

1 **NOTICE OF RULE MAKING PROCEEDINGS AND PUBLIC HEARING**

2
3 **NORTH CAROLINA BUILDING CODE COUNCIL**

4
5 **Notice of Rule-making Proceedings** *is hereby given by NC Building Code Council in accordance with*
6 *G.S. 150B-21.5(d).*

7
8 **Citation to Existing Rule Affected by this Rule-Making:** *North Carolina Building, Electrical, Fire, and*
9 *Residential Code amendments.*

10
11 **Authority for Rule-making:** *G.S. 143-136; 143-138.*

12
13 **Reason for Proposed Action:** *To incorporate changes in the NC State Building Codes as a result of*
14 *rulemaking petitions filed with the NC Building Code Council and to incorporate changes proposed by the*
15 *Council.*

16
17 **Public Hearing:** *Tuesday, June 12, 2018, 9:00AM, Albemarle Building, 325 North Salisbury Street,*
18 *Raleigh, NC 27603, 2nd Floor Training Room 240. Comments on both the proposed rule and any fiscal*
19 *impact will be accepted.*

20
21 **Comment Procedures:** *Written comments may be sent to Barry Gupton, Secretary, NC Building Code*
22 *Council, NC Department of Insurance, 1202 Mail Service Center, Raleigh, NC 27699-1202. Comments on*
23 *both the proposed rule and any fiscal impact will be accepted. Comment period expires on July 16, 2018.*

24
25 **Statement of Subject Matter:**

26
27
28 **1. Request by Joe Gorza, representing Space Walk of Currituck, to amend the 2018 NC Fire Code,**
29 **Sections 105.6.43 & 2403.2 as follows:**

30
31 [Note: These Section references do not match the 2018 NC Fire Code.]

32 Exception #3 tents, membrane & air inflated structures associated with single family dwellings less than
33 800 sq. ft.

34
35 **Motion/Second/Approved** – The request was granted. The proposed effective date of this rule is
36 December 1, 2018 (earliest through RRC), unless the BCC assigns a delayed effective date (January 1,
37 2020).

1 **Reason Given** – The purpose of this amendment is to increase the minimum permit and inspection size for
2 tents, membrane & air inflated structures associated with single family dwellings

3 **Fiscal Statement** – This rule is anticipated to provide equivalent compliance with no net decrease/increase
4 in cost. This rule is not expected to either have a substantial economic impact or increase local and state
5 funds. A fiscal note has not been prepared.

6
7
8 **2. Request by Randall Shackelford, P.E., representing Simpson Strong-Tie Company, to amend the**
9 **2018 NC Residential Code, Section AM105.1 as follows:**

10
11 **AM105.1 General.**

12 Girders shall bear directly on the support post with the post attached at top to prevent lateral displacement
13 or be connected to the side of the posts ~~with two 5/8 inch (16 mm) hot dip galvanized bolts with nut and~~
14 ~~washer~~ with one of the methods shown in Table AM105.1. Girder support is permitted to be installed in
15 accordance with Figure AM105.1(1) for top mount; Figure AM105.1(2) for side mount and Figure
16 AM105.1(3) for split girders. See Figure AM105.1(4) for cantilevered girders.

17
18 **Table AM105.1 Girder Connection to Side of Post**

<u>Maximum Girder Thickness</u>		
<u>Any</u>	<u>3" (Double 2X)</u>	<u>1-1/2" (Single 2X)</u>
<u>Two 5/8" diameter bolts¹</u>	<u>Four 6" long screws²</u>	<u>Three 4" long screws²</u>

19
20 1. Bolts shall be hot dip galvanized through bolts with nut and washer

21 2. Screws shall be hot dipped galvanized self-drilling screw fastener having a minimum diameter of 0.270",
22 staggered so that the screws are not in a line, and having a minimum edge distance of 1-1/2 inches.

23
24 **Motion/Second/Approved** – The request was granted. The proposed effective date of this rule is
25 December 1, 2018 (earliest through RRC), unless the BCC assigns a delayed effective date (January 1,
26 2020).

27 **Reason Given** – The purpose of this amendment is to allow new technology self-drilling fasteners in
28 addition to through bolts.

29 **Fiscal Statement** – This rule is anticipated to provide equivalent compliance with no net decrease/increase
30 in cost. This rule is not expected to either have a substantial economic impact or increase local and state
31 funds. A fiscal note has not been prepared.

