

North Carolina Building Code Council

Staffed by the NC Office of State Fire Marshal

Brian Taylor, State Fire Marshal **David Bruce Rittlinger,** PE, Secretary

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1429 Rock Quarry Road, Suite 105 Raleigh, NC 27610

Building Code Council

Chair:

Bridget Herring - 29 (Public Representative)

Vice Chairman:

Mark Matheny - 27 (Building Inspector)

Members:

Michael Ali, PE - 29 (State Agency)

Robert Axford - 25 (Electrical Contractor)

Chris Berg, PE - 27 (Structural Engineer)

Andrew C. Cole, AIA - 28 (Architect)

Ralph Euchner - 25 (Gas Industry)

David Gieser, RA - 28 (Architect)

Jeff Hilton - 28 (Coastal Contractor)

Robert Howard - 29 (Home Builder)

Natalie MacDonald, PE - 27 (Mechanical Engineer)

Gloria Shealey - 27 (General Contractor)

Deborah Shearin - 25 (Plumbing & Heating Contractor)

Jason B. Shepherd - 27 (Fire Services)

Kim Wooten, PE - 25 (Electrical Engineer)

Robert Zapple - 28 (County Gov't Rep)

May 31, 2024

Bridget Herring P.O. Box 7148 Asheville, NC 28802

RE: Agenda for the June 11, 2024 NC Building Code Council Meeting and Public Hearing.

Ms. Herring:

This is officially to notify you and other interested parties of a regularly scheduled meeting of the NC Building Code Council. Persons requiring auxiliary services should notify the Council at least ten business days prior to the meeting.

- 1. Standing Committees will meet beginning at 9:00AM on Monday, June 10, 2024 in Room 245 (Albemarle Building) 325 North Salisbury Street, Raleigh, NC 27603.
- 2. The NC Building Code Council Meeting and Public Hearing will begin at 9:00AM on Tuesday, June 11, 2024, in Room 245 (Albemarle Building) 325 North Salisbury Street, Raleigh, NC 27603. The meeting can be viewed remotely via Facebook Live (https://www.facebook.com/NCOSFMEngineering). Remote access does not provide capability to address the council.
- 3. The Agenda is printed as follows:
 - A- Items Administrative items that require Council action and temporary rules.
 - B- Items New amendment petitions introduced at this meeting.
 - C- Items Amendments that have been granted by the Council and advertised in the NC Register for public hearing.
 - D- Items Adoption of amendments by the Council prior to approval by the Rules Review Commission.
 - E- Items Reports from Committees and Staff.
 - F- Items Notice of Appeal Hearings.

Part A - Administrative Items

- Item A 1 Ethics Statement: Inquire upon conflicts of interest or appearance of conflicts that exist within the Council.
- Item A 2 Approval of minutes of the March 18, 2024 and March 19, 2024 NC Building Code Council Public Hearing and Meetings.
- Item A 3 Request from the Town of Mooresville for approval to perform local plan reviews in accordance with 2018 NCACP 104.1.2.
- Item A 4 Request from the Town of Black Mountain for approval to perform local plan reviews in accordance with 2018 NCACP 104.1.2.
- Item A 5 Request from Lenoir County for approval to perform local plan reviews in accordance with 2018 NCACP 104.1.2.
- Item A 6 Rules Review Commission Meeting Report
- Item A 7 Public Comments

Part B - New Petition for Rulemaking

The following Petitions for Rulemaking have been received since the last Council meeting. The Council will vote either to deny or grant these Petitions. The Council will give no further consideration to Petitions that are denied. Petitions that are granted may proceed through the Rulemaking process. The council may send any Petition to the appropriate committee. The public hearing will take place after the June 11, 2024 meeting, at the next available public hearing. All B items can be viewed and downloaded from: https://www.ncosfm.gov/news/events/building-code-council-public-hearing-june-11-2024

There will be no B items received from the floor.

Item B – 1 Request from David Rittinger representing the NC Office of State Fire Marshal to amend Chapter 36 of the 2018 NC Building Code to reflect the requirements of North Carolina General Assembly Session Law 2023-137, Section 35 "Restore 2009 Building Code Standards for Piers and Docks Constructed in Estuarine Waters".

