



North Carolina Building Code Council

Staffed by the NC Department of Insurance

Mike Causey, Commissioner of Insurance
Carl Martin, RA, Secretary

(919) 647-0001
(919) 662-4414 Fax

1202 Mail Service Center
Raleigh, NC 27699-1202

325 N. Salisbury Street
Raleigh, NC 27603

Building Code Council

Chair:

Bridget Herring - 23
(Public Representative)

Vice Chairman:

Mark Matheny - 27
(Building Inspector)

Members:

Michael Ali, PE - 23
(State Agency)

Robert Axford - 25
(Electrical Contractor)

Chris Berg, PE - 27
(Structural Engineer)

Andrew C. Cole, AIA - 28
(Architect)

Gary Embler - 23
(Home Builder)

Ralph Euchner - 25
(Gas Industry)

David Gieser, RA - 28
(Architect)

Jeff Hilton - 28
(Coastal Contractor)

Natalie MacDonald, PE - 27
(Mechanical Engineer)

Gloria Shealey - 27
(General Contractor)

Deborah Shearin - 25
(Plumbing & Heating Contractor)

Jason B. Shepherd - 27
(Fire Services)

Victoria Watlington, PE - 28
(Municipal Government Rep)

Kim Wooten, PE - 25
(Electrical Engineer)

Robert Zapple - 28
(County Gov't Rep)

February 14, 2023

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

RE: Agenda for the March 14, 2023 NC Building Code Council Meeting

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. The NC Building Code Council Meeting will begin at 9:00AM on Tuesday, March 14, 2023 (Albemarle Building). The meeting can be accessed remotely via Facebook Live (<https://www.facebook.com/NCOSFMEngineering>). Remote access does not provide capability to address the council.
2. Standing Committees will meet in the morning on Monday, March 13, 2023. Schedule to be set by the Council Chair.
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 December 13, 2022 NC Building Code Council Meeting.**
- Item A – 3 Request from Catawba County for approval to amend Section 8-1 Building Code Adopted of the Catawba County Code of Ordinances to adopt Appendices B (Fire-Flow Requirements for Buildings) and C (Fire Hydrant Locations and Distribution) of the 2018 NC Fire Code.**
- Item A – 4 Request from Orange County for approval to amend the Orange County Code of Ordinances, Section 14-1 Fire prevention, to adopt all optional operational permits as identified in the 2018 NC Fire Code, Section 105.**
- Item A – 5 Request from the City of Reidsville for approval to perform local plan review on buildings listed in Table 104.1 of the 2018 NC Administrative Code & Policies.**
- 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 hearing will take place during or after the March 14, 2023 meeting. All B items can be viewed and downloaded from: <https://www.ncosfm.gov/news/events/building-code-council-meeting-march-14-2023>.

Items B-1 through B-7 represent the proposed amendments to the 2021 International Codes to establish the 2024 NC Building Codes.

The 2021 International Codes for Items B-1 through B-7 can be found by clicking on the applicable code icon at the following link on the ICC website:

<https://codes.iccsafe.org/codes/i-codes/2021-icodes>.

There will be no B items received from the floor.

- Item B – 1 Request from the BCC Mechanical Standing Committee to adopt the 2024 edition of the North Carolina Plumbing Code as presented by the committee.**
- Item B – 2 NCMC Request from the BCC Mechanical Standing Committee to adopt the 2024 edition of the North Carolina Mechanical Code as presented by the committee.**
- Item B – 3 Request from the BCC Mechanical Standing Committee to adopt the 2024 edition of the North Carolina Fuel Gas Code as presented by the committee.**
- Item B – 4 Request from the BCC Residential Standing Committee to adopt the 2024 edition of the North Carolina Residential Code Chapters 1-10, 25-33, 45, 46 and Appendices as presented by the committee.**
- Item B – 5 Request from Natalie MacDonald, Chair of the NC BCC Mechanical Standing Committee to adopt and incorporate Chapters 12-23 (Mechanical) and Chapter 24 (Fuel-Gas) of the 2024 edition of the NC Residential Code, into the 2024 edition of the NC Residential Code.**
- Item B – 6 Request from Gloria Shealey, Chair of the NC BCC Energy Standing Committee to adopt and incorporate Chapter 11 (Energy) of the 2024 edition of the NC Residential Code, into the 2024 edition of the NC Residential Code.**
- Item B – 7 Request from Gary Embler, Chair of the NC BCC Residential Standing Committee to adopt and incorporate Chapter 11 (Energy), Chapters 12-23 (Mechanical), and Chapter 24 (Fuel-Gas) of the 2018 edition of the NC Residential Code, into the 2024 edition of the NC Residential Code**
- Item B – 8 Request from Carl Martin representing NCDOI to amend the 2024 NC Building Code, Section 101.2 as follows:**

