

North Carolina Building Code Council

Staffed by the NC Department of Insurance

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Building Code Council

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Vice Chairman:

Daniel S. Priest, RA - 22 (Architect)

Members:

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Gary Embler - 23 (Home Builder)

Ralph Euchner - 19 (Gas Industry)

Keith Hamilton - 19 (Plumbing and Heating Contractor)

Wayne Hamilton - 21 (Fire Services)

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Steve L. Knight, PE - 21 (Structural Engineer)

Frankie Meads - 22 (County Gov't Rep)

Robert Morrow - 19 (Electrical Contractor)

Keith Rogers, PE - 21 (Mechanical Engineer)

Tony W. Sears - 22 (Municipal-Gov't Rep)

Leon Skinner - 21 (Building Inspector)

David L. Smith - 22 (Coastal Contractor)

J. Wade White, Jr. - 19 (Electrical Engineer)

February 20, 2019

Robbie Davis, Chairman 5998 Dortches Boulevard Rocky Mount, NC 27804

RE: Agenda for the March 12, 2019 NC Building Code Council Meeting

Mr. Davis:

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 12, 2019 (Albemarle Building).
- 2. Standing Committees will meet in the afternoon on Monday, March 11. Schedule to be set by Chairman.
- 3. The Agenda is printed as follows:
 - A-Items- Administrative items that require Council action, but are not subject to Rule-Making.
 - 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 January 28, 2019 NC Building Code Council Meeting.
- Item A 3 Request by Ronnie Hayes representing Town of Leland, for approval of the Town Fire Protection and Prevention Ordinance.
- Item A 4 Request by Ed Parvin representing the Town of Carolina Beach, for approval of Ordinance No. 14-953 for fire protection and prevention.
- Item A 5 Request by Ben Alexander representing the Town of Kitty Hawk, for approval of the Ordinance Amendment of the Town Code of Kitty Hawk.
- Item A 6 Request by Bryan Phillips representing Moore County for approval of the Resolution adopting the 2018 Fire Code Appendixes.
- Item A 7 Rules Review Commission Meeting Report
- Item A 8 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 June 2019 meeting.

Item B – 1 Request by Carl Martin representing the North Carolina Department of Insurance to amend the 2018 NC Building Code, Sections 429.1.1 and 430.3.

429.1.1 Location.

Rooms where occupants receive care in I-4 and R-3 adult and child day care facilities shall be on the level of exit discharge.

Exception: Second story rooms used for first grade children but not younger than 2-1/2 years of age in licensed Group I-4 daycare facilities that meet all the following:

- 1. Fully sprinklered in compliance with 903.3.1.1,
- 2. Maximum of 49 children on the second story,
- 2. Maximum exit access travel distance is 75 feet.

- 3. Two remote means of egress is provided from each room containing children
- 4. Interior egress stairs shall be a minimum of 1-hour fire-resistant-rated and shall discharge directly to the exterior, and
- 5. Atriums shall not connect the first and second floor unless the atrium is 1-hour separated from the second floor.

430.3 Group E in churches, private schools and public schools.

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.

Exception: Second story rooms used for first grade children but not younger than 2-1/2 years of age in licensed Group E daycare facilities that meet all the following:

- 1. Fully sprinklered in compliance with 903.3.1.1,
- 2. Maximum of 49 children on the second story,
- 2. Maximum exit access travel distance is 75 feet,
- 3. Two remote means of egress is provided from each room containing children
- 4. Interior egress stairs shall be a minimum of 1-hour fire-resistant-rated and shall discharge directly to the exterior, and
- 5. Atriums shall not connect the first and second floor unless the atrium is 1-hour separated from the second floor.

Item B – 2 Request by Carl Martin representing the North Carolina Department of Insurance to amend the 2018 NC Building Code, Section 714.4.2 as follows:

714.4.2 Membrane penetrations.

Penetrations of membranes that are part of a *horizontal assembly* shall comply with Section 714.4.1.1 or 714.4.1.2. Where floor/ceiling assemblies are required to have a *fire-resistance rating*, recessed fixtures shall be installed such that the required *fire resistance* will not be reduced.