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-public-hearing-june-11-2024

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

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-public-hearing-june-11-2024

Item B - 3 Request from Joseph Starling, PE representing the NC Office of State Fire Marshal to amend the 2023 NC Electrical Code, Article 100 - Definitions - Selective Coordination as follows:

Article 100 – Definitions

. . . .

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

. . . .

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

Current Amendment of the 2023 North Carolina Electrical Code:

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

AMENDMENT 551.71(F)(2)

Amend NEC 2023, page 516:

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(2) Receptacles Installed in Recreational Vehicle Site Equipment. Ground-fault circuit-interrupter protection shall be provided as required in 210.8(B).

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

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

(2) <u>Receptacles Installed in Recreational Vehicle Site Equipment.</u>
Ground-fault circuit-interrupter protection shall only be required for 125-volt, single-phase, 15- and 20-ampere receptacles.

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

<u>Informational Note No. 2: The definition of Feed Assembly clarifies that the power supply cord to a recreational vehicle is considered a feeder.</u>

Item B - 5 Request from Dan Dittman representing the NC Office of State Fire Marshal to amend the 2018 NC Energy Conservation Code, Sections R402.2.2.1, R402.2.2.2, Table R402.1.2, and R402.1.4 to reflect the requirements of North Carolina General Assembly Session Law 2023-108, Section 5 "Amend Insulation Requirements for Unvented Attic and Enclosed Rafter Assemblies" as follows:

R402.2.2 Ceilings without attic spaces.

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

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

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

- (1) <u>The unvented attic or unvented enclosed rafter assemblies are constructed under Section R806.5 of the North Carolina Residential</u> Code.
- (2) The residence contains a mechanical ventilation system that operates on a positive, balanced, or hybrid pressure strategy in accordance with North Carolina Mechanical Code Section 403.3.
- (3) For residences with air-impermeable insulation installed below the roof deck, exposed portions of the roof rafters are wrapped by a minimum of R-3 insulation unless directly covered by drywall or finished ceiling material. For residences with air-impermeable insulation installed above the roof deck, roof rafters do not require insulation wrapping if air-impermeable insulation installed above the roof deck is continuous.
- (4) The residence obtains an ACH50 blower door test result of less than 3.0.
- (5) <u>The residence contains heating, cooling, and ventilation equipment</u> and ductwork within thermal envelope.

TABLE R402.1.2
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a

CLIMATE ZONE	FENESTRATION U-FACTOR ^{b,i}	SKYLIGHT ^b U FACTOR	GLAZED FENESTRATION SI	CEILING R-VALUE ^{m.g}	WOOD FRAME WAI VALUE	MASS WALI VALUE ⁱ	FLOOR R-VALUE	BASEMENT ^{c,o} W R-VALUE	SLAB R-VAL DEPTH	CRAWL SP WALL R-VA
3	0.35	0.55	0.30	38 or 30ci ¹	15 or 13+2	5/13 or 5/1	19	5/13 ^f	0	5/13
4	0.35	0.55	0.30	38 or 30ci ¹	15 or 13+2	5/13 or 5/1	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30ci ¹	19 ⁿ or 13+: 15+3 ^h	13/17 or 13/12.5ci	30 ^g	10/15	10	10/19

....

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.

. . . .

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TABLE R402.1.4 EQUIVALENT U-FACTORS²

CLIMATE ZONE	FENESTRATION U-FACTOR ^d	SKYLIGHTU- FACTOR	CEILING U-FACTOR [®]	FRAME WAI	MASS WALI FACTOR ^b	FLOOR U-FACTOR	BASEMENT WALL U-FACTO	CRAWL SPA WALL U-FAC
3	0.35	0.55	0.030	0.077	0.141	0.047	0.091°	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

....

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.

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

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-public-hearing-june-11-2024

Item B - 7 Request from Amanda Jane Albert representing Inhabit Living Solutions, LLC to amend the 2024 NC Residential Code, Appendix AS Strawable Construction as follows:

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-public-hearing-june-11-2024

Item B - 8 Request from Wendy Purser representing the NC Chapter of PHTA to amend the 2024 NC Residential Code, R327.1, delete Appendix NC-A and adopt the 2021 International Swimming Pool and Spa Code as follows:

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<u>Due to size, this petition and the 2021 ISPSC can be conveniently viewed at</u> the link below:

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

Part C - Notice of Rulemaking Proceedings and Public Hearing

The following Petitions for Rulemaking have been granted by the Council. Notice of Rulemaking proceedings has been made. The Public Hearing will be held on June 11, 2024, and the Final Adoption meeting may take place after the public comment period ends. The written public comment period expires on July 15, 2024 for Items C-1, C-2 and C-3. The written public comment period expires on June 14, 2024 for Item C-4. All C items can be viewed and downloaded from:

https://www.ncosfm.gov/news/events/building-code-council-meeting-new-petitions-and-final-adoption-only-b-and-d-items-march-19-2024

On-site Sign-up Sheet: 3 minutes for public comments, 2 minutes for rebuttals.

