

### **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**

Chairman:

Robbie Davis - 21 (General Contractor)

Vice Chairman:

Daniel S. Priest, RA - 22 (Architect)

Members:

Michael Ali, PE - 23 (State Agency)

Robert Axford - 25 (Electrical Contractor)

Charles A. Conner, AIA - 22 (Architect)

Gary Embler - 23 (Home Builder)

Ralph Euchner - 25 (Gas Industry)

Wayne Hamilton - 21 (Fire Services)

Bridget Herring - 23 (Public Representative)

Mary Humiston, PE - 25 (Electrical Engineer)

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

Keith Rogers, PE - 21 (Mechanical Engineer)

Deborah Shearin - 25 (Plumbing & Heating Contractor)

Leon Skinner - 21 (Building Inspector)

David L. Smith - 22 (Coastal Contractor)

Victoria Watlington - 22 (Municipal Government Rep)

Robert Zapple - 22 (County Gov't Rep)

August 12, 2021

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

RE: Agenda for the September 14, 2021 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, September 14, 2021 (Albemarle Building).
- 2. Standing Committees will meet in the afternoon on Monday, September 13. 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 Swearing-in of new Council members
- Item A 3 Election of Council Chairman
- Item A 4 Approval of minutes of the June 8, 2021 NC Building Code Council Meetings.
- Item A 5 Request for approval of an amendment to the Code of Ordinances of the Town of North Topsail Beach for the adoption of the 2018 NC Fire Code and Appendices.
- Item A 6 Request from the City of Burlington Inspections Department for approval to perform local plan review.
- 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 September 14, 2021 meeting.

#### There will be no B items received from the floor.

<u>Item B – 1 Request by David Smith representing the NC BCC Residential Ad Hoc Committee to amend the 2018</u> NC Residential Building Code, Section R404.4 **as follows:** 

- **R404.4 Retaining Walls.** Retaining walls that meets the following shall be designed by a *registered design professional*.
- 1. Any retaining wall systems on a residential site that cross over adjacent property lines regardless of vertical height, or
- 2. Retaining walls that support buildings and their accessory structures, undercutting footings 10' or less per R403.1.9 and Figure 403.1.9, or

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- 3. <u>Individual Rretaining walls supporting unbalanced backfill</u> exceeding 4 feet (1219mm) 5 feet (1524 mm) of unbalanced backfill in height within a horizontal distance of 15 feet (4572 mm) or less, or
- 4. <u>Multiple Rretaining walls systems</u> providing a cumulative vertical relief <u>of unbalanced backfill heights</u> greater than 5 Feet (1524 mm) <del>in height</del> within a horizontal <del>separation</del> distance of <del>50 feet (15M)</del> <u>15 feet (4572 mm)</u> or less.

Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning.

<u>Item B – 2 Request by Carl Martin representing the Department of Insurance to amend the 2018 NC Building Code, Section 116.1</u> **as follows:** 

#### SECTION 116 UNSAFE STRUCURES AND EQUIPMENT

Deleted. See the North Carolina Administrative Code and Policies

- **116.1 General.** Unsafe structures and equipment must comply with the *NC Administrative Code and Policies*, Section 204.2.8.
- 116.2 Public access. The structure owner or his representative shall secure the unsafe structure by a method approved by the local building official to prevent public access. The approved method shall be in place within the time limit specified in writing by the building official in the notice of unsafe building.
- <u>Item B 3 Request by Carl Martin representing the Department of Insurance to amend the 2018 Building Code</u>, Section 3006.2 **as follows:** 
  - **3006.2 Hoistway opening protection required.** Elevator hoistway door openings for occupied and unoccupied stories shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three *stories*, is required to be enclosed within a *shaft enclosure* in accordance with Section 712.1.1 and any of the following conditions apply:
  - 1. The building is not protected throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.
  - 2. The building contains a Group I-1, Condition 2 occupancy.
  - 3. The building contains a Group I-2 occupancy.
  - 4. The building contains a Group I-3 occupancy.
  - 5. The building is a high rise and the elevator hoistway is more than 75 feet (22 860 mm) in height. The height of the hoistway shall be measured from the *lowest floor* to the highest floor of the floors served by the hoistway.

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#### **Exceptions:**

- 1. Protection of elevator hoistway door openings is not required where the elevator serves only *open parking garages* in accordance with Section 406.5.
- 2. Protection of elevator hoistway door openings is not required at the level(s) of exit discharge, provided that the level(s) of exit discharge is equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- 3. Enclosed elevator lobbies and protection of elevator hoistway door openings are not required on levels where the elevator hoistway opens to the exterior.

## <u>Item B – 4 Request by Carl Martin representing the Department of Insurance to amend the 2018 NC Building Code</u>, Section 3006.3 **as follows:**

- **3006.3 Hoistway opening protection.** Where Section 3006.2 requires protection of the elevator hoistway door opening, the protection shall be provided by one of the following:
- 1. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway *shaft enclosure* doors from each floor by fire partitions in accordance with Section 708. In addition, doors protecting openings in the elevator lobby enclosure walls shall comply with Section 716.5.3 as required for *corridor* walls. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for *corridors* in accordance with Section 717.5.4.1.
- 2. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway *shaft enclosure* doors from each floor by smoke partitions in accordance with Section 710 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. In addition, doors protecting openings in the *smoke partitions* shall comply with Sections 710.5.2.2, 710.5.2.3 and 716.5.9. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for *corridors* in accordance with Section 717.5.4.1.
- 3. Additional doors shall be provided at each elevator hoistway door opening in accordance with Section 3002.6. Such door shall comply with the smoke and draft control door assembly requirements in Section 716.5.3.1 when tested in accordance with UL 1784 without an artificial bottom seal and contain a vision panel as allowed by Table 716.5. The door shall not be installed in a way that affects the fire-resistance-rating or operation of the normal elevator shaft doors.
- 4. The elevator hoistway shall be pressurized in accordance with Section 909.21.

