

2012 NC Building Code
Table 1004.1.1 Maximum Floor Area Allowances per Occupant. (130910 Item B-1)

TABLE 1004.1.1
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

Assembly without fixed seats
Unconcentrated (tables and chairs) ^a

Business areas ^a

Add the following footnote to “Assembly – unconcentrated (tables and chairs)” and to “Business areas”:

a. An assembly occupancy conference room that is accessory to a Group B office occupancy and meeting the requirements of Section 303.1, exception 2, shall be calculated at 100 square feet per occupant for determining the overall occupant load of the associated floor. The assembly occupancy shall be calculated at 15 square feet per occupant for the purpose of determining egress from the room containing the assembly occupancy.

The delayed effective date of this Rule is January 1, 2015.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2012 NC Building Code
Chapter 23 Wood Tables SP. (130910 Item B-2)

Change the following tables in Chapter 23 as indicated in the attachment:

2308.8.8(1), 2308.8(2), 2308.9.5, 2308.9.6, 2308.10.2(1), 2308.10.2(2),
2308.10.3(1), 2308.10.3(2), 2308.10.3(3), 2308.10.3(4), 2308.10.3(5), 2308.10.3(6)

The delayed effective date of this Rule is January 1, 2015.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

TABLE 2308.9.5—continued
HEADER AND GIRDER SPANS^{a,b} FOR EXTERIOR BEARING WALLS
 (Maximum Spans for Douglas Fir-Larch, Hem-Fir, Southern Pine and Spruce-Pine-Fir^b and Required Number of Jack Studs)

HEADERS SUPPORTING	SIZE	GROUND SNOW LOAD (psf) ^e											
		30						50					
		Building width ^c (feet)											
		20		28		36		20		28		36	
Span	NJ ^d	Span	NJ ^d	Span	NJ ^d	Span	NJ ^d	Span	NJ ^d	Span	NJ ^d		
Roof, Ceiling & 2 Center-Bearing Floors	2-2×4	2-7	1	2-3	1	2-0	1	2-6	1	2-2	1	1-11	1
	2-2×6	3-9	2	3-3	2	2-11	2	3-8	2	3-2	2	2-10	2
	2-2×8	4-9	2	4-2	2	3-9	2	4-7	2	4-0	2	3-8	2
	2-2×10	5-9	2	5-1	2	4-7	3	5-8	2	4-11	2	4-5	3
	2-2×12	6-8	2	5-10	3	5-3	3	6-6	2	5-9	3	5-2	3
	3-2×8	5-11	2	5-2	2	4-8	2	5-9	2	5-1	2	4-7	2
	3-2×10	7-3	2	6-4	2	5-8	2	7-1	2	6-2	2	5-7	2
	3-2×12	8-5	2	7-4	2	6-7	2	8-2	2	7-2	2	6-5	3
	4-2×8	6-10	1	6-0	2	5-5	2	6-8	1	5-10	2	5-3	2
	4-2×10	8-4	2	7-4	2	6-7	2	8-2	2	7-2	2	6-5	2
4-2×12	9-8	2	8-6	2	7-8	2	9-5	2	8-3	2	7-5	2	
Roof, Ceiling & 2 Clear Span Floors	2-2×4	2-1	1	1-8	1	1-6	2	2-0	1	1-8	1	1-5	2
	2-2×6	3-1	2	2-8	2	2-4	2	3-0	2	2-7	2	2-3	2
	2-2×8	3-10	2	3-4	2	3-0	3	3-10	2	3-4	2	2-11	3
	2-2×10	4-9	2	4-1	3	3-8	3	4-8	2	4-0	3	3-7	3
	2-2×12	5-6	3	4-9	3	4-3	3	5-5	3	4-8	3	4-2	3
	3-2×8	4-10	2	4-2	2	3-9	2	4-9	2	4-1	2	3-8	2
	3-2×10	5-11	2	5-1	2	4-7	3	5-10	2	5-0	2	4-6	3
	3-2×12	6-10	2	5-11	3	5-4	3	6-9	2	5-10	3	5-3	3
	4-2×8	5-7	2	4-10	2	4-4	2	5-6	2	4-9	2	4-3	2
	4-2×10	6-10	2	5-11	2	5-3	2	6-9	2	5-10	2	5-2	2
4-2×12	7-11	2	6-10	2	6-2	3	7-9	2	6-9	2	6-0	3	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.8 N/m².