Item C - 1 Request from Phillip Scott of BFPE International to amend the 2024 NC Fire Code, Section 510.1 Emergency responder communication coverage in new buildings, Exception #4 as follows (240319 Item B-1):

Exceptions:

•••

4. New buildings 7,500 square feet or less and not more than 1 story above grade plane. One-story buildings not exceeding 12,000 square feet with no below-ground area(s).

Of note, Item C-1 requires a fiscal note to be approved by the NC Office of State Budget Management per the requirements of N.C.G.S 143-138(a1)(1). A fiscal note has not been provided by the proponent by the date of this printing of the agenda.

- Item C 2 Request from Adam Smith representing Carolina's Association of RV Parks and Campgrounds to amend the 2023 NC Electrical Code, Section 210.8 Ground-Fault Circuit-Interrupter Protection for Personnel, (F) Outdoor Outlets as follows (240319 Item B-2):
 - **(F) Outdoor Outlets.** For dwellings, all outdoor outlets, other than those covered in 210.8(A), Exception No. 1, including outlets installed in the following locations, and supplied by single-phase branch circuits rated 150 volts or less to ground, 50 amperes or less, shall be provided with GFCI protection:

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- (1)Garages that have floors located at or below grade level
- (2)Accessory buildings
- (3)Boathouses

If equipment supplied by an outlet covered under the requirements of this section is replaced, the outlet shall be supplied with GFCI protection.

Exception No. 1: GFCI protection shall not be required on lighting outlets other than those covered in 210.8(C).

Exception No. 2: GFCI protection shall not be required for listed HVAC equipment. This exception shall expire September 1, 2026.

Exception No. 3: GFCI protection for an RV park pedestal is covered in 551.71(F).

Item C - 3 Request from David Rittlinger representing staff to amend the 2024 edition of the North Carolina Administrative Code and Policies, Table 202.5 and Appendix C as follows (240319 Item B-4):

Table 202.5.5 Typical Timeline Example for Adopted Rules

Rule Petition Received: February 1

Standing Committee First Review: February – March June

Rule Petition Granted for Public Hearing:

<u>Hearing (B-items)</u>: March BCC meeting

Notice of Hearing Published: April NC Register

Hearing Held: Held (C-items):

June BCC public hearing

Standing Committee Final Review: June—September BCC Standing

Committee meeting

Final Rule Adoption: Adoption (D-items): September June BCC meeting

Rules Review Meeting: November July or August RRC meeting

Effective: First day of the month following the month

the adopted rule is approved by RRC or a delayed effective date approved by the BCC.

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Typical Timeline Example for Adopted Rules					
Rule Petition Received:	February 1				
Standing Committee First Review	February - March June				
Rule Petition Granted for Public Hearing: Hearing items):	March BCC meeting				
Notice of Hearing Published:	April NC Register				
Hearing Held:Held (C-items):	June BCC public hearing				
Standing Committee Final Review	June <u>SeptemberBCC Standing</u> <u>Committee meeting</u>				
Final Rule Adoption: Adoption (D-items):	SeptemberJune BCC meeting				
Rules Review Meeting:	November July or August RRC meetin				
Effective:	First day of the month following the mo the adopted rule is approved by RRC o delayed effective date approved by the B				

Item C - 4 Request from the NCBCC Residential Standing Committee to amend the 2024 edition of the North Carolina Residential Code, Chapter 44 Reference Standards as follows (240319 Item B-5):

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-meeting-new-petitions-and-final-adoption-only-b-and-d-items-march-19-2024

Part D - Final Adoption

The following Petitions for Rulemaking have been granted by the Council. Notice of Rulemaking proceedings and Public Hearing has been made. The Public Hearings were held on March 18, 2024 for all petitions. The Final Adoption meeting will take place on June 11, 2024. The Council will give no further consideration to Petitions that are disapproved. Petitions that are approved will proceed through the Rulemaking process. The effective date is January 1, 2025, *unless* otherwise noted.