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# <u>Item B – 5 Request by Colin Triming representing the NC Fire Code Revision Committee to amend the 2018 NC</u> Fire Code, Section 304.4.2.3 **as follows:**

- 304.4.2.3. Containers used for valet trash collection shall not exceed a capacity of 2.0 cubic feet (15 gallons, 0.06 cubic meters) and shall be provided with tight-fitting or self-closing lids. Containers and lids shall comply with either:
- 1. Containers and lids located in an area that is protected by fire sprinklers shall be constructed entirely of noncombustible materials or materials that meet a peak rate of heat release not exceeding 300 kW/m2 when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m2 in the horizontal orientation. Containers and lids shall be listed or bear the label of an approved agency that validates compliance with this requirement;
- or 2. Containers and lids located in an area that is not protected by fire sprinklers shall be constructed entirely of noncombustible materials or materials that meet a peak rate of heat release not exceeding 150 kW/m2 when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m2 in the horizontal orientation. Containers and lids shall be listed or bear the label of an approved agency that validates compliance with this requirement

#### 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 September 14, 2021 and the Final Adoption meeting may take place on or after December 14, 2021. The written public comment period expires on October 15, 2021.

- Item C 1 Request by Carl Martin representing the Department of Insurance to amend the NC Administrative Code, Section 204.3.5 as follows (210608 Item B-1):
  - **204.3.5 Design professional seal required.** Where the General Statutes require, no permit shall be issued unless the construction documents (drawings and specifications), bear the North Carolina seal of a registered design professional. Construction documents shall include the name and address of the business entity (individual, corporation or partnership) with whom the registered design professional is affiliated. Questions concerning this section should be directed to the North Carolina Board of Architecture or the North Carolina Board of Examiners for Engineers and Land Surveyors.

**Exceptions:** For permitting purposes, the seal of a registered design professional is not required when the building, structure or project involved is in one of the categories listed below, unless otherwise required pursuant to the provisions of the General Statutes or the technical codes:

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- 1. A family residence, up to eight units attached with grade-level exit, which is not a part of or physically connected with any other buildings or residential units:
- 2. A building upon any farm that is for the use of any farmer, unless the building is of such nature and intended for such use as to substantially involve the health or safety of the public;
- 3. An institutional or commercial building if it does not have a total cost of construction exceeding \$90,000 \$200,000;
- 4. An institutional or commercial building if the total building area does not exceed 2,500 3,000 square feet (2.32 m2) in gross floor area;
- 5. Alteration, remodeling or renovation of an existing building that is exempt under this section, or alteration, remodeling or renovation of an existing building or building site that does not alter or affect the structural system of the building; change the building's access or exit pattern; or change the live or dead load on the building's structural system. This subdivision shall not limit or change any other exemptions to this chapter or to the practice of engineering under Chapter 89C of the General Statutes.
- 6. The preparation and use of details and shop drawings, assembly or erection drawings, or graphic descriptions utilized to detail or illustrate a portion of the work required to construct the project in accordance with the plans and specifications prepared or to be prepared under the requirements or exemptions of this chapter.
- 7. Nothing in this <u>chapter section</u> shall be construed to prevent any individual from making plans or data for buildings for himself or herself. This exemption does not apply to plans for places of religious worship.

(General Statute 83A-13)

# Item C - 2 Request by Carl Martin representing the Department of Insurance to amend the NC Administrative Code, Sections 106.3.1 and 106.3.2 as follows (210608 Item B-2):

**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 which 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.

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**Exception:** A Building Code Summary is not required if the AHJ 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 Polices. The Inspection Department An AHJ shall only modify its the building code summary Building Code Summary 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 which have been approved by the Building Code Council.
- Item C 3 Request from Jeff Griffin and Bob Haynes representing the NC Building Inspector's Association to amend the 2018 NC Residential Building Code, Sections R302.2, R313.1, and R202 as follows (210608 Item B-7):
  - **R302.2 Townhouses.** Each *townhouse* shall be considered a separate building and shall be separated by fire-resistance rated wall assemblies meeting the requirements of Section R302.1 for exterior walls. R302.2.1 or R302.2.2.

**Exception:** If an automatic residential fire sprinkler is installed, a common 1 hour fire resistance rated wall assembly tested in accordance with ASTM E119 or UL263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior wall sheathing and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Section R302.4.

- R302.2.1 Double walls. Each townhouse shall be separated by two 1-hour fire resistance-rated wall assemblies tested in accordance with ASTM E119, UL263 or Section 703.3 of the 2018 NC Building Code.
- R302.2.2 Common Walls. Common walls separating townhouses shall be assigned a fire-resistance rating in accordance with Item #1 or 2. The common wall shared by two townhouses shall be constructed shall be constructed without plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be in accordance with Chapter 34 through 43. Penetrations of the membrane of common walls for electrical outlet boxes shall be in accordance with Section R302. 4.
- 1. Where a fire sprinkler system in accordance with Section P2904 is provided, the common wall shall be not less than a 1-hour fire-resistance-rated wall

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- assembly tested in accordance with ASTM E119, UL 263 or Section 703.3 of the NC Building Code.
- 2. Where a fire sprinkle in accordance with Section P2904 is not provided, the common wall shall be not less than a 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E119, UL 263 or Section 703.3 of the NC Building Code.

R302.2.5 Townhouse eave protection. In townhouse construction (with three or more attached dwellings) projections extending into the fire separation distance shall have not less than 1-hour fire resistive construction on the underside. Soffit material beyond the fire separation distance shall be securely attached to framing members and shall be constructed using either noncombustible soffit material; fire-retardant-treated soffit material; vinyl soffit installed over 3/4-inch (19 mm) wood sheathing or 5/8-inch (15.9 mm) gypsum board; or aluminum soffit installed over 3/4-inch (19 mm) wood sheathing or 5/8-inch (15.9mm) gypsum board. Venting requirements shall be provided in both soffit and underlayment's. Vents shall be either nominal 2-inch (51 mm) continuous or equivalent intermittent and shall not exceed the minimum net free air requirements established in Section R806.2 by more than 50 percent. Vents in soffit are not allowed within 4 feet (1219 mm) of fire walls or property lines.

