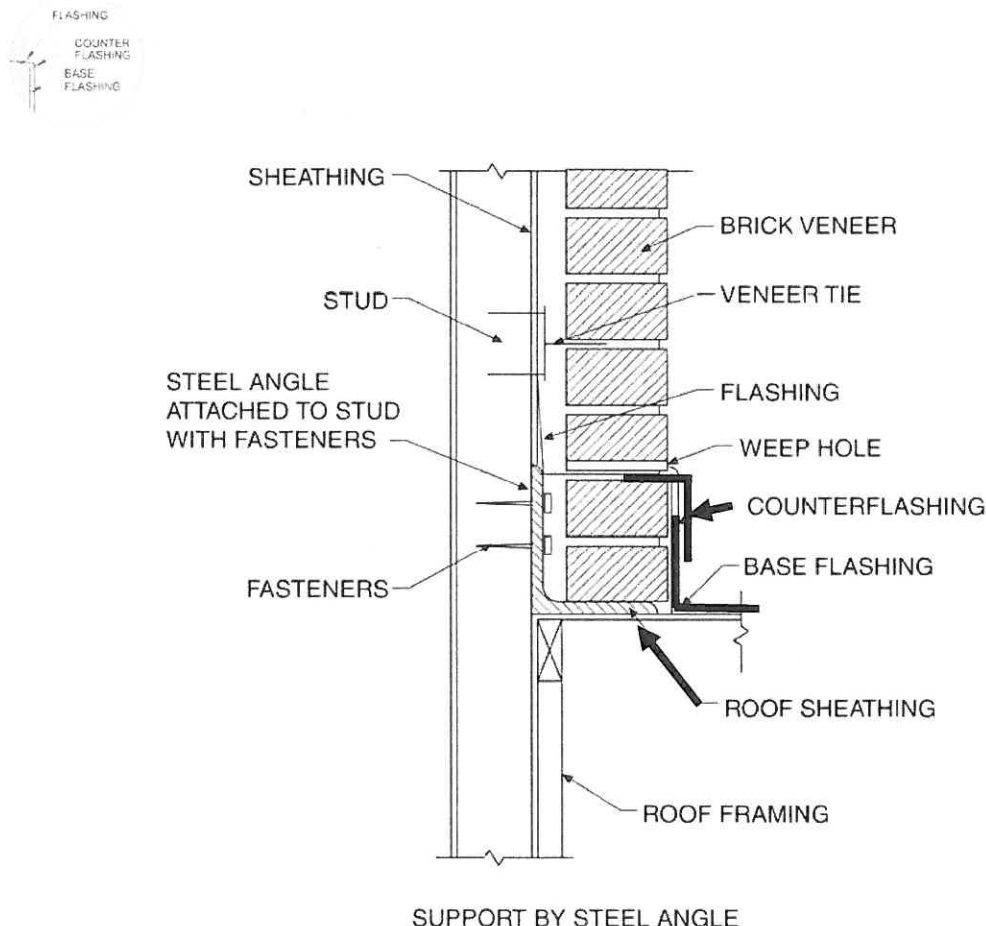