1 **3. Request by Randall Shackelford, P.E., representing Simpson Strong-Tie Company, to amend the**
 2 **2018 NC Residential Code, Section R4603.6 as follows:**

3
 4 **R4603.6 Tying and bracing of wood piles.**

5 Beams and girders shall fully bear on pilings and butt joints shall occur over pilings. If Sills, beams or
 6 girders are shall be attached to the piling a minimum of two 5/8 inch (16 mm) galvanized steel bolts per
 7 beam member shall be through bolted using either bolts or screws at each piling connection in accordance
 8 with Table R4603.6 and Figure R45603.6 (a). When the piling is notched so that the cross-section is
 9 reduced below 50 percent or the girder is is top bearing, sills, beams or girders shall be attached using 3/16
 10 × 4 × 18-inch (5 × 102 × 467 mm) hot dip galvanized straps, one each side, bolted with two 5/8 inch (15.9
 11 mm) galvanized through bolts fastened top and bottom in accordance with either bolts or screws in
 12 accordance with Table R4603.6 and Figure R4603.6(b) and Figure R45603.6(c). Where butt joints occur
 13 over the piling and screws are used, there shall be two straps on each side of the piling, having a minimum
 14 size of 3/16 by 2 by 18 inches (5 × 51 × 467 mm), with four self-drilling screws as described in each end.

15
 16 **Table R4603.6 Minimum Fastening of Beams and Girders to Pilings**

<u>Amount Piling is</u> <u>Notched</u>	<u>Beam/Girder Continuous</u>		<u>Beam/Girder Butt Joint</u>	
	<u>Bolts</u>	<u>Screws</u>	<u>Bolts</u>	<u>Screws</u>
<u>≤ 50%</u>	<u>two 5/8" bolts²</u>	<u>four screws³</u>	<u>four 5/8" bolts²</u>	<u>eight screws³</u>
<u>> 50%¹</u>	<u>two 5/8" bolts²</u>	<u>four screws³</u>	<u>four 5/8" bolts³</u>	<u>eight screws</u>

17
 18 1. Where piling is notched over 50%, use strap as required in Section 4603.6. Install the specified number
 19 of bolts or screws in each end of the strap.

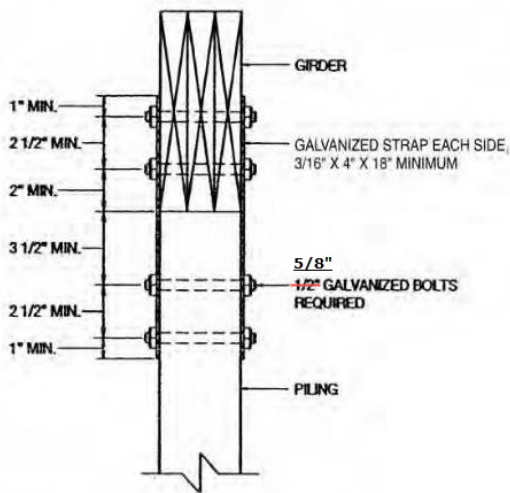
20 2. Bolts shall be 5/8" diameter hot dipped galvanized through bolts with nuts and washers.

21 3. Screws shall be 0.270" (6.9 mm) minimum in diameter, hot dipped galvanized to a minimum of A153,
 22 Class C, and having a minimum length of 4", and also shall be long enough to penetrate at least one inch
 23 through the remaining pile and into the girder.

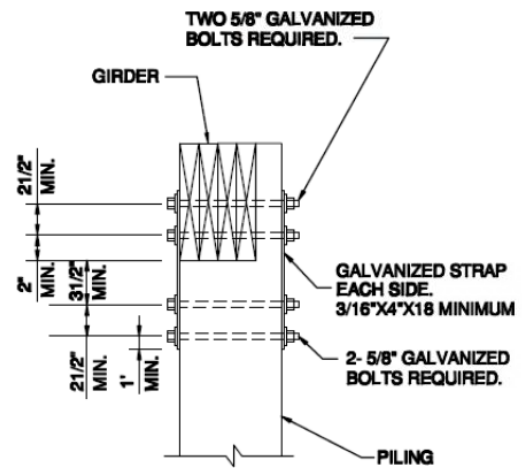
24
 25 **R4603.6.1 Tying at corners.** At corners, girders shall be connected to the pile with a minimum 3/16 × 4 ×
 26 18-inch (5 × 102 × 467 mm) hot dip galvanized strap bolted with two 5/8 inch (15.9 mm) galvanized
 27 through bolts on the exterior and a minimum L4 x 3/16 x 1'-6" (102 × 5 × 467 mm) galvanized steel angle
 28 bolted with two 5/8 inch (15.9 mm) galvanized through bolts on the interior in accordance with Figure
 29 R4603.6(d).