# R313.1 Townhouse automatic fire sprinkler systems. (<u>Deleted</u>) An automatic residential fire sprinkler system shall be installed in townhouses.

#### **Exceptions:**

- 1. Townhouses constructed with a common 2 hour fire resistance rated wall assembly tested in accordance with ASTM E119 or UL 263, provided such walls do not contain plumbing or mechanical equipment, duets or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior wall sheathing and the underside of the roof sheathing. Electrical installations shall be installed in accordance with the North Carolina Electrical Code. Penetrations for electrical outlet boxes shall be in accordance with Section R302.4.
- 2. An automatic residential fire sprinkler system shall not be required where additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed

#### **R202 Definitions.**

**[RB] DWELLING.** Any building that contains one or two dwelling units (duplex) on the same parcel of land, used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

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**[RB] DWELLING UNIT.** A single unit providing complete independent living facilities for <u>a single family</u> one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

**[RB] TOWNHOUSE.** A single-family dwelling unit constructed in a group of two three or more attached units separated by property lines in which each unit extends from foundation to roof and with a yard or public way on not less than two sides.

Item C - 4 Request from Bob Haynes & Jeff Griffin representing the NC Building Inspectors Association to amend the 2018 NC Residential Building Code, Appendix Q and delete Section R328 as follows (210608 Item B-8):

#### APPENDIX Q TINY HOUSES

The provisions contained in this appendix are adopted as part of this code.

#### SECTION AQ101 GENERAL

**AQ101.1 Scope.** This appendix shall be applicable to *tiny houses* used as single *dwelling unit*. *Tiny houses* shall comply with this code except as otherwise stated in this appendix.

#### SECTION AQ102 DEFINITIONS

**AQ102.1 General.** The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code for general definitions.

**LANDING PLATFORM.** A landing provided as the top step of a stairway accessing a *loft*.

HABITABLE LOFT. A floor level located more than 30 inches above the main floor and open to the main floor on one or more sides with a ceiling height of less than 6 feet 8 inches and used as a living or sleeping space.

**TINY HOUSE.** A *dwelling* that is 400 square feet or less in floor area excluding *lofts*.

#### SECTION AQ103 LOFTS

**AQ103.1 General.** Lofts used as a sleeping or living space shall meet the minimum area and dimension requirements of Sections AQ103.1.1 through AQ103.1.4.

**AQ103.1.1 Minimum area.** *Lofts* shall have a floor area of not less than 35 square feet.

**AQ103.1.2 Minimum dimensions.** *Lofts* shall be not less than 5 feet in any horizontal dimension.

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AQ103.1.3 Minimum ceiling height. Habitable space and hallways in tiny houses shall have a ceiling height of not less than 6 feet 8 inches. Bathrooms, toilet rooms and kitchens shall have a ceiling height of not less than 6 feet 4 inches. Obstructions including, but not limited to, beams, girders, ducts and lighting, shall not extend below these minimum ceiling heights.

**Exception:** Ceiling heights in *lofts* are permitted to be less than 6 feet 8 inches.

**AQ104.1.4 Height effect on loft area.** Portions of a *loft* with a sloped ceiling measuring less than 3 feet from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft. **Exception:** Under gable roofs with a minimum slope of 6 units vertical in 12 units horizontal (50-percent slope), portions of a *loft* with a sloped ceiling measuring less than 16 inches from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the *loft*.

# SECTION AQ104 MEANS OF EGRESS

- **AQ104.1 Loft access.** The access to and primary egress from *lofts* shall be of any type described in Sections AQ104.2.1 through AQ104.2.4.
- **AQ104.2.1 Stairways.** Stairways accessing *lofts* shall comply with this code or with Sections AQ104.2.1.1 through AQ104.2.1.5.
- **AQ104.2.1.1 Width.** Stairways accessing a *loft* shall not be less than 20 inches in clear width including handrail.
- **AQ104.2.1.2 Headroom.** The headroom in stairways accessing a *loft* shall be not less than 6 feet 2 inches, as measured vertically, from a sloped line connecting the tread or landing platform nosing in the middle of their width.
- AQ104.2.1.3 Treads and risers. Risers for stairs accessing a *loft* shall be a maximum of 12 inches in height and every riser shall be uniform within a tolerance of <sup>3</sup>/<sub>4</sub>". Tread depth shall be a minimum 12" with all treads uniform within a tolerance <sup>3</sup>/<sub>4</sub>".
- AQ104.2.1.4 Landing platforms. The top tread and riser of stairways accessing lofts shall be constructed as a landing platform where the loft ceiling height is less than 6 feet 2 inches where the stairway meets the loft. The landing platform shall be the width of the stairs with a minimum depth of 18" inches measured from the nosing of the landing platform to the edge of the loft, and 16 to 18 inches in height measured from the landing platform to the loft floor.
- **AQ104.2.1.5 Handrails.** Handrails shall comply with Section R311.7.8. **AQ104.2.1.6 Stairway guards.** Guards at open sides of stairways shall comply with Section R312.1.
- **AQ104.2.2 Ladders.** Non-removable ladders accessing *lofts* shall comply with Sections AQ104.2.2.1.

**Exception:** Ladders that slide out of away from the loft opening that are with reach of the loft occupant.

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- AQ104.2.2.1 Size and capacity. Ladders accessing *lofts* shall have a rung width of not less than 12 inches, and no more than 18-inches spacing between rungs. Ladders shall be capable of supporting a 200-pound load on any rung. Rung spacing shall be uniform within 3/8 inch.
- AQ104.2.3 Ship's ladders. Ship's ladders accessing *lofts* shall be installed at 70 to 80 degrees from horizontal are permitted to be used as an element of a means of egress from lofts. *Ship ladders* shall comply with Sections R311.7.12.
- **AQ104.2.4 Loft Guards.** *Loft* guards complying with R312.1 shall be located along the open side of *lofts*. *Loft* guards shall be not less than 36 inches in height or one-half of the clear height to the ceiling, whichever is less.

## SECTION AQ105 EMERGENCY ESCAPE AND RESCUE

**AS105.1 Emergency Escape and Rescue.** Tiny houses and their lofts shall meet the requirements of Section R310 for emergency escape and rescue openings.