Exceptions:

7. The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a wall assembly that is sheathed with Type X gypsum wallboard, provided that all penetrating items through the double top plate are protected in accordance with Section 714.4.1.1 or 714.4.1.2 and the ceiling membrane is tight to the top plate. For 2-hour fire-resistance-rated horizontal assemblies the wall assembly must be sheathed with Type X gypsum wallboard.

Item B – 3 Request by Terry Cromer representing the North Carolina Association of Electrical Contractors to amend the 2018 Administrative Code, Section 106.3.1 as follows:

106.3 Permit Application.

106.3.1 Information required. A permit application shall be filed with the Inspection Department on a form furnished for that purpose. The Inspection Department shall make available a list of information which must be submitted with the building permit application, including a complete building code summary (see Appendix A of the Administrative Code and Policies). Trade permit applications for miscellaneous electrical mechanical and plumbing work to be performed for other than the construction of, alterations, repairs or additions to one- and two- family dwellings, townhouses or other building or structure shall be submitted in the exact format as, and contain only the information in Appendix A-1 of the Administrative Code and Policies. The Inspection Department's building code summary shall be in the exact format as, and contain only the information in, Appendix B of the Administrative Code and Policies. The Inspection Department shall only modify its building code summary or trade permit application as set forth in section 103.5 Modifications, or as necessary to reflect any changes by the Office of State Fire Marshal to Appendix B or trade permit application which have been approved of by the Building Code Council.

This space reserve for department information

RESIDENTIAL & COMMERCIAL TRADE PERMIT PLUMBING/MECHANICAL/ELECTRICAL/FUEL PIPING/FIRE PLACE/OTHER

Application Date:
Subdivision:
Mobile phone #:
io □Yes If yes, additional paperwork may be required
bell to st
ONTRACTOR
License #:
Mobile #:
11 1
CONTRACTOR
License #:
Mobile #:
CONTRACTOR
License #:
Mobile #:
CONTRACTOR
License #:
Mobile #:
☐ No If yes, list appliance(s) below in description

Item B - 4 Request by Stuart Laney representing Laney Electrical Construction, Inc. to amend the 2017 Electrical Code, Section 406.4(D)(4) as follows:

406.4(D)(4) Arc Fault Circuit Interrupters.

Where a receptacle outlet is located in any areas specified in 210.12(A) or (B), 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 No. 1: Arc fault circuit interrupter protection shall not be required where all of the following apply:

- (1) The replacement complies with 406.4(D)(2)(b).
- (2) It is impracticable to provide an equipment a ground conductor as provided by 250.130(C).
- (3) A listed combination type arc fault circuit interrupter circuit breaker is not commercially available.
- (4) GFCI/AFCI dual function receptacles are not commercially available.

Exception No. 2: Section 210.12(B), Exception shall not apply to replacement of receptacles.

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 12, 2019 and the Final Adoption meeting may take place on or after June 2019. The written public comment period expires on June 3, 2019.

There are no C items.

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 January 28, 2019. The Final Adoption meeting will take place on March 12, 2019. The Council will give no further consideration to Petitions that are disapproved. Petitions that are approved will proceed through the Rulemaking process.

Item D - 1 Request by Eurilynn Caraballo representing Mecklenburg County Code Enforcement to amend the 2018 NC Building Code, Section 1009.7.2 as follows:

Exceptions:

- <u>1.</u> Areas for assisted rescue that are located 10 feet (3048 mm) or more from the exterior face of a building are not required to be separated from the building by fire-resistance rated walls or protected openings.
- 2. The fire-resistance rating and opening protectives are not required in the exterior wall where the building is equipped throughout with an automatic sprinkler system installed in accordance with section 903.3.1.1 or 903.3.1.2.

[NOTE: Also Fire Code Section 1009.7.2.]

- Item D 2 Request by Ryan Miller representing the NC Building Performance Association to amend the 2018 NC Energy Conservation Code, Section R406.6.2 Compliance Report as follows:
 - 5. The RESNET Registry number (or equivalent) for the ERI.
- Item D 3 Request by Ryan Miller representing the NC Building Performance Association to amend the 2018 NC Residential Code, Section N1106.6.2 (R406.6.2) Compliance Report as follows:
 - 5. The RESNET Registry number (or equivalent) for the ERI.
- Item D 4 Request by Ryan Miller representing the NC Building Performance Association to amend the 2018 NC Residential Code, Section N1106.6.1 (R406.6.1) Compliance Software Tools as follows:

N1106.6.1 (R406.6.1) Compliance software tools. Compliance software tools for this section shall be in compliance with ANSI/RESNET/ICC 301-2014 (- Including Addenda A & B).