- Spans are given in feet and inches (ft-in).
- ~~Tabulated values are for No. 2 grade lumber.~~ Spans are based on minimum design properties for No. 2 grade lumber of Douglas fir-larch, hem-fir, and spruce-pine-fir. No. 1 or better grade lumber shall be used for southern pine.
- Building width is measured perpendicular to the ridge. For widths between those shown, spans are permitted to be interpolated.
- NJ - Number of jack studs required to support each end. Where the number of required jack studs equals one, the header is permitted to be supported by an approved framing anchor attached to the full-height wall stud and to the header.
- Use 30 pounds per square foot ground snow load for cases in which ground snow load is less than 30 pounds per square foot and the roof live load is equal to or less than 20 pounds per square foot.

2012 NC Fire Code

908.7 Carbon monoxide alarms. (130910 Item B-8)

908.7 Carbon monoxide alarms. Group I-1, I-2, I-4 or R occupancies located in a building containing a fuel-burning heater, appliance, fireplace, or has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2 of the International Building Code, or an enclosed parking garage ventilated in accordance with Section 404 of the International Mechanical Code shall not be considered an attached garage.

Exception: Sleeping units or dwelling units that do not themselves contain a fuel-burning heater, appliance, fireplace or have an attached garage, but are located in a building with a fuel-burning heater, appliance, fireplace or an attached garage, need not be equipped with single-station carbon monoxide alarms provided that:

1. The sleeping unit or dwelling unit is located more than one story above or below any story which contains a fuel-burning heater, appliance, fireplace, or attached garage;
2. The sleeping unit or dwelling unit is not connected by duct work or ventilation shafts to any room containing a fuel-burning heater, appliance, fireplace or attached garage; and
3. The building is equipped with a common area carbon monoxide alarm system.

908.7.1 Carbon monoxide detection systems. Carbon monoxide detection systems, which include carbon monoxide detectors and audible notification appliances installed and maintained in accordance with NFPA 720, shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075.

Amend Chapter 47 as follows:

Add NFPA Standard:

720-09 Standard for the Installation of Carbon Monoxide(CO) Detection.....908.7, 908.7.1 and Warning Equipment, 2009 Edition

The effective date of this Rule is June 1, 2014.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.

[Note: This Rule will also be printed in the 2012 NC Building Code, Section 908.7]

2012 NC Fire Code

2206.2.3 Above-ground tanks located outside, above grade. (130910 Item B-9)

Add Exception # 5 to 2206.2.3:

2206.2.3 Above-ground tanks located outside, above grade. Above-ground tanks shall not be used for the storage of Class I, II, or IIIA liquid motor fuels except as provided by this section.

No change to Exceptions 1-4

1. Above-ground tanks used for outside, above-grade storage of Class I liquids shall be *listed and labeled* as protected above-ground tanks and be in accordance with Chapter 34. Such tanks shall be located in accordance with Table 2206.2.3.

2. Above-ground tanks used for above-grade storage of Class II or IIIA liquids are allowed to be protected above-ground tanks or, when *approved by the fire code official*, other above-ground tanks that comply with Chapter 34. Tank locations shall be in accordance with Table 2206.2.3.

3. Tanks containing fuels shall not exceed 12,000 gallons (45 420 L) in individual capacity or 48,000 gallons (181 680 L) in aggregate capacity. Installations with the maximum allowable aggregate capacity shall be separated from other such installations by not less than 100 feet (30 480 mm).

4. Tanks located at farms, construction projects, or rural areas shall comply with Section 3406.2.

5. Fleet service stations. Listed UL 142 above ground storage tanks with spill control, 1,100 gallons (4164L) or less in capacity, shall be permitted to be used to store Class I liquids at fleet service stations.