[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:

1. Detached one- and two-family *dwelling*s and *townhouse*s 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. Farm buildings not used for:
 - a. Sleeping purposes; or
 - b. Storage of hazardous materials in excess of those listed in Tables 307.1(1) and 307.1(2) within the building rules jurisdiction of any municipality.
3. The design, construction, location, installation or operation of equipment for storing, handling and transporting liquefied petroleum gases for fuel purposes up to the outlet of the first stage pressure regulator, anhydrous ammonia or other liquid fertilizer.
4. The design, construction, location, installation or operation of equipment of facilities of a public utility, as defined in N.C.G.S. 62-3, or electric or telephone membership corporation, including without limitation poles, towers and other structures supporting electric or communication lines from the distribution network up to the meter location.
5. The storage and handling of substances governed by the Hazardous Chemical Right to Know Act in N.C.G.S. Chapter 95, Article 18.
6. Retaining walls complying with any of the following:
 - a. 3 feet or less in height where a guard is required;
 - b. 5 feet or less of cumulative fill within 3 feet horizontally from the wall;
 - c. Not located within 15 feet of another retaining wall; and
 - d. Not located within 3 feet of a building or structure.
7. Farm structures exempt by N.C.G.S 143-138(b4).

Item B – 9 Request from Carl Martin representing NCDOI to amend the 2024 NC Fire Code, Section 101.2 as follows:

[A] 101.2 Scope. This code establishes regulations affecting or relating to structures, processes, premises and safeguards regarding all of the following:

1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices.
2. Conditions hazardous to life, property or public welfare in the occupancy of structures or premises.
3. Fire hazards in the structure or on the premises from occupancy or operation.
4. Matters related to the construction, extension, repair, *alteration* or removal of fire protection systems.

5. Conditions affecting the safety of fire fighters and emergency responders during emergency operations.

Exception: Farm structures exempt by N.C.G.S 143-138(b4).

Item B – 10 Request from Carl Martin representing NCDOI to amend the 2024 NC Existing Building Code, Section 101.2 as follows:

[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*.

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 to compliance with North Carolina State Building Codes.

Item B – 11 Request from Carl Martin representing NCDOI to amend the 2024 NC Energy Conservation Code, Section C101.2 and R102.2 as follows:

C101.2 Scope. This code applies to *commercial buildings* and the buildings' sites and associated systems and equipment.

Exception: Farm structures exempt by N.C.G.S 143-138(b4).

R101.2 Scope. This code applies to *residential buildings, building* sites and associated systems and equipment.

Exception: Farm structures exempt by N.C.G.S 143-138(b4).

Item B – 12 Request from Carl Martin to amend the 2024 NC Existing Building Code, Section 803.2.1.2 as follows:

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 B – 13 Request from Carl Martin representing NC Board of Architecture and Registered Interior Designers to amend the 2024 NC Administrative Code, Section Appendix B as follows:

APPENDIX B

**2024 BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS**

(EXCEPT ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

CONTACT: _____

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	_____	_____	_____	() _____	_____
Registered Interior Designer	_____	_____	_____	() _____	_____
Electrical	_____	_____	_____	() _____	_____
Fire Alarm	_____	_____	_____	() _____	_____
Plumbing	_____	_____	_____	() _____	_____
Mechanical	_____	_____	_____	() _____	_____
Sprinkler- Standpipe	_____	_____	_____	() _____	_____
Structural	_____	_____	_____	() _____	_____
Retaining Walls > 5 feet High	_____	_____	_____	() _____	_____
Other	_____	_____	_____	() _____	_____

("Other" should include firms and individuals such as truss, precast, pre-engineered, nonregistered interior designers, etc.)