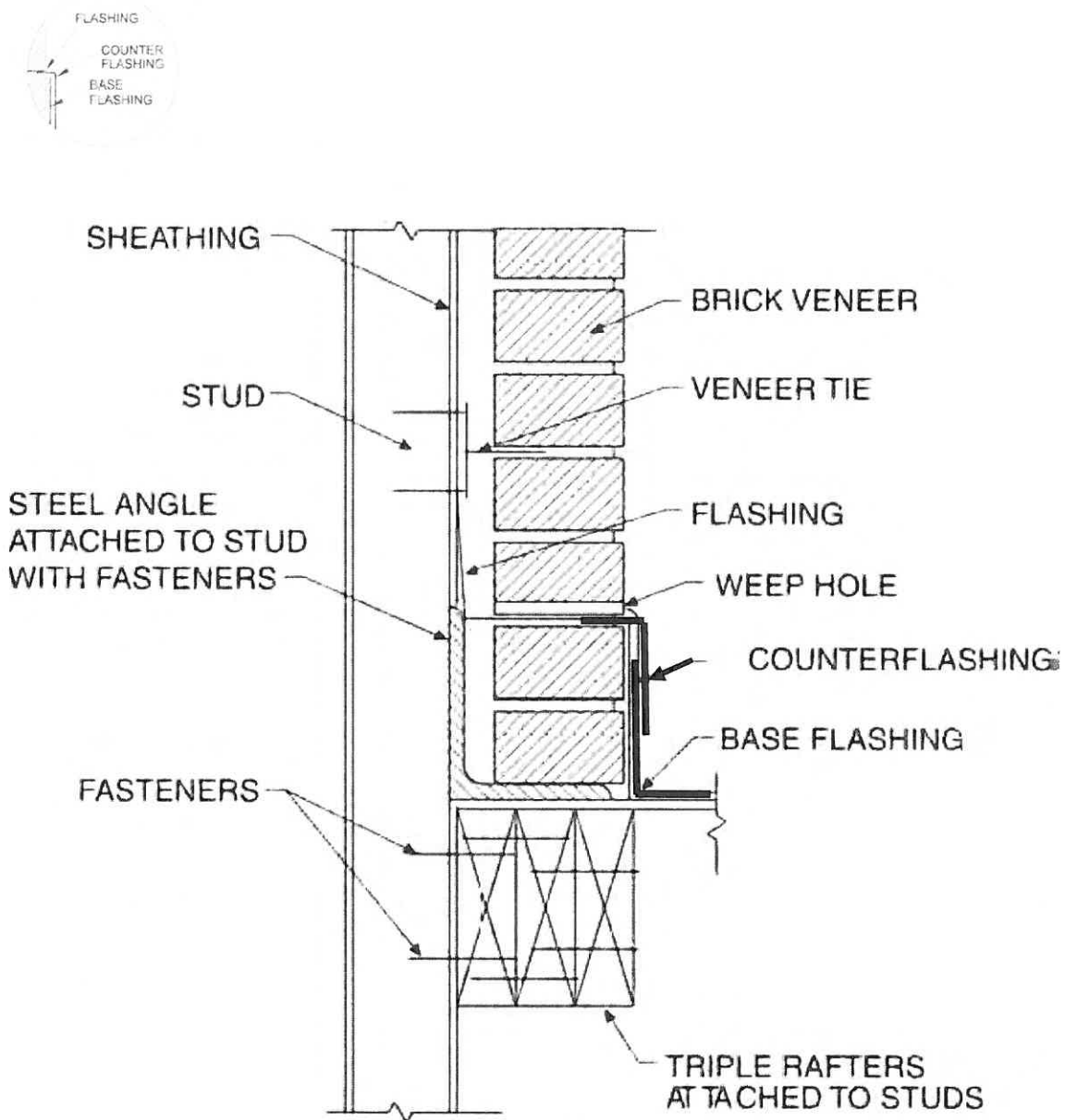