30
 31 **R4603.6.2 Bracing of Pilings.** Bracing of pile foundations is required where the clear height from ground
 32 to sill, beam or girder exceeds 10 feet (3048 mm) or the dwelling is more than one story above piles. A line
 33 of X-bracing is defined as a row of piles with X-bracing provided in at least two bays. A line of X-bracing

1 shall be provided at all exterior pile lines. Where the perimeter lines of X-bracing exceed 40 feet (12 192
 2 mm), an additional line of X-bracing shall be provided near the center of the building. See Figure
 3 R4603.6(e). X-bracing shall be with 2 × 10s through bolted with two 3/4-inch (19.1 mm) bolts at each end.
 4 The code official is permitted to accept alternate bracing designs if they bear the seal of a registered design
 5 professional.
 6
 7 Revise Figures as follows:



**FIGURE R4603.6(b)
 TOP MOUNTED GIRDER**



**FIGURE R4603.6(c)
 PILING NOTCHED MORE THAN 50%**

8
 9 **Motion/Second/Approved** – The request was granted. The proposed effective date of this rule is
 10 December 1, 2018 (earliest through RRC), unless the BCC assigns a delayed effective date (January 1,
 11 2020).

12 **Reason Given** – The purpose of this amendment is to allow new technology self-drilling fasteners in
 13 addition to through bolts.

14 **Fiscal Statement** – This rule is anticipated to provide equivalent compliance with no net decrease/increase
 15 in cost. This rule is not expected to either have a substantial economic impact or increase local and state
 16 funds. A fiscal note has not been prepared.

17
 18
 19 **4. Request from Terry Cromer representing the NC Association of Electrical Contractors to amend**
 20 **the 2017 NC Electrical Code as follows:**

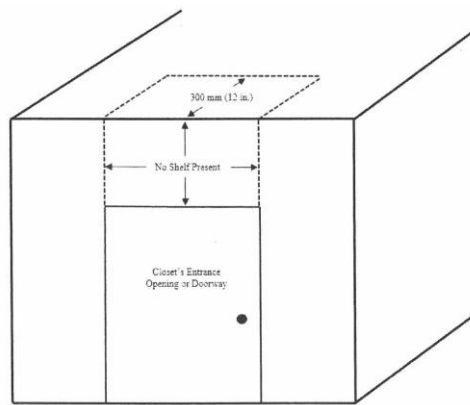
21
 22 **410.2 Definition.**

1 **Closet Storage Space.** The volume bounded by the sides and back closet walls and planes extending from
2 the closet floor vertically to a height of 1.8 m (6 ft) or to the highest clothes-hanging rod and parallel to the
3 walls at a horizontal distance of 600 mm (24 in.) from the sides and back of the closet walls, respectively,
4 and continuing vertically to the closet ceiling parallel to the walls at a horizontal distance of 300 mm (12
5 in.) or the width of the shelf, whichever is greater; for a closet that permits access to both sides of a hanging
6 rod, this space includes the volume below the highest rod extending 300 mm (12 in.) on either side of the
7 rod on a plane horizontal to the floor extending the entire length of the rod. See Figure 410.2.

8
9 Exception:

10 Where a shelf is not present in the area of wall above the closet's entrance opening or doorway extending
11 from the top of such opening or doorway vertically to the ceiling, including the area of ceiling extending
12 perpendicular from the area of wall directly above the closet's entrance opening or doorway to a
13 horizontal distance of 300 mm (12 in.) shall not be defined as closet storage space. See Figure 410.2

14 Exception.



15
16
17
18
19
20
21
22
23
24
25 **Figure 410.2 Exception Closet Storage Space Exception**

26
27 **Motion/Second/Approved** – The request was granted. The proposed effective date of this rule is
28 December 1, 2018 (earliest through RRC), unless the BCC assigns a delayed effective date (January 1,
29 2020).

30 **Reason Given** – The purpose of this amendment is to allow a lighting fixture above the door in a closet.

31 **Fiscal Statement** – This rule is anticipated to provide equivalent compliance with no net decrease/increase
32 in cost. This rule is not expected to either have a substantial economic impact or increase local and state
33 funds. A fiscal note has not been prepared.

34
35
36 **5. Request by Terry Cromer, representing the NC Association of Electrical Contractors to amend the**
37 **2017 NC Electrical Code as follows:**

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37

410.16 Luminaires in Clothes Closets.

(C) Location. The minimum clearance between luminaires installed in clothes closets and the nearest point of a closet storage space shall be as follows:

- (1) 300 mm (12 in.) for surface-mounted incandescent or LED luminaires with a completely enclosed light source installed on the wall above the door or on the ceiling.
- (2) 150 mm (6 in.) for surface-mounted fluorescent luminaires installed on the wall above the door or on the ceiling.
- (3) 150 mm (6 in.) for recessed incandescent or LED luminaires with a completely enclosed light source installed in the wall or the ceiling.
- (4) 150 mm (6 in.) for recessed fluorescent luminaires installed in the wall or the ceiling.
- (5) Surface-mounted fluorescent or LED luminaires shall be permitted to be installed within the closet storage space where identified for this use.
- (6) LED luminaires with a completely enclosed light source or fluorescent luminaires shall be permitted to be installed within the area defined in 410.2 Exception.