Item D - 1 Request from the BCC Building Code Standing Committee to adopt the 2024 edition of the North Carolina Building Code as presented by the committee. (231219 Item B-3)

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-special-meeting-december-19-2023

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- Item D 2 Request from David Rittlinger representing staff to amend the 2024 NC Building Code, Section 101.2 Scope by adding Exceptions #7 and #8 as follows (231219 Item B-4):
 - **[A] 101.2 Scope.** The provisions of this code shall apply to the construction, *alteration*, relocation, enlargement, replacement, *repair*, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures. Exception: If any of the following apply, then the building or structure is exempt from the provisions of this code:

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

. . .

- 7. Farm structures exempt by N.C.G.S 143-138(b4).
- 8. Buildings used for temporary motion picture, television, and theater stage sets and scenery are exempt from use and occupancy classification under the *North Carolina State Building Code* by N.C.G.S 143-138(b20).

. . . .

Item D - 3 Request from Kate Whalen representing staff to amend the 2024 NC Building Code, Sections 202, 307, and 414 as follows (231212 Item B-3):

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-meeting-december-12-2023

- Item D 4 Request from Cliff Isaac representing the NC Home Builders
 Association to amend the 2024 NC Building Code, Section 1109.2 by
 adding #8 as follows (231212 Item B-6):
 - 8. This section is not applicable to dwellings built under the NC Residential Code that serve as model homes if one temporary ADA accessible portable toilet is provided during the time in which the garage serves as a sales office. A sign shall be provided to direct staff and the public to the ADA portable toilet. Water shall be permitted to be supplied to the entire dwelling while operating as a model home, and when fully converted to a residential dwelling when meeting the NC Residential Code for 1- and 2 family dwellings.

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Item D - 5 Request from the BCC Fire Prevention Code Standing Committee to adopt the 2024 edition of the North Carolina Fire Prevention Code as presented by the committee. (231219 Item B-5)

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-special-meeting-december-19-2023

Item D - 6 Request from David Rittlinger representing staff to amend the 2024 NC Fire Code, Section 102.13 Exception to applicability as follows by adding #7 (231219 Item B-6):

102.13 Exception to applicability. The provisions of this code shall not apply to the following:

. . . .

- 7. Farm structures exempt by N.C.G.S 143-138(b4).
- Request from Marielena Salazar & Kyle Baker representing Shell Retail & Convenience Operations (dba Shell TapUp) to amend the 2024 NC Fire Code, Section 5706.5.4.5 as follows (231219 Item B-7): 5706.5.4.5 Commercial, industrial, governmental or manufacturing establishments. Dispensing of Class I, II and III motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles located at commercial, industrial, governmental or manufacturing establishments is allowed where approved permitted provided that such dispensing operations are conducted in accordance with the following:

. . . .

Item D - 8 Request from Jason Shepherd to amend the 2024 NC Building Code, Section 907.2.3.1 and the 2024 NC Fire Code, Section 907.2.3.1 as follows (231219 Item B-8):

2024 NC Building Code

907.2.3.1 Automatic smoke detection systems. An automatic smoke detection system that initiates the occupant notification in accordance with Section 907.5.2.2 shall be installed throughout all stories of Group E buildings.

Exceptions:

1. An automatic smoke detection system shall not be required in Group E occupancies with an *occupant load* of 50 or less.

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2. An automatic smoke detection system shall not be required in Group E occupancies that are protected with approved automatic sprinkler systems installed in accordance with Section 903.3.1.1.

3. An automatic smoke detection system shall not be required in licensed day care facilities complying with Section 431.

2024 NC Fire Code

907.2.3.1 Automatic smoke detection systems. An automatic smoke detection system that initiates the occupant notification in accordance with Section 907.5.2.2 shall be installed throughout all stories of Group E buildings.

Exceptions:

- 1. An automatic smoke detection system shall not be required in Group E occupancies with an occupant load of 50 or less. 2. An automatic smoke detection system shall not be required in Group E occupancies that are protected with approved automatic sprinkler systems installed in accordance with Section 903.3.1.1.
- 3. An automatic smoke detection system shall not be required in licensed day care facilities complying with Section 431 of the *International Building Code*.
- Item D 9 Request from the Fire Code Revision Committee to amend the 2024 NC Building Code and 2024 NC Fire Code, Sections 1010.2.14, 1010.2.14.4 and 1010.2.1 as follows (231219 Item B-9):

2024 NC Building Code

1010.2.14 Controlled egress doors in Groups I-1, I-2, and R-4, and E.

. . . .

