

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 Administrative Code and*
9 *Policies, Building Code, Electrical Code, Energy Conservation Code, Existing Building Code, Fire Code,*
10 *Fuel Gas Code, Mechanical Code, Plumbing Code and Residential Code amendments.*

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

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

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18 **Public Hearing:** *Tuesday, September 10, 2024, 9:00AM, Albemarle Building, 325 North Salisbury Street,*
19 *Raleigh, NC 27603, 2nd Floor Training Room 245. Comments on both the proposed rules and any fiscal*
20 *impacts will be accepted.*

21
22 **Comment Procedures:** *Written comments may be sent to David B. Rittlinger, Secretary, NC Building*
23 *Code Council, NC Department of Insurance: Office of the State Fire Marshal, 1429 Rock Quarry Road,*
24 *Raleigh, NC 27610 (email david.rittlinger@ncdoi.gov). Comments on both the proposed rule and any*
25 *fiscal impact will be accepted. Comment period expires on October 14, 2024.*

26
27 **Link to Agency Notice:**

28 <https://www.ncosfm.gov/codes/building-code-council-bcc/bcc-hearing-notice>

29
30 **Statement of Subject Matter:**

31
32 **1. Request from David Rittlinger representing the NC Office of State Fire Marshal to amend Chapter**
33 **36 of the 2018 NC Building Code to reflect the requirements of North Carolina General Assembly**
34 **Session Law 2023-137, Section 35 “Restore 2009 Building Code Standards for Piers and Docks**
35 **Constructed in Estuarine Waters”.**
36

1 Due to size, this petition can be conveniently viewed at the link below and selecting the link “B-1 2018
2 NCBC Section 3608”:

3 <https://www.ncosfm.gov/news/events/building-code-council-public-hearing-june-11-2024>
4

5 **Motion/Second/Approved** – The request was granted. The proposed effective date of this rule is January
6 1, 2025, unless the BCC assigns a delayed effective date.

7
8 **Reason Given** – Sections 3601 through 3607 is edited and applies to docks, piers, bulkheads and waterway
9 structures not included in North Carolina General Assembly Session Law 2023-137, Section 35 and not in
10 estuarine waters as defined within the definition of “Coastal Fishing Waters” within North Carolina
11 General Statute 113-129(4). Section 3608 is added and applies to docks, piers, bulkheads and waterway
12 structures included in North Carolina General Assembly Session Law 2023-137, Section 35 and in
13 estuarine waters as defined within the definition of “Coastal Fishing Waters” within North Carolina
14 General Statute 113-129(4). Section 3608 represents a reprint of Chapter 36 of the 2009 North Carolina
15 Building Code. Code change required by North Carolina General Assembly Session Law 2023-137,
16 Section 35 to reinstate 2009 NC Building Code, Chapter 36 Docks, Piers, Bulkheads and Waterway
17 Structures for docks, piers, bulkheads and waterway structures built within estuarine waters.
18

19 **Fiscal Statement** – No impact to federal, state and local government funds. No substantial impact and/or
20 an increase of more than \$80 per dwelling. A fiscal note has not been prepared.

21
22 **2. Request from David Rittinger representing the NC Office of State Fire Marshal to amend Chapter**
23 **36 of the 2024 NC Building Code to reflect the requirements of North Carolina General Assembly**
24 **Session Law 2023-137, Section 35 “Restore 2009 Building Code Standards for Piers and Docks**
25 **Constructed in Estuarine Waters”.**

26
27 Due to size, this petition can be conveniently viewed at the link below and selecting the link “B-2 2024
28 NCBC Section 3608”:

29 <https://www.ncosfm.gov/news/events/building-code-council-public-hearing-june-11-2024>
30

31 **Motion/Second/Approved** – The request was granted. The proposed effective date of this rule is January
32 1, 2025, unless the BCC assigns a delayed effective date.