## SECTION AQ106 SMOKE AND CARBON MONOXIDE DETECTORS

AQ106.1 Smoke and Carbon monoxide detectors. Smoke and carbon monoxide detectors shall be installed as required in Sections R314 and R315 and just below the highest point of any loft.

#### SECTION AQ107 FOUNDATION

- **AQ107.1 Foundation options.** *Tiny Houses* are permitted to be constructed without a masonry or concrete foundation per Section AQ107.1.1 and AQ107.1.2, except in coastal high hazard, ocean hazard and flood hazard areas.
- AQ107.1.1 Wood Foundation. The building is supported on a wood foundation of minimum 4-inch by 4-inch or 6-inch by 6-inch mudsill or runner of approved wood in accordance with Section R317. Structural floor system which include joists and subfloor material shall also comply with Section R317, item #1.
- **AQ107.1.2. Anchorage**. Tiny houses with wood foundations per AQ107 shall be designed and anchored to resist overturning and sliding.

**Exception:** Tiny houses with no more than 12' vertical mean roof height shall be anchored to resist overturning and sliding by installing a minimum of one ground anchor at each corner of the building. The total resisting force of the anchors shall be equal to 20psf (958 Pa) times the plan area of the building.

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### Section R202 Definitions

**LANDING PLATFORM.** A landing provided as the top step of a stairway accessing a loft.

**LOFT.** A floor level located more than 30 inches (762 mm) above the main floor and open to it on at least one side with a ceiling height of less than 6 feet 8 inches (2032 mm), used as a living or sleeping space.

**R305.1 Minimum height.** *Habitable space*, hallways and portions of *basements* containing these spaces shall have a ceiling height of not less than 7 feet (2134 mm). Bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6 feet 8 inches (2032 mm).

#### **Exceptions:**

- 1. For rooms with sloped ceilings, the required floor area of the room shall have a ceiling height of not less than 5 feet (1524 mm) and not less than 50 percent of the required floor area shall have a ceiling height of not less than 7 feet (2134 mm).
- 2. The ceiling height above bathroom and toilet room fixtures shall be such that the fixture is capable of being used for its intended purpose. A shower or tub equipped with a showerhead shall have a ceiling height of not less than 6 feet 8 inches (2032 mm) above an area of not less than 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.
- 3. Beams, girders, ducts or other obstructions in *habitable space* shall be permitted to project to within 6 feet 4 inches (1931 mm) of the finished floor. 4. Ceiling heights in *lofts* are permitted to be less than 6 feet 8 inches.

### Section R328

#### **Lofts**

R328.1 Minimum loft area and dimensions. *Lofts* used as a sleeping or living space shall meet the minimum area and dimension requirements of Sections R328.1.1 through R328.1.4.

**R328.1.1 Minimum area.** *Lofts* shall have floor area of not less than 35 square feet (3.25 m2).

R328.1.2 Maximum area. *Lofts* shall have a floor area not greater than 70 square feet (6.50 m2).

**R328.1.3 Minimum dimensions.** *Lofts* shall not be less than 5 feet (1524 mm) in any horizontal dimension.

R328.1.4 Height effect on loft area. Portions of a *loft* with a sloping ceiling measuring less than 3 feet (914 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the *loft*.

Exception: Under gable roofs with a minimum slope of 6 units vertical in 12 units horizontal (50 percent slope) portions of a *loft* with a sloped ceiling measuring less than 16 inches (406 mm) from the finished floor to the finished

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- <u>ceiling shall not be considered as contributing to the minimum required area</u> for the *loft*.
- R328.2 Loft access. The access to and primary egress from *lofts* shall be any type described in Sections R328.2.1 through R328.2.4.
- **R328.2.1 Stairways.** Stairways accessing *lofts* shall comply with this code or with Sections R328.2.1.1 through R328.2.1.5.
- R328.2.1.1 Width. Stairways accessing a *loft* shall not be less than 17 inches (432 mm) in clear width at or above the handrail. The minimum below the handrail shall be not less than 20 inches (508 mm).
- R328.2.1.2 Headroom. The headroom in stairways accessing a *loft* shall be not less than 6 feet 2 inches (1880 mm), as measured vertically, from a sloped line connecting the tread or landing platform nosings in the middle of their width.
- R328.2.1.3 Treads and Risers. Risers for stairs accessing a *loft* shall be not less than 7 inches (178 mm) and not more than 12 inches (305 mm) in height. Tread depth and riser height shall be calculated in accordance with one of the following formulas:
- 1. The tread depth shall be 20 inches (508 mm) minus 4/3 of the riser height; or
- 2. The riser height shall be 15 inches (381 mm) minus ¾ of the tread depth. R328.2.1.4 Landing platforms. The top tread and riser of stairways accessing lofts shall be constructed as a landing platform where the loft ceiling height is less than 6 feet 2 inches (1880 mm) where the stairway meets the loft. The landing platform shall be 18 inches to 22 inches (457 to 559 mm) in depth measured from the nosing of the landing platform to the edge of the loft, and 16 to 18 inches (406 to 457 mm) in height measured from the landing platform to the loft floor.
- R328.2.1.5 Handrails. Handrails shall comply with Section R311.7.8.
- R328.2.1.6 Stairway guards. Guards at open sides of stairways shall comply with Section R312.1.
- R328.2.2 Ladders. Ladders accessing *lofts* shall comply with Sections R328.2.2.1 and R328.2.2.2.
- R328.2.2.1 Size and capacity. Ladders accessing *lofts* shall have a rung width of not less than 12 inches (305 mm) and 10 inches (254 mm) to 14 inches (356 mm) spacing between rungs. Ladders shall be capable of supporting a 200 pound (75 kg) load on any rung. Rung spacing shall be uniform within 3/8-inch (9.5 mm).
- R328.2.2.2 Incline. Ladders shall be installed at 70 to 80 degrees from horizontal.
- R328.2.4 Ships ladders. Ships ladders accessing *lofts* shall comply with Sections R311.7.12.1 and R311.7.12.2. The clear width at and below handrails shall be not less than 20 inches (508 mm).
- **R328.2.5 Loft Guards.** Loft guards shall be located along the open side of *lofts. Loft* guards shall not be less than 36 inches (914 mm) in height or one-half of the clear height to the ceiling, whichever is less.