Item D - 5 Request by Ryan Miller representing the NC Building Performance Association to amend the 2018 NC Residential Code, Section N1106.2 (R406.2) Mandatory Requirements as follows:

N1106.2 (R406.2) Mandatory requirements. Compliance with this section requires that the provisions identified in Sections N1101.14 through N1104 labeled as "mandatory" be met. The building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table 402.1.1 or Table 402.1.3 of the 2012 North Carolina Energy Conservation Code. Minimum standards associated with compliance shall be the

ANSI/RESNET/ICC 301-2014 Standard (<u>Including Addenda A and B</u>) for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using Energy Rating Index. A North Carolina registered design professional or certified HERS rater is required to perform the analysis if required by North Carolina licensure laws.

Item D - 6 Request by Ryan Miller representing the NC Building Performance Association to amend the 2018 NC Energy Conservation Code, Section R406.2 as follows:

N1106.2 (R406.2) Mandatory requirements. Compliance with this section requires that the provisions identified in Sections R401 through R404 labeled as "mandatory" be met. The building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table 402.1.1 or Table 402.1.3 of the 2012 North Carolina Energy Conservation Code. Minimum standards associated with compliance shall be the ANSI/RESNET/ICC 301 – 2014 Standard (Including Addenda A and B) for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using an Energy Rating Index. A North Carolina registered design professional or certified HERS rater is required to perform the analysis if required by North Carolina licensure laws.

Item D - 7 Request by Ryan Miller representing the NC Building Performance Association to amend the 2018 NC Residential Code, Section N1106.7.1 (R406.7.1) Minimum Capabilities as follows:

N1106.7.1 (R406.7.1) Minimum capabilities. Calculation procedures used to comply with this section shall be software tools capable of calculating the ERI as described in Section N1106.3 and shall be in compliance with ANSI/RESNET/ICC 301 (Including Addenda A and B), and the software shall include the following capabilities:

1. Computer generation...

Item D - 8 Request by Ryan Miller representing the NC Building Performance Association to amend the 2018 NC Energy Conservation Code, Section R406.6.1 Compliance Software Tools as follows:

R406.6.1 Compliance software tools. Compliance software tools for this section shall be in compliance with the ANSI/RESNET/ICC 301-2014 (Including Addenda A & B).

Item D - 9 Request by Ryan Miller representing the NC Building Performance Association to amend the 2018 NC Energy Conservation Code, Section R406.7.1 Minimum Capabilities as follows:

N1106.7.1 (R406.7.1) Minimum capabilities. Calculation procedures used to comply with this section shall be software tools capable of calculating the ERI as described in Section N1106.3 and shall be in compliance with ANSI/RESNET/ICC 301 (Including Addenda A and B), and the software shall include the following capabilities:

- 1. Computer generation...
- Item D 10 Request by Ryan Miller representing the NC Building Performance
 Association to amend the 2018 NC Residential Code, Section Part IX
 Referenced Standards / ICC as follows:

ANSI/RESNET/ICC 301-14 (Including Addenda A & B) Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using an Energy Rating IndexN1106.2, N1106.6.1, N1106.7.1

Item D – 11 Request by Ryan Miller representing the NC Building Performance
Association to amend the 2018 NC Energy Conservation Code, Section
NC Residential Provisions, Chapter 6 Referenced Standards, ICC as
follows:

ANSI/RESNET/ICC 301-14 (Including Addenda A & B) Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using an Energy Rating Index.....R406.2, R406.6.1, R406.7.1

Item D - 12 Request by Barry Siegal representing BSC Holdings, Inc. to amend the 2018 NC Building Code, Section 903.2.8 and Table 602 and 2018 NC Fire Prevention Code, Section 903.2.8 as follows:

903.2.8 Group R. An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*.

Exceptions:

- 1. An *automatic sprinkler system* is not required in new adult and child day care facilities located in existing Group R-3 and R-4 occupancies.
- 2. temporary overflow shelters.