33
34 **Reason Given** – Sections 3601 through 3607 is edited and applies to docks, piers, bulkheads and waterway
35 structures not included in North Carolina General Assembly Session Law 2023-137, Section 35 and not in
36 estuarine waters as defined within the definition of “Coastal Fishing Waters” within North Carolina
37 General Statute 113-129(4). Section 3608 is edited and applies to docks, piers, bulkheads and waterway

1 structures included in North Carolina General Assembly Session Law 2023-137, Section 35 and in
2 estuarine waters as defined within the definition of “Coastal Fishing Waters” within North Carolina
3 General Statute 113-129(4). Section 3608 represents a reprint of Chapter 36 of the 2009 North Carolina
4 Building Code. Code change required by North Carolina General Assembly Session Law 2023-137,
5 Section 35 to reinstate 2009 NC Building Code, Chapter 36 Docks, Piers, Bulkheads and Waterway
6 Structures for docks, piers, bulkheads and waterway structures built within estuarine waters.

7
8 **Fiscal Statement** – No impact to federal, state and local government funds. No substantial impact and/or
9 an increase of more than \$80 per dwelling. A fiscal note has not been prepared.

10
11 **3. Request from Joseph Starling, PE representing the NC Office of State Fire Marshal to amend the**
12 **2023 NC Electrical Code, Article 100 – Definitions – Selective Coordination as follows:**

13
14 **Article 100 – Definitions**

15

16 **Coordination, Selective. (Selective Coordination)** Localization of an overcurrent condition to restrict
17 outages to the circuit or equipment affected, ~~accomplished~~ for fault current events that extend beyond 0.1
18 second, and accomplished by the selection and installation of overcurrent protective devices and their
19 ratings or settings for the full range of available overcurrents, ~~from overload to the available fault current,~~
20 under such conditions, whether originating from overload, ground-fault or short circuit, and for the full
21 range of overcurrent protective device opening times associated with those overcurrents, applicable to such
22 events.

23
24 **Motion/Second/Approved** – The request was granted. The proposed effective date of this rule is January
25 1, 2025, unless the BCC assigns a delayed effective date.

26
27 **Reason Given** – This proposal is a current Amendment to the NEC for redefining selective coordination
28 that was unintentionally excluded in the 2023 State Electrical Code adoption package. This request is to
29 include the Amendment with adopting the 2023 NEC. The State Electrical Division will handle this by
30 interpretation until this is corrected.

31
32 **Fiscal Statement** – No impact to federal, state and local government funds. No substantial impact and/or
33 an increase of more than \$80 per dwelling. A fiscal note has not been prepared.

34
35 **4. Request from Joseph Starling, PE representing the NC Office of State Fire Marshal to amend the**
36 **2023 NC Electrical Code, Section 551.71(F)(C), Receptacles Installed in Recreational Vehicle Site**
37 **Equipment as follows:**

1 Current Amendment of the 2023 North Carolina Electrical Code:

2
3 ~~Item 26: Requiring GFCI for 30 and 50 amp receptacles in RV site equipment the same as non-RV~~
4 ~~site equipment in (A) for RV parks; Retaining 2020 Code requirements.~~

5
6 ~~AMENDMENT 551.71(F)(2)~~

7 ~~Amend NEC 2023, page 516:~~

8
9 ~~(2) Receptacles Installed in Recreational Vehicle Site Equipment.~~

10 ~~Ground-fault circuit interrupter protection shall be provided as required in 210.8(B).~~

11
12 ~~Informational Note No. 1: The definition of Feed Assembly clarifies that the power supply cord to a~~
13 ~~recreational vehicle is considered a feeder.~~

14
15 Repeal Amendment and Replace with Original Text of the 2023 NEC in the 2023 North Carolina Electrical
16 Code:

17
18 (2) Receptacles Installed in Recreational Vehicle Site Equipment.

19 Ground-fault circuit-interrupter protection shall only be required for 125-volt, single-phase, 15- and 20-
20 ampere receptacles.

21
22 Informational Note No. 1: Appliances used within- the recreational vehicle can create leakage current
23 levels at the supply receptacle(s) that could exceed the limits of a Class A GFCI device. Informational Note

24
25 No. 2: The definition of Feed Assembly clarifies that the power supply cord to a recreational vehicle is
26 considered a feeder.

27
28 **Motion/Second/Approved** – The request was granted. The proposed effective date of this rule is January
29 1, 2025, unless the BCC assigns a delayed effective date.