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Item C - 5 Request from Barry Gupton representing the NC Manufactured Building Division to amend the 2018 NC Residential Code, Sections 4602, 4605.5 as follows (210608 Item B-9):

#### SECTION R4602 DEFINITIONS

COASTAL HIGH HAZARD AREA. An area subject to coastal flooding and high velocity waters including storm wave wash, as shown by Federal Emergency Management Agency Maps and subject to the approval of the Building Code Council.

**COASTAL HIGH HAZARD AREA.** An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The coastal high hazard area is identified as either V Zone or Coastal A Zone on Flood Insurance Rate Maps (FIRMs).

CORROSION RESISTANCE AREA. Areas within hurricane prone regions defined as that area east of the Intracoastal Waterway from the NC/SC state line north to Beaufort Inlet and from that point to include the barrier islands to the NC/VA state line.

**OCEAN HAZARD AREA.** An area, as identified by the North Carolina Coastal Resources Commission, and subject to approval by the Building Code Council, near the shoreline of the Atlantic Ocean that has been identified as subject to at least one of the following hazards: (A) Historical or predicted future trends of long-term erosion, (B) erosion expected to occur during a coastal storm reaching the base flood elevation, or (C) shoreline fluctuations due to tidal inlets.

#### SECTION R4606 FASTENER CORROSION RESISTANCE

#### R4605.5 R4606. Fastener corrosion resistance.

In the Coastal High Hazard Area, the Corrosion Resistance Area and the Ocean Hazard Area, all metal connectors and fasteners outside of conditioned spaces shall be hot-dip galvanized steel after fabrication and meet ASTM A 153. Exposed metal connectors, such as tie-down straps on porches, decks, and areas under the structure, shall be a minimum 3/16-inch (5 mm) thick, and shall be hot-dip galvanized after fabrication and meet ASTM A 123 or ASTM A 153. Stainless steel light-gage metal connectors shall be permitted in exposed or partially exposed locations. Metal connectors of approved equivalent corrosion-resistant material are permitted to be accepted. See Table R4605.5 R4606.

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### TABLE R4605.5<sup>a</sup> R4606<sup>a</sup> CORROSION RESISTANCE

	OPEN (exterior, porches, under house)	EXPOSURE LEVEL VENTED/ENCLOSED (attic, floor trusses, enclosed crawl spaces and stud cavity)	CONDITIONED (heated/cooled living areas)
Nails, staples, screws	Hot-dip galvanized	Hot-dip galvanized	-
Nuts, bolts, washers, tie rods	Hot-dip galvanized	Hot-dip galvanized	-
Steel connection plates & straps (3/16" minimum thickness)	Hot-dip galvanized after fabrication	Hot-dip galvanized	-
Sheet metal connectors, wind anchors, joists hangers, steel joists and beams	Stainless steel or hot- dipped galvanized after fabrication	Hot-dip galvanized after plate fabrication or triple galvanized <sup>b</sup>	Hot-dip galvanized or triple galvanized <sup>b</sup>
Truss plates	Stainless steel or hot- dipped galvanized after fabrication	Hot-dip galvanized after fabrication, stainless steel, triple galvanized <sup>b</sup> or in accordance with TPI-1 of the Truss Plate Institute within 6'-0" of a gable louver, ridge or soffit vent. Otherwise, standard galvanized <sup>b</sup>	Standard galvanized

- a. Applies only to structures located in Coastal High Hazard Area, Corrosion Resistance Area and Ocean High Hazard Area.
- b. Triple galvanizing G185, standard galvanizing G60, both per ASTM A 653 / A 653M.

#### (RENUMBER THE REMAINDER OF R4605.6 - R4605.8)

#### 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 June 8, 2021. The Final Adoption meeting will take place on September 14, 2021. 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, 2022 unless otherwise noted.

# Item D - 1 Request from Carl Martin representing the Department of Insurance to amend the 2018 NC Administration Code, Chapters 1, 2, and 3 as follows (210309 Item B-1):

**106.1 Permit required.** A current permit is required for all work described in the technical codes unless specifically exempted by the North Carolina General Statutes or the technical codes.

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Commentary: Reference North Carolina General Statutes 153A 357 and 160A 417 Statute 160D-1110 for exceptions.

**106.2.3 Review and approval.** When the inspection department issues a permit, it shall approve, in writing or by stamp, all sets of drawings and specifications "Reviewed for Code Compliance".

**Exception:** Nothing in this section shall require the review and approval of one- and two-family dwelling plans.

Commentary: Drawings and specifications shall be kept in a manner prescribed by North Carolina General Statutes 153A-373 and 160A-433 Statute 160D-1126.

**202.9.1 Engineering division.** A written technical interpretation shall be provided as specified in Section 203.1.2.1.2 203.2.1.2. Any person may appeal in writing an order, decision or determination pertaining to the code or any state building law by filing written notice with the Commissioner of Insurance or his designee within 10 days after the order, decision or determination. A copy of the appeal shall be furnished to each party. (General Statutes 143-140, 153A-374 and 160A-434 and 160D-1127)

**202.9.2.2** The Notice or Appeal shall be received no later than 30 days from the date of the decision of the State enforcement agency. (General Statute 143-141).

**203.1.1.3 Buildings within primary fire limits.** The Commissioner of Insurance or his or her designee shall review all permits to erect, alter, repair or move any wood-frame building or structure within the primary fire district of a municipality. Such permits shall be received and approved by the Inspection Department and approved by the Municipal Council prior to the Commissioner or his or her designee's approval. (General Statutes 153A-375 and 160A-436 Statute 160D-1128)

**203.2.2 Appeals.** Any person may appeal in writing an order, decision or determination of a code enforcement official pertaining to the code or any state building law. The appeal shall be addressed to the Chief Engineer for the Department of Insurance by filing written notice within 10 days after the order, decision or determination. The appeal shall contain the type and size of

the building in question, the location of the building and shall reference the code sections in question. The decision shall be in writing and shall set forth the facts found. The decision rendered shall be based on the technical provisions of the code, public health and safety and shall be construed liberally to those ends. A decision shall be binding on all parties unless an appeal is submitted to the Building Code Council as specified in Section

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201.9.2 202.9.2. A copy of the appeal and written decision shall be furnished to each party.