Motion/Second/Approved – The request was granted. The proposed effective date of this rule is December 1, 2018 (earliest through RRC), unless the BCC assigns a delayed effective date (January 1, 2020).

Reason Given – The purpose of this amendment is to allow LED luminaires above the door in a closet.
Fiscal Statement – This rule is anticipated to provide equivalent compliance with no net decrease/increase in cost. This rule is not expected to either have a substantial economic impact or increase local and state funds. A fiscal note has not been prepared.

6. Request by Jonathan Leonard representing the NC Fire Code Revisions Committee to amend the 2018 NC Fire Code, Section 314.4 as follows:

314.4 Vehicles. Liquid- or gas-fueled vehicles, boats or other motorcraft shall not be located indoors except as follows:

- 1. Batteries are disconnected.
Exception: Alternative-Fueled vehicles in which manufacturer prohibits disconnection of power supply
- 2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19L) (whichever is least).
Exception: Diesel fueled vehicles-maximum fuel amount permitted shall be 20 gallons.
- 3. Fuel tanks and fill openings are closed and sealed to prevent tampering and the release of vapors.
- 4. Vehicles, boats or other motorcraft equipment are not fueled or defueled within the building.

1 **Motion/Second/Approved** – The request was granted. The proposed effective date of this rule is
2 December 1, 2018 (earliest through RRC), unless the BCC assigns a delayed effective date (January 1,
3 2020).

4 **Reason Given** – The purpose of this amendment is to provide exceptions for public shows and displays of
5 alternate fuel and diesel fuel vehicles.

6 **Fiscal Statement** – This rule is anticipated to provide equivalent compliance with no net decrease/increase
7 in cost. This rule is not expected to either have a substantial economic impact or increase local and state
8 funds. A fiscal note has not been prepared.

9
10
11 **7. Request by Jonathan Leonard representing the NC Fire Code Revisions Committee to amend the**
12 **2018 NC Building (and Fire) Code, Section 1010.1.9.11 as follows:**

13
14 **[BE] 1010.1.9.11 Stairway doors.**

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

17
18 Exceptions:

19 1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the
20 opposite side.

21 2. This section shall not apply to doors arranged in accordance with Section 403.5.3 of the International
22 Building Code.

23 ~~3. In stairways serving not more than four stories, doors are permitted to be locked from the side opposite~~
24 ~~the egress side, provided they are openable from the egress side and capable of being unlocked~~
25 ~~simultaneously without unlatching upon a signal from the fire command center, if present, or a signal by~~
26 ~~emergency personnel from a single location inside the main entrance to the building.~~

27 3. Stairway exit doors are permitted to be locked from the side opposite the egress side, provided that they
28 are openable from the egress side and capable of being unlocked simultaneously without unlatching upon a
29 signal from the fire command center, if present, or a signal by emergency personnel from a single location
30 inside the main entrance to the building and upon activation of the fire alarm if present.

31 4. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite
32 side in Group B, F, M and S occupancies where the only interior access to the tenant space is from a single
33 exit stairway where permitted in Section 1006.3.2.

34 5. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite
35 side in Group R-2 occupancies where the only interior access to the dwelling unit is from a single exit
36 stairway where permitted in Section 1006. 3.2.

1 ~~6. In other than highrise, stairways serving floors above a 3 hour horizontal building separation, doors are~~
2 ~~permitted to be locked from the side opposite the egress side, provided they are openable from the egress~~
3 ~~side and capable of being unlocked simultaneously without unlatching upon activation of the building fire~~
4 ~~alarm system.~~

5
6 **Motion/Second/Approved** – The request was granted. The proposed effective date of this rule is
7 December 1, 2018 (earliest through RRC), unless the BCC assigns a delayed effective date (January 1,
8 2020).

9 **Reason Given** – This purpose of this amendment is for occupant security and to prevent unauthorized
10 personnel from entering the floor in non-high-rise buildings.

11 **Fiscal Statement** – This rule is anticipated to provide equivalent compliance with no net decrease/increase
12 in cost. This rule is not expected to either have a substantial economic impact or increase local and state
13 funds. A fiscal note has not been prepared.

14
15
16 **NOTICE:**

17 **Appeals and Interpretations** *of the North Carolina State Building Codes are published online at the*
18 *following link.*

19 http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=Code_Interpretations&user=C
20 [ode Enforcement Resources](#)

21
22
23 **NOTICE:**

24 **Objections and Legislative Review** *requests may be made to the NC Office of Administrative Hearings in*
25 *accordance with G.S. 150B-21.3(b2) after Rules are adopted by the Building Code Council.*

26 <http://www.ncoah.com/rules/>
27
28