1010.2.14.4 Group E Classrooms. Electric locking systems, including electro-mechanical locking systems and electromagnetic locking systems, shall be permitted to be installed on exit or exit access doors leading from Group E classrooms and day care classrooms within a Group E occupancy where identified and documented by the local school administration as having one or more students that require restraint to preserve the safety of the student or students and meeting all of the following:

1. The building is equipped with a *fire alarm system* in accordance with Section 907.2.3 (Section 907.2.3, Exception 1 is not applicable).

2. The door locks shall unlock on actuation of the *fire alarm system* and remain unlocked until the *fire alarm system* has been reset.

3. The door locks shall unlock on loss of power controlling the lock or lock mechanism.

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- 4. A building occupant shall not be required to pass through more than one door equipped with a controlled egress locking system before entering an exit.
- 5. The procedures for unlocking the doors shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the *International Fire Code*.
- 6. Staff within the rooms equipped with controlled egress shall have the keys, codes or other means necessary to operate the locking systems.
- 7. When operated, the locking system shall remain unlocked for not less than 30 seconds.
- 8. Emergency lighting shall be provided at the door.
- 9. The door locking system units shall be listed in accordance with UL 294.

. . . .

1010.2.1 Unlatching. The unlatching of any door or leaf for egress shall require not more than one motion in a single linear or rotational direction to release all latching and all locking devices.

Exceptions:

- 1. Places of detention or restraint.
- 2. Where manually operated bolt locks are permitted by Section 1010.2.5.
- 3. Doors with automatic flush bolts as permitted by Section 1010.2.4, Item 4.
- 4. Doors from individual *dwelling units* and *sleeping units* of Group R occupancies as permitted by Section 1010.2.4, Item 5.
- 5. Group E classrooms identified by the local school administration as having one or more students that require restraint to preserve the safety of the student or students shall be permitted to have latching devices that require a maximum of two motions to unlatch the door from the egress side.

2024 NC Fire Code

[BE] 1010.2.14 Controlled egress doors in Groups I-1, I-2, and R-4, and E.

. . .

1010.2.14.4 Group E Classrooms. Electric locking systems, including electro-mechanical locking systems and electromagnetic locking systems, shall be permitted to be installed on exit or exit access doors leading from Group E classrooms and day care classrooms within a Group E occupancy where identified and documented by the local school administration as having one or more students that require restraint to

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preserve the safety of the student or students and meeting all of the following:

- 1. The building is equipped with a *fire alarm system* in accordance with Section 907.2.3 (Section 907.2.3, Exception 1 is not applicable).
- 2. The door locks shall unlock on actuation of the *fire alarm system* and remain unlocked until the *fire alarm system* has been reset.
- 3. The door locks shall unlock on loss of power controlling the lock or lock mechanism.
- 4. A building occupant shall not be required to pass through more than one door equipped with a controlled egress locking system before entering an exit.
- 5. The procedures for unlocking the doors shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the *International Fire Code*.
- 6. Staff within the rooms equipped with controlled egress shall have the keys, codes or other means necessary to operate the locking systems.
- 7. When operated, the locking system shall remain unlocked for not less than 30 seconds.
- 8. Emergency lighting shall be provided at the door.
- 9. The door locking system units shall be listed in accordance with UL 294.

. . . .

[BE] 1010.2.1 Unlatching. The unlatching of any door or leaf for egress shall require not more than one motion in a single linear or rotational direction to release all latching and all locking devices.

Exceptions:

- 1. Places of detention or restraint.
- 2. Where manually operated bolt locks are permitted by Section 1010.2.5.
- 3. Doors with automatic flush bolts as permitted by Section 1010.2.4, Item 4.
- 4. Doors from individual dwelling units and sleeping units of Group R occupancies as permitted by Section 1010.2.4, Item 5.
- 5. Group E classrooms identified by the local school administration as having one or more students that require restraint to preserve the safety of the student or students shall be permitted to have latching devices that require a maximum of two motions to unlatch the door from the egress side.