(General Statutes 153A 374 and 160A 434 Statute 160D-1127)

- **204.1 General.** The powers, duties and responsibilities of the code enforcement official are generally described in the following General Statutes: 1. GS153A-352 for counties, and 2. GS160A-412 for cities Statute 160D, Article 11.
- **204.2.2 Jurisdiction.** A municipal inspection department shall have jurisdiction over all areas within the city limits, all extraterritorial areas that the city has jurisdiction pursuant to state laws, and over any areas in which the municipal limits have contracted with another unit of government to perform code enforcement. A county inspection department shall have jurisdiction over all unincorporated areas outside any municipal jurisdiction located within the county, all areas in which a municipality has requested the county to enforce the code, and within the jurisdiction of another unit of government in which the county has contracted to perform code enforcement. A joint inspection department created by two or more units of government shall have the authority to enforce the code in all areas of legal jurisdiction of all units of government supporting the joint department. (General Statutes 153A 352 and 153A 353 for counties, and 160A 411 and 160A-413 for cities 160D-1104 and 160D-1107)

#### **204.2.3 Duties.** Inspection departments shall:

- 1. Receive applications and supporting data for permits;
- 2. Issue or deny permits;
- 3. Make all necessary inspections to ensure code compliance;
- 4. Identify technical provisions found to be inconsistent with the inspection;
- 5. Issue or deny certificates of compliance and certificates of occupancy;
- 6. Issue stop work orders or orders to correct violations;
- 7. Maintain adequate records of permits issued or denied, inspections made, corrections ordered and certifications issued; and
- 8. Take other actions that may be required to adequately enforce the code. (General Statutes 153A-352 and 160A-412 Statute 160D-1104)
- **204.2.4 Code enforcement official's qualifications.** No state or local government employee shall enforce any provision of the North Carolina State Building Codes who does not possess an appropriate valid certificate issued by the North Carolina Code Official's Qualification Board as specified in General Statutes 143-151.13, 153A 351.1 and 160A 411.1 and 160D-1103.
- **204.2.5 Conflict of interest.** Information about conflict of interest for code enforcement officials can be found in General Statutes 153A-355 for counties and 160A 415 for cities Statute 160D-1108.

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- **204.2.6 Right of entry.** The code enforcement official shall have the right to enter buildings or premises as described in General Statutes 153A-360 and 153A 364 for counties, and 160A 420 and 160A 421 for cities 160D-1113 and 160D-1117.
- **204.2.7 Stop work orders.** General Statute 153A-361 160D-404 authorizes a county code enforcement official to issue stop work orders. General Statute 160A 421 authorizes a city code enforcement official to issue stop work orders. These statutes describe The statute describes when a stop work order can be issued, and how the stop work order is to be issued. and how the stop work order may be appealed. See Section 204.10 for appeal of stop work orders.
- **204.2.8 Unsafe building or systems.** A <del>county</del> code enforcement official's authority to condemn an unsafe building is found in General Statute <del>153A 160D-1119</del>. A city code enforcement official's authority to condemn an unsafe building is found in General Statute 160A-426.
- **204.3.1 General.** No person may commence or proceed with:
- 1. The construction, reconstruction, alteration, repair, movement to another site, removal or demolition of any building;
- 2. The installation, extension or general repair of any plumbing system;
- 3. The installation, extension, alteration or general repair of any heating or cooling equipment system; or
- 4. The installation, extension, alteration or general repair of any electrical wiring, devices, appliances or equipment without first securing from the Inspection Department with jurisdiction over the site of the work each permit required by the North Carolina State Building Codes and other State or local law or local ordinance or regulation applicable to the work. (General Statute 153A 357 and 160A 417 160D-1110)
- **204.3.2 Validity.** In accordance with General Statutes 153A 358 for counties and 160A-418 for cities Statute 160D-1111, a permit expires 6 months, or any lesser time fixed by local ordinances, after the date of issuance if the work authorized by the permit has not been commenced. If, after commencement, the work is discontinued for a period of 12 months, the permit immediately expires. No work authorized by a permit that has expired may be performed until a new permit has been issued.
- **204.3.6 Contractor license required.** When the General Statutes require that general construction, plumbing, mechanical, electrical, fire protection or gas work be performed by an appropriately licensed individual, no permit for such type work shall be issued to an unlicensed person or firm. Additional requirements may be found in General Statutes 87-14, 87-21(e), 87-43.1, 87-58, 153A-134, 153A-357, 160A-194 and 160A-417 160D-1110.

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**204.4.1 Action on permits.** In accordance with General Statute 153A 357 for counties and General Statute 160A-417 for cities 160D-1110, the Inspection Department shall examine each application for a permit to determine if it is in compliance with the requirements of the technical codes and other pertinent laws and ordinances. If the inspection department is satisfied that the work described in the application conforms to the requirements of the technical codes and other pertinent laws and ordinances, it shall issue a permit to the applicant.

If the application does not conform to the requirements of the technical codes and other pertinent laws and ordinances, the application shall be returned to the applicant with the reasons for refusal stated.

(General Statutes 153A 352, 160A 412 and 160A 417 160D-1104 and 160D-1110)

**204.5.2 Permit intent.** A permit issued shall be construed as permission to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes. Issuance of a permit shall not prevent the inspection department from requiring correction of errors in plans, construction or violations of this code.

(General Statutes 153A 357 and 160A 417 Statute 160D-1110)

**204.5.3.2 Violation of code provisions.** The code enforcement official may revoke a permit upon determination that the work for which the permit was issued is in violation of, or not in conformity with, the provisions of this or the technical codes.