FIGURE R703.8.2.1  
EXTERIOR MASONRY VENEER SUPPORT BY STEEL ANGLES  
Permanent Rule 0400 – 03/2019

# SUBMISSION FOR PERMANENT RULE



## SUPPORT BY ROOF MEMBERS

**FIGURE R703.8.2.2**  
**EXTERIOR MASONRY VENEER SUPPORT BY ROOF MEMBER**

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



## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 NC Building Code, Table 2902.1

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Please combine the changes (noted as B-17 and B-19) into one document. I suggest using B-17 and showing the change to the Business Classification water closets on that.*

*In Mercantile, the "other" column, you are currently citing within the Code to Footnote e. Please reflect this change.*

*In Footnote o, please underline the addition of "30"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020

# SUBMISSION FOR PERMANENT RULE

2018 NC Building Code

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

(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 INTERNATI ONAL 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 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	1 service sink <sup>o</sup>
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 <sup>o</sup>

- 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.
- Toilet facilities for employees shall be separate from facilities for inmates or care recipients.
- 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.
- The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- 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).
- For attached one- and two-family dwellings, one automatic clothes washer connection shall be required per 20 dwelling units.
- A mop receptacle with a water supply, or a hose bib and floor drain, may be used in lieu of a service sink.
- A can wash may be used in lieu of a service sink.
- See Section 2902.9 for additional information on plumbing fixtures for schools.
- When the rearrangement of an area or space increases the occupant content, the plumbing facilities shall be increased in accordance with this code.
- For baseball stadiums, the number of fixtures shall be reduced by 50 percent.
- Service sink may be omitted when located within a single-family dwelling.
- Self-service mini-storage facilities without an office area are exempt.
- Unheated storage buildings which are used periodically are not required to have toilet rooms.
- For business and mercantile occupancies with an occupant load of ~~25~~ 30 or fewer, service sinks shall not be required.
- See section 2902.7 for adjustments in occupant count.

## **SUBMISSION FOR PERMANENT RULE**

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

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

# SUBMISSION FOR PERMANENT RULE

2018 NC Building Code

Table 2902.1 Minimum Number of Required Plumbing Fixtures. (191210 Item 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 INTERNATI ONAL PLUMBING CODE)	OTHER
				MALE	FEMALE	MALE	FEMALE			
2	Business	B	(no changes to this section)	1 per 25 <del>30</del> for the first <del>50</del> <del>30</del> and 1 per 50 for the remainder exceeding <del>50</del> <del>30</del>		1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80		—	1 per 100	1 service sink <sup>o</sup>

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

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

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 NC Building Code, 2902.2

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Why aren't Exceptions 4 and 5 listed here? Are they being retained? I would think so, given the language in the amended 2018 Plumbing Code, 403.2.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020

## SUBMISSION FOR PERMANENT RULE

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.

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

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

## SUBMISSION FOR PERMANENT RULE

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.

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 NC Plumbing Code, Table 403.1

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Please combine the changes (noted as B-18 and B-20) into one document. I suggest using B-18 and showing the change to the Business Classification water closets on that.*

*In Mercantile, the classification column in the Code refers to Sections 403.2, 403.3, and 403.3.3.2. If you are changing them, then you need to show that here by striking the existing language and adding the new language.*

*In Footnote o, please underline the addition of "30"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020



# SUBMISSION FOR PERMANENT RULE

2018 NC Plumbing Code

Table 403.1 Minimum Number of Required Plumbing Fixtures. (191210 Item B-18)

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

**TABLE 403.1**

**MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES**

NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (URINALS: SEE SECTION 419.2)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAIN (SEE SECTION 410)	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 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	1 service sink <sup>o</sup>
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 <sup>o</sup>

- 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.
- Toilet facilities for employees shall be separate from facilities for inmates or care recipients.
- 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.
- The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- 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).
- For attached one- and two-family dwellings, one automatic clothes washer connection shall be required per 20 dwelling units.
- A mop receptacle with a water supply, or a hose bib and floor drain, may be used in lieu of a service sink.
- A can wash may be used in lieu of a service sink.
- See Section 403.9 for additional information on plumbing fixtures for schools.
- When the rearrangement of an area or space increases the occupant content, the plumbing facilities shall be increased in accordance with this code.
- For baseball stadiums, the number of fixtures shall be reduced by 50 percent.
- Service sink may be omitted when located within a single-family dwelling.
- Self-service mini-storage facilities without an office area are exempt.
- Unheated storage buildings which are used periodically are not required to have toilet rooms.
- For business and mercantile occupancies with an occupant load of 25 30 or fewer, service sinks shall not be required.
- See section 403.6 for adjustments in occupant count.