(Appendix B beyond this portion remains unchanged by this amendment.)

Item B – 14 Request from Carl Martin representing NC Building Code Council to amend the 2024 NC Administrative Code, Sections 106.3.1 and 106.3.2 as follows:

106.3.1 Information required. A permit application shall be filed with the Inspection Department on a form (see Appendix A) furnished for that purpose. The Inspection Department shall make available a list of information that must be submitted with the building permit application, including a complete ~~building code summary~~ Building Code Summary (see ~~Appendix A of the Administrative Code and Policies~~ Appendix B) complying with 106.3.2.

Exception: A Building Code Summary is not required if the AHJ (Authority Having Jurisdiction) determines plan review can be performed without the Building Code Summary.

106.3.2 Building Code Summary. ~~The Inspection Department's building code summary~~ Building Code Summary used by an AHJ shall be in the exact format as, and contain only the information in, Appendix B of the Administrative Code and Policies. ~~The Inspection Department~~ An AHJ shall only modify ~~its building code summary~~ the Building Code Summary as set forth in section 103.6 Modifications, or as necessary to reflect any changes by the Office of State Fire Marshal to Appendix B that have been approved by the Building Code Council.

Item B – 15 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:

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 B – 16 Request from Adam Hill representing Simpson Strong-Tie to amend the 2018 NC Building Code, Section 3605.3.1 as follows:

3605.3.1 Wood Connections.

All wood connections shall be designed to resist the forces specified in Section 3604. Steel steel bolts, rods and other hardware shall be hot-dipped galvanized in accordance with ASTM A153 or protected with an equivalent system. All Where bolts, or rods and other metal materials are used, they shall be no smaller than 5/8-inch in diameter. Beams, girders or pile caps shall be attached to the piling with a minimum of two 5/8-inch hot-dip galvanized steel bolts per beam member through bolted at each piling or a connection having equivalent capacity and corrosion resistance. The piling Piling shall not be notched so that the cross-section is reduced below 50 percent. Threaded fasteners shall not be tightened directly against wood surfaces but used only in conjunction with standard ogee or flat washers. Cold formed metal connectors shall not be used in wet applications or applications subject to wetting and drying cycles, unless they are manufactured from Stainless Steel meeting grade 316. Mooring hardware, including cleats, and pile guides shall be through bolted using sizes recommended by the manufacturer.

Item 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 March 14, 2023, and the Final Adoption meeting may take place on or after June 13, 2023. The written public comment period expires on April 17, 2023. All C items can be viewed and downloaded from: <https://www.ncosfm.gov/news/events/building-code-council-meeting-december-13-2022>.

Items C-3 through C-6 represent the proposed amendments to the 2021 International Codes to establish the 2024 NC Building Codes.

The 2021 International Codes for Items C-3 through C-6 can be found by clicking on the applicable code icon at the following link on the ICC website:

<https://codes.iccsafe.org/codes/i-codes/2021-icodes>

A sign-up sheet for public comments will be provided onsite. Public comments are limited to 3 minutes per person for each item. Rebuttals are limited to 2 minutes per person for each item.

- Item C – 1 Request from the BCC NCAC&P Standing Committee to adopt the 2024 edition of the North Carolina Administrative Code and Policies as presented by the committee (221213 Item B-1).**
- Item C – 2 Request from the BCC NCAC&P Standing Committee to revise Administrative Code and Policies, Section 107 (221213 Item B-2).**
- Item C – 3 Request from the BCC Building Code Standing Committee to adopt the 2024 edition of the North Carolina Building Code as presented by the committee (221213 Item B-3).**
- Item C – 4 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 (221213 Item B-4).**
- Item C – 5 Request from the BCC Existing Building Code Standing Committee to adopt the 2024 edition of the North Carolina Existing Buildings Code as presented by the committee (221213 Item B-5).**
- Item C – 6 Request from the BCC Energy Conservation Code Standing Committee to adopt the 2024 edition of the North Carolina Energy Conservation Code as presented by the committee (221213 Item B-6).**

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 December 13, 2022. The Final Adoption meeting will take place on March 14, 2023. 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, 2024 unless otherwise noted.