30
31 **Reason Given** – Item B-2 of the March 2024 BCC meeting will have no effect on the GFCI requirements
32 to RV site equipment as intended by the petitioner. The attached proposal of returning back to the 2023
33 NEC text for section 551.71(F)(2) will modify section 210.8(B) to exempt RV site equipment from
34 providing GFCI protection for 30 and 50 amp receptacles as intended by the petitioner.

35
36 **Fiscal Statement** – No impact to federal, state and local government funds. No substantial impact and/or
37 an increase of more than \$80 per dwelling. A fiscal note has not been prepared.

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2 **5. Request from Dan Dittman representing the NC Office of State Fire Marshal to amend the 2018**
3 **NC Energy Conservation Code, Sections R402.2.2.1, R402.2.2.2, Table R402.1.2, and R402.1.4 to**
4 **reflect the requirements of North Carolina General Assembly Session Law 2023108, Section 5**
5 **“Amend Insulation Requirements for Unvented Attic and Enclosed Rafter Assemblies” as follows:**
6

7 **R402.2.2 Ceilings without attic spaces.**
8

9 **R402.2.2.1 Roof Ceiling Assemblies.** Where Section R402.1.2 would require R-38 insulation and
10 the design of the roof/ceiling assembly, including cathedral ceilings, bay windows and other
11 similar areas, does not allow sufficient space for the required insulation, the minimum required
12 insulation for such roof/ceiling assemblies shall be R-30. This reduction of insulation from the
13 requirements of Section R402.1.2 shall be limited to 500 square feet (46 m2) of the total insulated
14 ceiling area. This reduction shall not apply to the U-factor alternative approach in Section
15 R402.1.4 and the total UA alternative in Section R402.1.5.
16

17 **R402.2.2.2 Unvented attic and unvented enclosed rafter assembly alternate.**

18 Where Table R402.1.2 requires R-38 insulation in the ceiling, or Table R402.1.4 requires a ceiling
19 U-factor of 0.030, installing air-impermeable insulation, as follows, to the underside or directly
20 above the roof deck shall be deemed to satisfy the R-38 requirements: (i) R-20 (equivalent U-
21 factor 0.05) for climate zone 3;(ii) R-25 (equivalent U-factor 0.037) for climate zone 4; and (iii)
22 R-25 (equivalent U-factor 0.037) for climate zone 5. These air-impermeable insulation alternative
23 R-value minimums apply in residences meeting the following criteria:

24 (1) The unvented attic or unvented enclosed rafter assemblies are constructed under
25 Section R806.5 of the North Carolina Residential Code.

26 (2) The residence contains a mechanical ventilation system that operates on a positive,
27 balanced, or hybrid pressure strategy in accordance with North Carolina Mechanical
28 Code Section 403.3.

29 (3) For residences with air-impermeable insulation installed below the roof deck, exposed
30 portions of the roof rafters are wrapped by a minimum of R-3 insulation unless directly
31 covered by drywall or finished ceiling material. For residences with air-impermeable
32 insulation installed above the roof deck, roof rafters do not require insulation wrapping if
33 air-impermeable insulation installed above the roof deck is continuous.

34 (4) The residence obtains an ACH50 blower door test result of less than 3.0.

35 (5) The residence contains heating, cooling, and ventilation equipment and ductwork
36 within thermal envelope.
37

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TABLE R402.1.2
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT*

CLIMATE ZONE	FENESTRATION U-FACTOR ^{b,j}	SKYLIGHT ^b U-FACTOR	GLAZED FENESTRATION SHGC ^{b,k}	CEILING R-VALUE ^{m,p}	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ^l	FLOOR R-VALUE	BASEMENT ^{o,q} WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE
3	0.35	0.55	0.30	38 or 30ci ^l	15 or 13+2.5 ^h	5/13 or 5/10ci	19	5/13 ^f	0	5/13
4	0.35	0.55	0.30	38 or 30ci ^l	15 or 13+2.5 ^h	5/13 or 5/10ci	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30ci ^l	19 ⁿ or 13+5 ^h or 15+3 ^h	13/17 or 13/12.5ci	30 ^g	10/15	10	10/19

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7

p. Alternately, per North Carolina General Assembly Session Law 2023-108, Section 6 (effective 8/16/23), unvented attic and unvented enclosed rafter assemblies can utilize R402.2.2.2 where the assembly can comply with the criteria listed under R402.2.2.2.