(General Statute 153A-362, 160A-422 160D-1115)

- **204.6.1 Fees.** A permit shall not be issued until the fees prescribed by the local governing authority have been paid. No amendment to a permit shall be released until the additional fee, if any, has been paid. (General Statutes 153A-354 and 160A-414 Statute 160D-402)
- **204.6.2 Work commencing before permit issuance.** If any person commences any work on a building or service systems before obtaining the necessary permit, he or she shall be subject to a penalty as established by the local governing body.

(General Statutes 153A 354 and 160A 414 Statute 160D-402)

- **204.7.1 Periodic inspections for hazardous or unlawful conditions.** The inspection department shall make periodic inspections as specified in General Statutes 153A 364 for counties and 160A 424 for cities Statute 160D-1117.
- **204.8.1 Building occupancy.** A new building shall not be occupied, or a change made in the occupancy, nature or use of a building or part of a building until after the inspection department has issued a certificate of compliance. The certificate of compliance shall not be issued until all required service systems have been inspected for compliance with the technical codes

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and other applicable laws and ordinances and released by the inspection department.

(General Statutes 153A 363 and 160A 423 Statute 160D-1116)

**204.8.2 Certificate of compliance.** Upon satisfactory completion of a building, plumbing, mechanical, electrical, fire protection or gas system, or portion thereof, a certificate of compliance shall be issued. The certificate of compliance represents that a structure or system is complete and for certain types of permits is permission granted for connection to a utility system. The certificate of compliance shall not be construed to grant authority to occupy a building.

(General Statutes 153A 363 and 160A 423 Statute 160D-1116)

- **204.8.3 Temporary/partial occupancy.** A temporary/partial certificate of compliance may be issued permitting occupancy for a stated period for specific portions of a building or service system that the inspector finds safe for occupancy prior to final completion of the entire building or system. (General Statutes 153A-363 and 160A-423 Statute 160D-1116)
- **204.9.2 Temporary connection.** The inspection department may authorize the temporary connection of the building or system to the utility source of energy, fuel or power for the purpose of testing building service systems. (General Statutes 153A-363 and 160A-423 Statute 160D-1116)
- **204.10** Appeal of stop Stop work orders. Whenever a stop order has been issued by an inspection department involving alleged violations of the State Building Codes, the owner or builder may appeal in writing to the Commissioner of Insurance, or his or her designee, within 5 days after the date the order is issued, with a copy of the appeal to the inspection department. No further work may take place in violation of a stop order. The Commissioner, or his or her designee, shall promptly conduct an investigation. The inspection department and the owner or builder shall be permitted to submit relevant evidence for the investigation. The Commissioner of Insurance, or his or her designee, shall provide a written statement of the decision setting forth the facts found, the decision reached and the reasons for the decision. In the event of dissatisfaction with the decision, the person affected shall have the option of appealing as set forth in Section 203.1.2. (General Statutes 153A 361 and 160A 421 Statute 160D-1114)
- **204.14 Code enforcement official not fulfilling responsibilities.** When the code enforcement official does not fulfill his responsibilities as specified in Section 204.13, the Commissioner of Insurance or his designee may institute any appropriate actions or proceedings available. (General Statutes 14-230, 14-231, 14-232, <del>153A-356 and 160A-41</del> 160D-1109)

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### CHAPTER 3 REPRINT OF THE GENERAL STATUTES PERTAINING TO THE ENFORCEMENT OF THE NORTH CAROLINA STATE BUILDING CODE

The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other State agencies, occupational licensing boards and commissions. It shall be the responsibility of a permit holder, design professional, contractor or occupational license holder to determine whether any additional requirements exist.

The current language of the General Statutes may be viewed at www.ncleg.gov.

The following list, while extensive, may not include all applicable General Statutes.

1-539.2 Dismantling portion of building

14-68 Failure of owner of property to comply with orders of public authorities

14-228–232 Misconduct in public office

14-414 Pyrotechnics defined; exceptions

15-27.2 Administrative search and inspection warrants

42 Article 5 Landlord Tenant

58-2-95 Commissioner to supervise local inspectors

58-31-40 Commissioner to inspect state property; plans submitted

58-79-20 Inspection of premises; dangerous material removed

66-23-27 Electrical materials, devices, appliances and equipment

83A-1-13 Architects

87-1–15 General contractors

87-21 Plumbing, heating and fire sprinkler contractor

87-43 Electrical contractors

87-57-58 Refrigeration contractors

89C-3–23 Engineers

95-69 Uniform boiler and pressure vessel act

105-130-151 Accessibility tax credit

106-581.1 Agriculture Defined

115C-525 Public schools

119 Article 5 Liquefied petroleum gases

130A-336–339 Wastewater system construction

133-1-4 Public works

143-135.1 Inspection of state owned buildings

143-136-143 Building Code Council and Building Code

143-141 Appeals to Building Code Council

143-151.8-21 Code officials qualification board

143-151.42 Prohibition of master meters for electric and natural gas service

143-151.43-64 North Carolina home inspector board

150B-18-21 Administrative Procedures Act

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153A 97-375 Counties 160A-167-438 Cities 160D Article 11 Building Code Enforcement

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Signature: \_

### APPENDIX E APPEALS NORTH CAROLINA BUILDING CODE COUNCIL

325 North Salisbury Street, Room 5\_44 Raleigh, North Carolina 27603 (919) 647-0009

	APPEAL TO NCD	OOI/NCBCC	Hearing	Date/_	/
GS 153A-374, GS 160A Formal Interpretation by Decision to NCBCC Appeal of Local Decision NCDOI Decision to NC	y NCDOI on to NCDOI	GS 143 	3-140, GS 1	43-141	Appeal of Local Appeal of
REPRESENTING: ADDRESS:			•		X
CITY:		STATE:		ZIP:	
E-MAIL:				FAX: ()	
North Carolina State Bu REQUEST ONE: [ ] NCBCC		on by NCDOI	[ ] App	eal of Local D	ecision to NCBCC
Type or print. Include all ba Attach additional supporting		required by the re	ferenced Gen	eral Statutes and	the attached policies.
REASON:					
				APPEAL	TO NCDOI/NCBCC