- 3. An *automatic sprinkler system* is not required in camping units located within a campground where all of the following conditions exist.
 - 3.1. The camping unit is limited to one story in height,
 - 3.2. The camping unit is less than 400 square feet (37 m₂) in area.
 - 3.3. The camping unit does not have a kitchen.
- 4. An automatic sprinkler system is not required in an *Open Air Camp Cabin* that complies with the following:
 - 4.1. The open air camp cabin shall have at least two remote unimpeded exits. Lighted exit signs shall not be required.
 - 4.2. The open air camp cabin shall have at least two remote unimpeded exits. Lighted exit signs shall not be required.
 - 4.3. Smoke detectors and portable fire extinguishers shall be installed as required by other sections of this Code.
- 5. An automatic sprinkler system is not required in Group R-3 detached oneand two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress.

NC BUILDING CODE

TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE $^{a,\,d,\,g}$

FIRE SEPARATION DISTANCE = X (feet)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP He	OCCUPANCY GROUP F-1, M, S- 1 ^f	OCCUPANCY GROUP A, B, E, F-2, I, R ^h , S-2, U	
X < 5	All	3	2	1	
5 £ X < 10	IA Others	3 2	2 1	1	
10 ≤ X < 30	IA, IB IIB, VB Others	2 1 1	1 0 1	1 0 c 1	
X ≥ 30	All	0	0	0	

For SI: 1 foot = 304.8 mm.

- a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
- b. See Section 706.1.1 for party walls.
- c. Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.
- d. The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.
- e. For special requirements for Group H occupancies, see Section 415.6.
- f. For special requirements for Group S aircraft hangars, see Section 412.4.1.
- g. Where Table 705.8 permits nonbearing exterior walls with unlimited area of unprotected openings, the required fire-resistance rating for the exterior walls is 0 hours.
- h. For Group R-3 detached one- and two-family dwollings and townhouses of any construction type and not more than three stories above grade plane in height with a separate means of egress a fire separation distance of 3 feet or less shall be 1-hour fire-resistant rated and shall be 0-hour fire-resistant rated for distances greater than 3 feet.

Item D - 13 Request by Colin Triming representing the NC Fire Code Revision Committee to amend the 2018 NC Existing Building Code, Sections 403.11, 804.4.3, 1104.2 as follows:

403.11 Carbon Monoxide alarms. Individual sleeping units and individual dwelling units in Group R and I occupancies and classrooms in Group E occupancies and Group A-2 occupancies that contain a fuel-burning appliance or a fuel-burning fireplace shall be provided with carbon monoxide alarms in accordance with Section 915 of the North Carolina Building Code, except that the carbon monoxide alarms shall be allowed to be solely battery operated.

804.4.3 Carbon Monoxide alarms. Individual sleeping units and individual dwelling units in Group R and I occupancies and classrooms in Group E occupancies and <u>Group A-2 occupancies that contain a fuel-burning appliance or a fuel burning fireplace</u> shall be provided with carbon monoxide

alarms in accordance with Section 915 of the North Carolina Building Code, except that the carbon monoxide alarms shall be allowed to be solely battery operated.

1104.2 Carbon Monoxide alarms in existing portions of a building. Where an *addition* is made to a building or structure of a Group A-2, I-1, I-2, I-4 or R occupancies, or classrooms are added in Group E occupancies, the *existing building* shall be provided with carbon monoxide alarms in accordance with Section 915 of the *North Carolina Building Code* or Section R315 of the *North Carolina Residential Code*, except the carbon monoxide alarms shall be allowed to be solely battery operated.

Item D - 14 Request by Carl Martin representing the NC Department of Insurance to amend the 2018 NC Building Code, Sections 312.1 & H109.2 as follows:

312.1 General

Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirements of this code commensurate with the fire and life hazard incidental to their occupancy. Group U shall include, but not be limited to, the following:

Agricultural buildings

Aircraft hangars, accessory to a one- or two-family residence (see Section 412.5)

Barns

Carports

Fences and ground signs more than 6 feet (1829 mm) in height

Grain silos, accessory to a residential occupancy

Greenhouses

Livestock shelters

Photovoltaic panel system (mounted at grade)

Private garages

Retaining walls

Sheds

Stables

Tanks

Towers

SECTION H101 GENERAL

H101.2 Signs exempt from permits.