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- Item D 10 Request from Jason Shepherd representing the Durham County Fire Marshal to amend the 2024 NC Fire Code, Section 105.5.32 as follows (231219 Item B-10):
 - **105.5.32 Mobile food preparation vehicles.** (optional permit). AAn operational permit is required for *mobile food preparation vehicles* equipped with appliances that produce smoke or grease-laden vapors. Permits shall originate from the commissary address where the mobile food preparation vehicle is associated.
- Item D 11 Request from Jason Shepherd representing the Durham County Fire Marshal to amend the 2024 NC Fire Code, Sections 319.11.1 and 319.11.13 as follows (231219 Item B-11):
 - **319.11.1 Stability.** *Mobile food preparation vehicles* shall be stabilized against movement when parked for food prep operations in accordance with Section 319.11.1.1 through 319.11.1.2319.11.1.3.
 - 319.11.1.3 Mobile cooking operations. *Mobile food preparation vehicles* shall be separated from buildings, structures, canopies, tents, combustible materials, vehicles, and other cooking operations by a minimum of 10 feet (3048mm). Exhaust shall be directed away from openings, air intakes and away from any means of egress.
- Item D 12 Request from Kate Whalen representing staff to amend the 2024 NC Fire Code, Sections 202, 203, 608, 911, 3307, 5003 and Reference Standards as follows (231212 Item B-4):

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-meeting-december-12-2023

Item D - 13 Request from Colin Triming representing the NC Fire Code Revision Committee to amend the 2024 NC Fire Code, Chapter 80, NFPA 241 edition as follows (231212 Item B-11):

241-1922

Standard for Safeguarding Construction, Alteration and Demolition Operations

3301.1, 3303.2

Item D – 14 Request from the NC Building Code Council Energy Standing
Committee to adopt the 2024 edition of the North Carolina Energy
Conservation Code as presented by the committee. (231219 Item B-21)

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Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-special-meeting-december-19-2023

Item D - 15 Request from AIA North Carolina to amend the 2024 NC Energy Conservation Code, Section C502.2 as follows (231212 Item B-7):

C502.2 Change in space conditioning. Any nonconditioned or low-energy space that is altered to become *conditioned space* shall be required to comply with Section C502.

Exceptions:

- 1. Where the component performance alternative in Section C402.1.5 is used to comply with this section, the proposed UA shall be not greater than 110120 percent of the target UA.
- 2. Where the total building performance option in Section C407 is used to comply with this section, the annual energy cost of the proposed design shall be not greater than 110<u>120</u> percent of the annual energy cost otherwise permitted by Section C407.2.

Of note, Item D-15 requires a fiscal note to be approved by the NC Office of State Budget Management per the requirements of N.C.G.S 143-138(a1)(1) and a cost benefit analysis per N.C.G.S 143-138(a1)(2). A fiscal note and cost benefit analysis has not been provided by the proponent by the date of this printing of the agenda.

Item D - 16 Request from AIA North Carolina to amend the 2024 NC Energy Conservation Code, Section 505.1 as follows (231212 Item B-8):

C505.1 General. Spaces undergoing a change in occupancy that would result in an increase in demand for either fossil fuel or electrical energy shall comply with this code. Where the use in a space changes from one use in Table C405.3.2 (1) or C405.3.2(2) to another use in Table C405.3.2 (1) or C405.3.2(2), the install lighting wattage shall comply with Section C405.3. With the space undergoing a change in occupancy or use is in a building with a fenestration area that exceeds the limitations of Section C402.4.1, the space is exempt from Section C402.4.1 provided that there is not an increase in fenestration area.

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Exceptions:

- 1. Where the component performance alternative in Section C402.1.5 is used to comply with this section, the proposed UA shall not be greater than 110120 percent of the target UA.
- 2. Where the total building performance option in Section C407 is used to comply with this section, the annual energy cost of the proposed design shall not be greater than 110120 percent of the annual energy cost otherwise permitted by Section C407.2.

Of note, Item D-16 requires a fiscal note to be approved by the NC Office of State Budget Management per the requirements of N.C.G.S 143-138(a1)(1) and a cost benefit analysis per N.C.G.S 143-138(a1)(2). A fiscal note and cost benefit analysis has not been provided by the proponent by the date of this printing of the agenda.