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

## **SUBMISSION FOR PERMANENT RULE**

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

# SUBMISSION FOR PERMANENT RULE

2018 NC Plumbing Code

Table 403.1 Minimum Number of Required Plumbing Fixtures. (191210 Item B-20)

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

[P] TABLE 403.1

MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES

NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (URINALS: SEE SECTION 419.2)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAIN (SEE SECTION 410)	OTHER
				MALE	FEMALE	MALE	FEMALE			
2	Business	B	(no changes to this section)	1 per 25 <del>30</del> for the first <del>50</del> <u>30</u> and 1 per 50 for the remainder exceeding <del>50</del> <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 <sup>o</sup>

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

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

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 NC Plumbing Code, 403.2

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In Exception 1, should "dwelling units" and "sleeping units" be italicized as they are in the 2018 Building Code, 2902.2?*

*In Exception 3, please be sure to retain italics for "occupancies"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020

# SUBMISSION FOR PERMANENT RULE

2018 NC Plumbing Code

403.2 Separate Facilities. (191210 Item B-16)

## **403.2 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 fewer.
4. Except as provided in Section 405.3.2.
5. Where the code requires only one toilet facility for each sex, two unisex facilities may be substituted for separate 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.

## SUBMISSION FOR PERMANENT RULE

2018 NC Plumbing Code

410.2 Small Occupancies. (191210 Item B-14)

**410.2 Small occupancies.** ~~Deleted. Drinking fountains shall not be required for an occupant load of 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.

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 Fire Code, 1031

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*So that I'm clear – this isn't Section 1031.10, since the Section in the Code is 1031?*

*1031.10: What is "clear and unobstructed"? What about "good working order"? Does your regulated public know?*

*1031.10.2: Consider inserting a comma after "testing"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020

# SUBMISSION FOR PERMANENT RULE

2018 NC Fire Code

1031.10 Fire Escape Stairs and Ladders. (190910 Item B-4)

## **Section 1031.10 Fire Escape Stairways.**

All fire escape *stairways* and *ladders* shall be kept clear and unobstructed at all times and shall be maintained in good working order. All fire escape *stairways* that need to be replaced or repaired shall comply with the requirements of the *International Existing Building Code*.

## **Section 1031.10.1 Examination.**

Fire escape *stairways*, balconies, and *ladders* shall be examined for structural adequacy and safety in accordance with Section 1031.10 by a *registered design professional* every 5 years, or as required by the fire code official.

## **Section 1031.10.2 Examination Report.**

Records of inspections, testing and maintenance shall be maintained in accordance with Section 107.3.

## **Section 1031.10.3 Marking.**

The open space under fire escape *stairways* or *ladders* shall not be used for any purpose. *Approved* signs or other *approved* markings that include the words FIRE ESCAPE – KEEP CLEAR shall be provided to prohibit the obstruction thereof.

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

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



## REQUEST FOR TECHNICAL CHANGE

AGENCY: Building Code Council

RULE CITATION: 2018 Existing Building Code, 405.6

**DEADLINE FOR RECEIPT: Friday, September 11, 2020**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*I note that in the February 17, 2020 Register, you also published a proposed adoption of Section 805.3.1.2.4 but did not submit it. Did the agency decide to not move forward with that rulemaking?*

*When you publish, please be sure to italicize "stairways," "Approved," and "approved"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amanda J. Reeder  
Commission Counsel  
Date submitted to agency: August 27, 2020

## SUBMISSION FOR PERMANENT RULE

2018 NC Existing Building Code  
405.6 Marking. (190910 Item B-5)

### **405.6 Marking**

The open space under fire escape stairways shall not be used for any purpose. Approved signs or other approved markings that include the words FIRE ESCAPE – KEEP CLEAR shall be provided to prohibit the obstruction thereof.

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