10

11

12

TABLE R402.1.4
EQUIVALENT U-FACTORS^a

CLIMATE ZONE	FENESTRATION U-FACTOR ^d	SKYLIGHT U-FACTOR	CEILING U-FACTOR ^e	FRAME WALL U-FACTOR	MASS WALL U-FACTOR ^b	FLOOR U-FACTOR	BASEMENT WALL U-FACTOR	CRAWL SPACE WALL U-FACTOR
3	0.35	0.55	0.030	0.077	0.141	0.047	0.091 ^c	0.136
4	0.35	0.55	0.030	0.077	0.141	0.047	0.059	0.065
5	0.35	0.55	0.030	0.061	0.082	0.033	0.059	0.065

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17

e. Alternately, per North Carolina General Assembly Session Law 2023-108, Section 6 (effective 8/16/23), unvented attic and unvented enclosed rafter assemblies can utilize R402.2.2.2 where the assembly can comply with the criteria listed under R402.2.2.2.

19

20

21

Motion/Second/Approved – The request was granted. The proposed effective date of this rule is January 1, 2025, unless the BCC assigns a delayed effective date.

22

23

1 **Reason Given** – This amendment is being filed to comply with the requirements of N.C. Sess. L. 2023-
2 108, § 6 (eff. Aug. 16, 2023). As such, the proposal was not vetted for cost of construction, increasing the
3 cost of a dwelling by \$80 or more, affecting Local or State funds, or if it will cause a substantial impact.
4 Likewise, a cost-benefit analysis was not performed because the code change was a directive by the North
5 Carolina General Assembly to codify the language.

6
7 **Fiscal Statement** – No impact to federal, state and local government funds. No substantial impact and/or
8 an increase of more than \$80 per dwelling. A fiscal note has not been prepared.

9
10 **6. Request from Dan Dittman representing the NC Office of State Fire Marshal to amend the 2024**
11 **NC Energy Conservation Code, Section R402 Building Thermal Envelope to reflect the requirements**
12 **of North Carolina General Assembly Session Law 2023-108, Section 5 “Amend Insulation**
13 **Requirements for Unvented Attic and Enclosed Rafter Assemblies” as follows:**

14
15 Due to size, this petition can be conveniently viewed at the link below and selecting the link “B-6 2024
16 NCECC R402 building Thermal Envelope”:

17 <https://www.ncosfm.gov/news/events/building-code-council-public-hearing-june-11-2024>

18
19 **Motion/Second/Approved** – The request was granted. The proposed effective date of this rule is January
20 1, 2025, unless the BCC assigns a delayed effective date.

21
22 **Reason Given** – This amendment is being filed to comply with the requirements of N.C. Sess. L. 2023-
23 108, § 6 (eff. Aug. 16, 2023). As such, the proposal was not vetted for cost of construction, increasing the
24 cost of a dwelling by \$80 or more, affecting Local or State funds, or if it will cause a substantial impact due
25 to the incremental impact of said Statute. Likewise, a cost-benefit analysis was not performed for the
26 incremental impact of said Statute, because the code change was a directive by the North Carolina General
27 Assembly to codify the language. This permanent rule change to the 2024 NC Energy Conservation Code is
28 in response to the objection by the Rules Review Commission of the NC Office of Administrative Hearings
29 at the 4/30/24 RRC meeting.

30
31 **Fiscal Statement** – A fiscal note as required by N.C.G.S. 143-138 (a1)(1) and approved by OSBM is in
32 development and is anticipated to be available by the publication of the 8/15/24 NC Register. A cost benefit
33 analysis as required by N.C.G.S. 143-138 (a1)(2) is in development and is anticipated to be available by the
34 publication of the 8/15/24 NC Register. The fiscal note and cost benefit analysis can be found at the link
35 below once it is completed:

36 <https://www.ncosfm.gov/news/events/building-code-council-public-hearing-june-11-2024>

37

1 **NOTICE:**

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

4 <https://www.ncosfm.gov/interpretations>

5

6 **NOTICE:**

7 **Amendments** of the North Carolina State Building Codes are published online at the following link.

8 <https://www.ncosfm.gov/codes/codes-current-and-past>

9

10 **NOTICE:**

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

13 <http://www.ncoah.com/rules/>