AGENCY: NC Building Code Council

RULE CITATION: 2011 NC Electrical Code, 250.53(A)(2), Supplemental Electrode Required

DEADLINE FOR RECEIPT: Monday, November 10, 2014

<u>NOTE WELL:</u> This request when viewed on computer extends 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 this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

I know that this office does not publish this Code. However, should (1) through (4) end with semicolons, with an "or" at the end of (4), and a period at the end of (5)?

In Exception No. 2, is a "ground electrode" the same as "grounding electrode"? (I ask because "grounding electrode" is defined in the NEC.)

What does "temporary" mean in this context?

Insert a comma after "site"

You state "100A" in Exception No. 2. Does A stand for "amp"? I take it your regulated public knows what this means?

2011 NC Electrical Code

250.53(A)(2) Supplemental Electrode Required. (130910 Item B-4)

250.53(A)(2) Supplemental Electrode Required. A single rod, pipe, or plate electrode shall be supplemented by an additional electrode of a type specified in 250.52(A)(2) through (A)(8). The supplemental electrode shall be permitted to be bonded to one of the following:

- (1) Rod, pipe, or plate electrode
- (2) Grounding electrode conductor
- (3) Grounded service-entrance conductor
- (4) Nonflexible grounded service raceway
- (5) Any grounded service enclosure

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

Exception No. 2: The supplemental ground electrode shall not be required at temporary electrical service installation (saw service pole) at construction site provided the temporary electrical service does not exceed 150 volts to ground or 100A.

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

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

AGENCY: NC Building Code Council

RULE CITATION: 2011 NC Electrical Code, 406.4(D)(4), Arc-Fault Circuit-Interrupter

Protection

DEADLINE FOR RECEIPT: Monday, November 10, 2014

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In reviewing these rules, the staff determined that the following technical changes need to be made:

I know that this office does not publish this Code. However, should (1) and (2) end with semicolons, with an "or" at the end of (2), and a period at the end of (3)?

I take it that "Code" is italicized because it is italicized in the National Electrical Code?

Please end the Exception with a period, to be consistent with other rules in the Code.

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: October 27, 2014

2011 NC Electrical Code 406.4(D)(4) Arc-Fault Circuit-Interrupter Protection. (140311 Item B-4)

406.4(D)(4) Arc-Fault Circuit-Interrupter Protection. Where a receptacle outlet is supplied by a branch circuit that requires arc-fault circuit interrupter protection as specified elsewhere in this *Code*, a replacement receptacle at this outlet shall be one of the following:

- (1) A listed outlet branch circuit type arc-fault circuit interrupter receptacle
- (2) A receptacle protected by a listed outlet branch circuit type arc-fault circuit interrupter type receptacle
- (3) A receptacle protected by a listed combination type arc-fault circuit interrupter type circuit breaker Exception: Non-grounding type receptacle(s)

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

AGENCY: NC Building Code Council

RULE CITATION: 2011 NC Electrical Code, 680.42(B), Bonding

DEADLINE FOR RECEIPT: Monday, November 10, 2014

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In reviewing these rules, the staff determined that the following technical changes need to be made:

In the existing language, I take it your regulated public knows what a "common" frame or base is?

In the new language, I take it your regulated public knows what "equipotential bonding" is (since that is the name of 680.26)?

Again, this office does not publish this Code. However, I recommend ending (1) and (2) with semicolons, ending (3) a semicolon and "and"

In (1), I'd state, "The spa or hot tub is shall be listed..." and then make conforming changes in (2), (3) and (4). For example, in (3), I'd state, "The installation is in accordance with the manufacturer's instructions and located on or above grade."

I take it in (4) you need the "at least" language?

2011 NC Electrical Code 680.42(B) Bonding. (140311 Item B-5)

680.42(B) Bonding. Bonding by metal-to-metal mounting on a common frame or base shall be permitted. The metal bands or hoops used to secure wooden staves shall not be required to be bonded as required in 680.26.

Equipotential bonding of perimeter surfaces in accordance with 680.26(B)(2) shall not be required to be provided for spas and hot tubs where all of the following conditions apply:

- (1) The spa or hot tub shall be listed as a self-contained spa for aboveground use.
- (2) The spa or hot tub shall not be identified as suitable only for indoor use.
- (3) The installation shall be in accordance with the manufacturer's instructions and shall be located on or above grade.
- (4) The top rim of the spa or hot tub shall be at least 710 mm (28 in.) above all perimeter surfaces that are within 760 mm (30 in.), measured horizontally from the spa or hot tub. The height of nonconductive external steps for entry to or exit from the self-contained spa shall not be used to reduce or increase this rim height measurement.