Item D - 17 Request from the BCC Existing Building Code Standing Committee to adopt the 2024 edition of the North Carolina Existing Building Code as presented by the committee. (231219 Item B-12)

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-special-meeting-december-19-2023

- Item D 18 Request from David Rittlinger representing staff to amend the 2024 NC Existing Building Code, Section 101.2 Scope as follows by adding Exception #2 (231219 Item B-13):
 - [A] 101.2 Scope. The provisions of this code shall apply to the *repair*, alteration, change of occupancy, addition to and relocation of existing buildings.

Exception: Exceptions:

- 1. Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height, shall comply with this code or the *International Residential Code*.
- 2. This code shall not apply to buildings constructed under exemption by North Carolina State law in compliance with North Carolina State Building Codes.

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- Item D 19 Request from David Rittlinger of staff to amend the 2024 NC Existing Building Code, Section 803.2.1.2 as follows (231219 Item B-14):
 - **803.2.1.2 Low-rise buildings.** Work areas that increase the fire area or calculated occupant load above the limits listed in Section 903.2 of the *International Building Code* shall meet the requirements of those sections. **Exception:** Where an automatic sprinklers system is not existing in a building or otherwise required by Section 803, North Carolina Building Code Section 903.2.8 shall not be applied for Group R-3.
- Item D 20 Request from the NC Building Code Council Mechanical Standing Committee to adopt the 2024 edition of the North Carolina Fuel Gas Code as presented by the committee. (231219 Item B-19).

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-special-meeting-december-19-2023

Item D – 21 Request from the NC Building Code Council Mechanical Standing Committee to adopt the 2024 edition of the North Carolina Mechanical Code as presented by the committee. (231219 Item B-18)

Due to size, this petition can be conveniently viewed at the link below: https://www.ncosfm.gov/news/events/building-code-council-special-meeting-december-19-2023

- Item D 22 Request from Kerry Sutton, P.E. representing the American Concrete Institute, Edward Deaver representing the ACI Carolinas Chapter, Caroline Sutton representing Carolinas Ready Mixed Concrete Association, Shamim Rashid-Sumar, P.E., F.S.F.P.E. representing National Ready Mixed Concrete Association, Griff Shapack, P.E. representing Simpson Strong-Tie, Jay Pease, P.E. representing Owens Corning/Infrastructure Solutions, Jerzy Zemajtis, P.E. representing NEX: An ACI Center of Excellence for Nonmetallic Building Materials, and Jay Thomas representing Structural Technologies to amend the 2024 NC Building Code, Section 1901 as follows (230912 Item B-3):
 - **1901.2 Plain and reinforced concrete.** Structural concrete shall be designed and constructed in accordance with the requirements of this chapter and ACI 318 as amended in Section 1905 of this code. Except for the provisions of Section 1904 and 1907, the design and construction of slabs on grade shall not be governed in this chapter unless they transmit vertical *loads* or lateral forces from other parts of the structure to the soil.

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1901.2.1 Structural concrete with GFRP reinforcement. Cast-in-place structural concrete internally reinforced with glass fiber reinforced polymer (GFRP) reinforcement conforming to ASTM D7957 and designed in accordance with ACI CODE 440.11 shall be permitted where fire resistance ratings are not required and only for structures assigned to Seismic Categories A, B or C.

Exception: Concrete internally reinforced with GFRP bars shall not be permitted for concrete elements that are part of the seismic lateral force resisting system in structures assigned to Seismic Design Categories B or C.

Add new reference standard(s) to Chapter 35 as follows:

<u>440.11-22</u> Building Code Requirements for Structural Concrete Reinforced with Glass Fiber-Reinforced Polymer (GFRP) Bars-Code and Commentary.....1901.2.1

ASTM

D7957-17 Standard Specification for Solid Round Glass Fiber Reinforced Polymer Bars for Concrete Reinforcement......1901.2.1

Part E – Reports

- * Ad-Hoc Committee Reports
- Standing Committee Reports
- Staff Reports
- Chairman's Report

Part F – Appeals

BBUDC, Inc vs. Durham City/County Inspections Department is scheduled for 9:00 AM on Wednesday, July 31, 2024, Room 245 of the Albemarle Building located at 325 North Salisbury Street, Raleigh NC, 27603.

Sincerely,

DR. Kittlinger

David Bruce Rittlinger, PE. Secretary,

NC Building Code Council

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