Item D – 1 Request by Carl Martin representing NC Department of Insurance to amend the 2018 NC Plumbing Code, Table 403.1 and 202 and the 2018 NC Building Code, Table 2902.1 and 202 as follows (220913 Item B-1):

**NC PLUMBING CODE:
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			
1	Assembly (See Sections 403.2, 403.3 and 403.3.3.2)	A-3	Places of worship and other religious services. <u>Including churches</u> Churches without assembly halls ^e	per 150	1 per 75	1 per 200		-	1 per 1,000	1 service sink

e. 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). Remote buildings applying this footnote shall be a maximum of 300 feet (91.44 m) exterior travel distance to the nearest entrance of the building containing required plumbing fixtures and the total plumbing fixture access travel distance shall comply with Section 403.3.3. The path of travel between buildings is not required to be enclosed or covered when applying this footnote. (The remainder of Table 403.1 remains unchanged by this proposed amendment.)

Section 202 – General Definitions

Travel distance, plumbing fixture access. Travel distance shall be measured from the most remote point of each room, area or space along the natural, unobstructed and accessible path of horizontal and vertical travel to the entrance to the nearest toilet room containing plumbing fixtures required to serve the room, area or space.

NC BUILDING CODE:

[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 INTERNATIONAL PLUMBING CODE)	OTHER
				MALE	FEMALE	MALE	FEMALE			
1	Assembly (See Sections 403.2, 403.3 and 403.3.3.2)	A-3	Places of worship and other religious services. Including churches Churches without assembly halls ^e	1 per 150	1 per 75	1 per 200		-	1 per 1,000	1 service sink

e. 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). Remote buildings applying this footnote shall be a maximum of 300 feet (91.44 m) exterior travel distance to the nearest entrance of the building containing required plumbing fixtures and the total plumbing fixture access travel distance shall comply with Section 2902.3.2. The path of travel between buildings is not required to be enclosed or covered when applying this footnote.

(The remainder of Table 2902.1 remains unchanged by this proposed amendment.)

Section 202 – Definitions

Travel distance, plumbing fixture access. Travel distance shall be measured from the most remote point of each room, area or space along the natural, unobstructed and accessible path of horizontal and vertical travel to the entrance to the nearest toilet room containing plumbing fixtures required to serve the room, area or space.

Item D – 2 Request by Carl Martin representing NC Department of Insurance to amend the 2018 NC Building Code and Fire Code, Table 1004.1.2 as follows (220913 Item B-2):

**TABLE 1004.1.2
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT^c**

Skating rinks, swimming pools, recreational courts	
Rink, pool, and recreational court	50 gross
Decks	15 gross ^d

For SI: 1 square foot = 0.0929 m², 1 foot = 304.8 mm.

- a. Floor area in square feet per occupant.
- b. An assembly occupancy conference room that is accessory to a Group B office occupancy and meeting the requirements of Section 303.1, exception 2, shall be calculated at 100 square feet per occupant for

determining the overall occupant load of the associated floor. The assembly occupancy shall be calculated at 15 square feet per occupant for the purpose of determining egress from the room containing the assembly occupancy.

- c. For mixed uses sum all loads before rounding up to the next whole number.
- d. Occupant circulation area required by NCAC 18A.2522 around the edge of a swimming pool shall not be included in the deck gross floor area.

(The remainder of Table 1004.1.2 remains unchanged by this proposed amendment.)

Part E – Reports

- ❖ **Ad-Hoc Committee Reports**
- ❖ **Standing Committee Reports**
- ❖ **Staff Reports**
- ❖ **Chairman’s Report**

Part F – Appeals

Davidson County Fire Marshal’s Office appeal is scheduled to be continued on April 26, 2023 at 10:00 a.m. at the Albemarle Building (325 N. Salisbury St, Raleigh NC).

Sincerely,



Carl Martin, RA. Secretary,
NC Building Code Council