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

AGENCY: NC Building Code Council

RULE CITATION: Fire Prevention Code, 320, Group E in churches, private schools and

public schools

DEADLINE FOR RECEIPT: Monday, November 10, 2014

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 this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

The office print copy of this Code is from 2012, and I am sure there have been updated since then. However, I do not see a 319, so please confirm it exists, such that this would be 320.

I know the Code itself categorizes Group E (education group) by grade level, so I take it your regulated public knows the age for first grade and second grade children in this context?

The definition of "Occupancy classification" states, "Education Group E occupancy includes... the use of a building or structure... by six or more persons at any one time for educational purposes through 12th grade. Religious educational rooms...which are accessory to places of religious worship... and have occupant loads of less than 100, shall be classified as Group A-3 occupancies." Here, you are classifying rooms in churches in Group E, rather than A-3. Is the Council classifying the rooms in churches as Group E in this rule because it is the Council's understanding that they do not qualify as religious educational rooms? Or is this written to only apply to rooms properly classified in Group E in the churches, and not those covered by A-3?

Please confirm that italicized terms are italicized to show the terms are defined within the Code.

2012 NC Fire Code

320 Group E in churches, private schools and public schools. (140311 Item B-12)

<u>320 Group E in churches, private schools and public schools.</u> Rooms used for first grade children and younger shall be located on the *level of exit discharge*. Rooms used for second grade children shall not be located more than one *story* above the *level of exit discharge*.

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

[Note: This Rule is currently printed in the 2012 NC Building Code, Section 427.3]

AGENCY: NC Building Code Council

RULE CITATION: Plumbing Code, 417.4, Shower Compartments

DEADLINE FOR RECEIPT: Monday, November 10, 2014

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 this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made:

In the existing language, where you state that the compartment shall have approved shower pan or the equivalent thereof "as determined by the plumbing official," what is the standard to make that determination? Professional expertise, training, the rest of the Code?

On the 5th line, I'd add a comma after "drain" so it reads, "Shower drains ... securely fastened to the shower <u>drain</u>, thereby..." Alternatively, I'd state "Shower drains... securely fastened to the shower drain thereby making and make a watertight joint."

In the next sentence, I recommend "There shall be a watertight joint between the shower and drain shower, drain, and trap."

I see that in this Code, the Exceptions are referred to as "Exceptions: 1, 2" and not as "Exception No. 1" as they are in the Electrical Code. I take it this is due to your publisher?

In Exception 2, is "bonded waterproof" one phrase, or are they both adjectives for "membranes"? If they are all adjectives, then I'd state "Where load bearing, bonded bonded, waterproof membranes..."

2012 NC Plumbing Code 417.4 Shower compartments. (140311 Item B-8)

417.4 Shower compartments. Shower compartments shall conform to Table 417.4 and shall have approved shower pan material or the equivalent thereof as determined by the plumbing official. The pan shall turn up on three sides at least 2 inches (51 mm) above the finished curb level. The remaining side shall wrap over the curb. Shower drains shall be constructed with a clamping device so that the pan may be securely fastened to the shower drain thereby making a watertight joint. Shower drains shall have an approved weephole device system to ensure constant drainage of water from the shower pan to the sanitary drainage system. There shall be a watertight joint between the shower and drain and trap. Shower receptacle waste outlets shall be not less than 2 inches (51 mm) and shall have a removable strainer.

Exceptions:

- 1. Shower compartments with prefabricated receptors conforming to the standards listed in Table 417.4.
- 2. Where load-bearing, bonded waterproof membranes meeting ANSI A118.10 are used, integrated bonding flange drains shall be approved. Clamping devices and weepholes are not required where shower drains include an integrated bonding flange. Manufacturer's installation instructions shall be followed to achieve a watertight seal between the bonded waterproof membrane and the integrated bonding flange drain. Integrated bonding flange drains shall conform to ASME A112.6.3, ASME A112.18.2/CSA B125.2, or CSA B79.

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