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Date:\_\_\_

FORM 3/14/17

- Item D 2 Request from Wayne Hamilton representing the NC Building Code Council Tent Ad-hoc Committee to amend the 2018 NC Fire Code, Section 3103.4 as follows (210309 Item B-3):
  - **3103.4 Permits.** Permits shall be required as set forth in Sections 105.6 and 105.7. The *fire code official* shall refer the permit applicant to the appropriate agency for other applicable occupational licensing or construction permitting requirements.
- Item D 3 Request from Bryan Dale Robinson representing the City of Raleigh to amend the 2018 NC Building Code as follows (210309 Item B-5):
  - **1004.2 Increased Occupant Load** Where approved by the Building Official, the *occupant load* permitted in any building, or portion thereof, is permitted to be increased from the number established for the occupancies in Table 1004.1.2, provided that all other requirements of the code are met based on such modified number and the occupant load does not exceed one occupant per 7 square feet (0.65 m²) of occupiable floor space. Where required by the *building official*, an *approved aisle*, seating or fixed equipment diagram substantiating any increase in *occupant load* shall be submitted. Where required by the *building official*, such diagram shall be posted.
- Item D 4 Request from Drew Crawford representing DIYtiny, INC to add to the 2018 NC Building Code, Sections 101.2, Exception #6 and amend Section 202 as follows (210309 Item B-6):
  - **101.2, Exception #6** A *Tiny House* shall be constructed in accordance with the *International Residential Code* and shall be separated in accordance with Table 602.

### Section 202

#### **Definitions**

TINY HOUSE. A detached single-family dwelling that is 400 square feet (37 m<sup>2</sup>) or less in floor area, excluding lofts.

Item D - 5 Request from Drew Crawford representing DIYtiny, INC to amend the 2018 NC Residential Building Code, Sections R202, R305.1, R328 as follows (210309 Item B-7):

### Section R202

#### **Definitions**

TINY HOUSE A detached single-family dwelling that is 400 square feet (37 m<sup>2</sup>) or less in floor area excluding lofts.

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- **R305.1 Minimum height.** Habitable space, hallways and portions of basements containing these spaces shall have a ceiling height of not less than 7 feet (2134 mm). Bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6 feet 8 inches (2032 mm). Exceptions:
- 1. For rooms with sloped ceilings, the required floor area of the room shall have a ceiling height of not less than 5 feet (1524 mm) and not less than 50 percent of the required floor area shall have a ceiling height of not less than 7 feet (2134 mm).
- 2. The ceiling height above bathroom and toilet room fixtures shall be such that the fixture is capable of being used for its intended purpose. A shower or tub equipped with a showerhead shall have a ceiling height of not less than 6 feet 8 inches (2032 mm) above an area of not less than 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.
- 3. Beams, girders, ducts or other obstructions in *habitable space* shall be permitted to project to within 6 feet 4 inches (1931 mm) of the finished floor.
- 4. Ceiling heights in lofts are permitted to be less than 6 feet 8 inches.
- 5. Kitchens shall have a ceiling height of not less than 6 feet 8 inches in a tiny house.
- **R328.1.2 Maximum area.** *Lofts* shall have a floor area not greater than  $70 \ 100$  square feet ( $6.50 \ 9.29 \ m^2$ ).
- **R328.1.3 Minimum** <u>horizontal</u> <u>dimensions.</u> *Lofts* shall not be less than 5 feet (1524 mm) in any horizontal dimension.
- **R328.2 Loft access and egress.** The access to and primary egress from *lofts* shall be any type described in Sections R328.2.1 through R328.2.4. The *loft* access and egress elements along its required minimum width, shall meet the *loft* where its ceiling height is not less than 3 feet (914mm).
- **R328.2.1.2 Headroom.** The headroom in above stairways accessing a loft shall be not less than 6 feet 2 inches (1880 mm), as measured vertically, from a sloped line connecting the tread, or landing platform nosings in the middle center of their width, and vertically from the landing platform along the center of its width.
- **R328.2.1.4 Landings.** Intermediate landings and landings at the bottom of *stairways* shall comply with Section R311.7.6, except that the depth in the direction of travel shall be not less than 24 inches (610 mm).
- **R328.2.1.4 R328.2.1.5 Landing platforms.** The top tread and riser of stairways accessing *lofts* shall be constructed as a landing platform where the *loft* ceiling height is less than 6 feet 2 inches (1880 mm) where the *stairway*

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meets the loft. The landing platform shall be 18 inches to 22 inches (457 to 559) not less than 20 inches (508 mm) in width and in depth measured horizontally from and perpendicular to the nosing of the landing platform. The landing platform riser height to the edge of the loft, and 16 to floor shall be not less than 16 inches (406 mm) and not greater than 18 inches (406 to 457 mm) in height measured from the landing platform to the loft floor.

**R328.2.1.5 R328.2.1.6 Handrails.** *Handrails* shall comply with Section R311.7.8.

**R328.2.1.6 R328.2.1.7 Stairway guards.** *Guards* at open sides of *stairways*, landings and landing platforms shall comply with Section R312.1.

**R328.2.2.1 Size and capacity.** Ladders accessing lofts shall have a rung width of not less than 12 inches (305 mm) and 10 inches (254 mm) to 14 inches (356 mm) spacing between rungs. Ladders shall be capable of supporting a 200 300 pound (75 136 kg) load on any rung. Rung spacing shall be uniform within 3/8-inch (9.5 mm).

**R328.2.5 Loft Guards.** *Loft guards* shall be located along the open side sides of *lofts. Loft guards* shall not be less than 36 inches (914 mm) in height or one-half of the clear height to the ceiling, whichever is less. *Loft guards* shall comply with Section R312.1.3 and Table R301.5 for their components.

#### Part E - Reports

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

#### Part F - Appeals

Ballantyne Village Parking, LLC Appeal is scheduled for October 27, 2021 at 10:00 AM at the Albemarle Building (325 N. Salisbury Street, Raleigh NC).

Sincerely.

Carl Martin, RA. Secretary, NC Building Code Council

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