



APPENDIX C CODE CHANGE PROPOSAL NORTH CAROLINA BUILDING CODE COUNCIL

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Petition for Rule Making

Item Number _____

Granted by BCC _____
Denied by BCC _____

Adopted by BCC _____
Disapproved by BCC _____

Approved by RRC _____
Objection by RRC _____

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North Carolina State Building Code, Volume Residential Code - Section R101.2
North Carolina State Building Code, Volume Residential Code - Table R302.1
North Carolina State Building Code, Volume Building Code - Table 602
North Carolina State Building Code, Volume Building Code - Section 903.2.8
North Carolina State Building Code, Volume Fire Code - Section 903.2.8

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.

NCRC:

R101.2 Scope.

The provisions of the *International Residential Code for One- and Two-family Dwellings* shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of one or more detached one- and two-family dwellings and townhouses located on a parcel not more than three stories above *grade plane* in height with a separate means of egress, and their *accessory structures* not more than three stories above *grade plane* in height. Single family dwellings otherwise permitted by this code shall include *bed and breakfast homes*.

Exceptions:

1. Live/work units located in *townhouses* and complying with the requirements of Section 419 of the *International Building Code* shall be permitted to be built as one- and two- family *dwellings* or townhouses. Fire suppression required by Section 419.5 of the *International Building Code* where constructed under the *International Residential Code for One- and Two-family Dwellings* shall conform to Section P2904.
2. Deleted.

NCRC:

Section R202 DEFINITIONS

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

NCRC:

TABLE R302.1

EXTERIOR WALLS

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	Fire-resistance rated	1 hour—tested in accordance with ASTM E 119 or UL 263 with exposure from both sides	< 3 feet <u>≤ 5 feet^a</u>
	Not fire-resistance rated	0 hours	≥ 3 feet <u>> 5 feet^a</u>
Projections	Fire-resistance rated	1 hour on the underside	< 3 feet <u>≤ 5 feet^a</u>
	Not fire-resistance rated	0 hours	≥ 3 feet <u>> 5 feet^a</u>
Openings in walls	Not allowed	N/A	< 3 feet <u>≤ 5 feet^a</u>
	Unlimited	0 hours	≥ 3 feet <u>> 5 feet^a</u>
Penetrations	All	Comply with Section R302.4	< 3 feet <u>≤ 5 feet^a</u>
		None required	≥ 3 feet <u>> 5 feet^a</u>

For SI: 1 foot = 304.8 mm.

N/A = Not Applicable.

a. Fire separation distance requirement for multiple dwellings on a single parcel.

NCBC:

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 H ^e	OCCUPANCY GROUP F-1, M, S-1 ^f	OCCUPANCY GROUP A, B, E, F-2, I, R ^{ij} , S-2, U ^h
$X < 5^b$	All	3	2	1
$5 \leq X < 10$	IA	3	2	1
	Others	2	1	1
$10 \leq X < 30$	IA, IB	2	1	1 ^c
	IIB, VB	1	0	0
	Others	1	1	1 ^c
$X \geq 30$	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 a building containing only a Group U occupancy private garage or carport, the exterior wall shall not be required to have a fire-resistance rating where the fire separation distance is 5 feet (1523 mm) or greater.

~~i. For Group R-3 detached one- and two-family dwellings 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 5 feet or less shall be 1-hour fire-resistant rated and shall be 0-hour fire-resistant rated for distances greater than 5 feet.~~

~~j. For Group R-3 attached one- and two-family dwellings of any construction type separated with fire walls complying with Section 706, containing no other occupancy classification, and not more than three stories above grade plane in height with a separate means of egress, a fire separation distance of 5 feet or less shall be 1-hour fire-resistant rated and shall be 0-hour fire-resistant rated for distances greater than 5 feet.~~

NCBC:

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*, except as provided for in Section 903.2.8.5.

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. An *automatic sprinkler system* is not required in *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 not be required to have plumbing or electrical systems, but if the cabin has these systems, then the provisions of the code otherwise applicable to those systems shall apply.
 - 4.3. Smoke alarms and portable fire extinguishers may be required as otherwise provided in the code.
- ~~5. An *automatic sprinkler system* is not required in the following Group R-3 buildings not more than three stories above grade plane in height with a separate means of egress:
 - 5.1. Detached one- and two-family dwellings.
 - 5.2. Attached one- and two-family dwellings separated with fire walls complying with Section 706 and containing no other occupancy classification.~~

NCFC:

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. An automatic sprinkler system is not required in 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 not be required to have plumbing or electrical systems, but if the cabin has these systems, then the provisions of the code otherwise applicable to those systems shall apply.
 - 4.3. Smoke alarms and portable fire extinguishers shall be installed as required by other sections of this code.
- ~~5. An automatic sprinkler system is not required in the following Group R-3 buildings not more than three stories above grade plane in height with a separate means of egress:

 - 5.1. Detached one- and two-family dwellings.
 - 5.2. Attached one- and two-family dwellings separated with fire walls complying with NC Building Code, Section 706 and containing no other occupancy classification.~~

Will this proposal change the cost of construction? Decrease [] Increase [] No

Will this proposal increase to the cost of a dwelling by \$80 or more? Yes [] No

Will this proposal affect the Local or State funds? Local [] State [] No

Will this proposal cause a substantial economic impact (≥\$1,000,000)? Yes [] No

- 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: Clarification and simplification of application of the NCRC and NCBC to multiple dwellings on a single parcel of land. This change will help keep designers and contractors in one book instead of relying on cross references between the NCBC and the NCRC.

Because the use of the NCRC for construction of multiple dwellings on a single lot can currently be achieved by use of an alternate method there is no added cost or savings for this amendment.

Signature: Cal Yantis

Date: 12/10/2021

BCC CODE CHANGES
FORM 11/26/19