The following signs are exempt from the requirements to obtain a *permit* before erection:

- 1. Nonilluminated wall signs.
- 2. Temporary signs.
- 3. Signs erected by transportation authorities.
- 4. Projecting signs not exceeding 6 square feet (0.56 m²).
- 5. The changing of moveable parts of an approved sign that is designed for such changes, or the repainting or repositioning of display matter shall not be deemed an alteration.
- 6. Ground signs less than 6 feet (1829 mm) in height above finished grade.

SECTION H109 GROUND SIGNS

H109.2 Required Clearance. The bottom coping of every ground sign shall be not less than 3 feet (914 mm) above the ground or street level, which space can be filled with platform decorative trim or light wooden construction.

Exception: Signs that have a solid base of masonry, steel or similar material, commonly known as monument signs.

Item D – 15 Request by the NC Building Code Council representing the NC General Assembly to amend the 2018 NC Energy Conservation Code, Section R101.2 as follows:

R101.2 Scope.

This code applies to *residential buildings* and the buildings sites and associated systems and equipment.

Exception:

1. In accordance with N.C.G.S. 143-138 (b19), no energy conservation code provisions shall apply to detached and attached garages located on the same lot as a dwelling.

GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2017 SESSION LAW 2018-65 HOUSE BILL 573

AN ACT TO MAKE BUSINESS AND REGULATORY CHANGES TO VARIOUS STATE LAWS.

The ratified and signed legislation reads in part with respect to the energy conservation code requirements:

The General Assembly of North Carolina enacts:

EXEMPT RESIDENTIAL GARAGES FROM ENERGY EFFICIENCY CODES SECTION 2.(A)

G.S. 143-138 is amended by adding a new subsection to read: "(b19) Exclusion From Energy Efficiency Code Requirements for Residential Garages. -The Council shall provide for an exemption for detached and attached garages located on the same lot as a dwelling from any requirements in the energy efficiency standards pursuant to Chapter 11 of the North Carolina Residential Code for One- and Two-Family Dwellings and Chapter 4 of the North Carolina Energy Conservation Code."

SECTION 2.(b) This section becomes effective October 1, 2018.

Item D - 16 Request by the NC Building Code Council representing the NC General Assembly to amend the 2018 NC Residential Code, Section N1101.1 as follows:

N1101.1 Scope.

This chapter regulates the energy efficiency for the design and construction of buildings regulated by this code.

Exception:

1. In accordance with N.C.G.S. 143-138 (b19), no energy conservation code provisions shall apply to detached and attached garages located on the same lot as a dwelling.

Item D - 17 Request by the NC Building Code Council representing the NC General Assembly to amend the 2018 Existing Building Code, Section 101.12 as follows:

101.12 Energy conservation exceptions.

The following exceptions apply to energy conservation code provisions in existing buildings in accordance with NC General Statutes:

1. In accordance with N.C.G.S. 143-138 (b18), no energy conservation code provisions shall apply to any structure for which the primary occupancy classification is Group F, S, or U. This exclusion shall apply to the entire building area.

2. In accordance with the N.C.G.S. 143-138 (b19), for *residential* buildings, no energy conservation code provisions shall apply to detached and attached garages located on the same lot as a dwelling.

Item D - 18 Request by Daniel Priest representing Priest Architecture, PLLC to amend the 2018 NC State Building Code, Table 2902.1 and the 2018 NC State Plumbing Code, Table 403.1 as follows:

2	Business (See Sections 2902.2, 2902.3, and 2902.3.2.2)	В	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50	1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80	_	1 per 100⊈	1 service ^O sink
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<u>q.</u> For business occupant loads of 25 or fewer, drinking fountains shall not be required.

Item D - 19 Request by Daniel Priest representing Priest Architecture, PLLC to amend the 2018 NC State Plumbing Code, Section 410.2 as follows:

410.2 Small occupancies. Drinking fountains shall not be required for an occupant load of 15 or fewer.

Part E - Reports

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

Part F - Appeals

Sincerely,

Barry Gupton, P.E. Secretary, NC Building Code Council