



APPENDIX C CODE CHANGE PROPOSAL

NORTH CAROLINA BUILDING CODE COUNCIL

325 North Salisbury Street, Room 5_44
Raleigh, North Carolina 27603
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Petition for Rule Making

Granted by BCC _____

Adopted by BCC _____

Item Number _____

Denied by BCC _____

Disapproved by BCC _____

Approved by RRC _____

Objection by RRC _____

PROPONENT: Drew Crawford _____ **PHONE:** (704)650-0130

REPRESENTING: DIYtiny, INC _____

ADDRESS: 22 Burleson Rd

CITY: Asheville

STATE: NC _____

ZIP: 28805

E-MAIL: Drew@divtiny.com

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North Carolina State Building Code, Volume, Residential Building Code - Sections R202, R305, R328

CHECK ONE: Revise section to read as follows: Delete section and substitute the following:

Add new section to read as follows: Delete section without substitution:

~~LINE THROUGH MATERIAL TO BE DELETED~~

UNDERLINE MATERIAL TO BE ADDED

Please type. Continue proposal or reason on plain paper attached to this form. See reverse side for instructions.

Section R202
Definitions

TINY HOUSE A detached single-family dwelling that is 400 square feet (37 m²) or less in floor area excluding lofts.

Section R305
Ceiling Height

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*.

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~~ 100 square feet (6.50 m²).

R328.1.3 Minimum horizontal 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 ceiling shall not be considered as contributing to the minimum required area for the loft.

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 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~~ 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, or landing platform nosings in the middle center of their width, and vertically from the landing platform along the center of its width.

R328.2.1.3 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 $\frac{4}{3}$ of the riser height; or
2. The riser height shall be 15 inches (381 mm) minus $\frac{3}{4}$ of the tread depth.

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 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 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~~ 300 pound (~~75~~ 136 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 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.

Will this proposal change the cost of construction? Decrease [X] Increase [] No []
Will this proposal increase to the cost of a dwelling by \$80 or more? Yes [] No [X]
Will this proposal affect the Local or State funds? Local [] State [] No [X]
Will this proposal cause a substantial economic impact (≥\$1,000,000)? Yes [] No [X]

- Non-Substantial – Provide an economic analysis including benefit/cost estimates.
- Substantial – The economic analysis must also include 2-alternatives, time value of money and risk analysis.
- Pursuant to §143-138(a1)(2) a cost-benefit analysis is required for all proposed amendments to the NC Energy Conservation Code. The Building Code Council shall also require same for the NC Residential Code, Chapter 11.

REASON:

To align NCRC with IRC Appendix Q, the underlying source used when these sections were adopted into the NCRC, while recognizing the higher standards NC has set for loft areas and ceiling heights.

BCC CODE CHANGES

Signature: 

Date: 1-29-21