The delayed effective date of this Rule is January 1, 2015.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2012 NC Residential Code
Chapter 5, Chapter 8 Wood Tables SP. (130910 Item B-3)

Change the following tables in Chapter 5 as indicated in the attachment:

R502.3.1(1), R502.3.1(2), R502.3.3(1), R502.3.3(2), R502.5(1), R502.5(2)

Change the following tables in Chapter 8 as indicated in the attachment:

R802.4(1), R802.4(2), R802.5.1(1), R802.5.1(2), R802.5.1(3), R802.5.1(4), R802.5.1(5), R802.5.1(6),
R802.5.1(7), R802.5.1(8)

The delayed effective date of this Rule is January 1, 2015.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

TABLE R502.3.3(1)
CANTILEVER SPANS FOR FLOOR JOISTS SUPPORTING LIGHT-FRAME EXTERIOR BEARING WALL AND ROOF ONLY^{a, b, c, f, g, h}
 (Floor Live Load ≤ 40 psf, Roof Live Load ≤ 20 psf)

Member & Spacing	Maximum Cantilever Span (Uplift Force at Backspan Support in Lbs.) ^{c, e}											
	Ground Snow Load											
	≤ 20 psf			30 psf			50 psf			70 psf		
	Roof Width			Roof Width			Roof Width			Roof Width		
	24 ft	32 ft	40 ft	24 ft	32 ft	40 ft	24 ft	32 ft	40 ft	24 ft	32 ft	40 ft
2 × 8 @ 12"	20" (177)	15" (227)	—	18" (209)	—	—	—	—	—	—	—	—
2 × 10 @ 16"	29" (228)	21" (297)	16" (364)	26" (271)	18" (354)	—	20" (375)	—	—	—	—	—
2 × 10 @ 12"	36" (166)	26" (219)	20" (270)	34" (198)	22" (263)	16" (324)	26" (277)	—	—	19" (356)	—	—
2 × 12 @ 16"	—	32" (287)	25" (356)	36" (263)	29" (345)	21" (428)	29" (367)	20" (484)	—	23" (471)	—	—
2 × 12 @ 12"	—	42" (209)	31" (263)	—	37" (253)	27" (317)	36" (271)	27" (358)	17" (447)	31" (348)	19" (462)	—
2 × 12 @ 8"	—	48" (136)	45" (169)	—	48" (164)	38" (206)	—	40" (233)	26" (294)	36" (230)	29" (304)	18" (379)

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.

- a. Tabulated values are for clear-span roof supported solely by exterior bearing walls.
- b. Spans are based on minimum design properties for No. 2 grade lumber of Douglas fir-larch, hem-fir, ~~southern pine~~ and spruce-pine-fir for repetitive (three or more) members. No. 1 or better grade lumber shall be used for southern pine.
- c. Ratio of backspan to cantilever span shall be at least 3:1.
- d. Connections capable of resisting the indicated uplift force shall be provided at the backspan support.
- e. Uplift force is for a backspan to cantilever span ratio of 3:1. Tabulated uplift values are permitted to be reduced by multiplying by a factor equal to 3 divided by the actual backspan ratio provided (3/backspan ratio).
- f. See Section R301.2.2.2.5, Item 1, for additional limitations on cantilevered floor joists for detached one- and two-family dwellings in Seismic Design Category D₀, D₁, or D₂ and townhouses in Seismic Design Category C, D₀, D₁ or D₂.
- g. A full-depth rim joist shall be provided at the unsupported end of the cantilever joists. Solid blocking shall be provided at the supported end.
- h. Linear interpolation shall be permitted for building widths and ground snow loads other than shown.

TABLE R502.3.3(2)
CANTILEVER SPANS FOR FLOOR JOISTS SUPPORTING EXTERIOR BALCONY^{a, b, e, f}

Member Size	Spacing	Maximum Cantilever Span (Uplift Force at Backspan Support in lb) ^{c, d}		
		Ground Snow Load		
		≤ 30 psf	50 psf	70 psf
2 × 8	12"	42" (139)	39" (156)	34" (165)
2 × 8	16"	36" (151)	34" (171)	29" (180)
2 × 10	12"	61" (164)	57" (189)	49" (201)
2 × 10	16"	53" (180)	49" (208)	42" (220)
2 × 10	24"	43" (212)	40" (241)	34" (255)
2 × 12	16"	72" (228)	67" (260)	57" (268)
2 × 12	24"	58" (279)	54" (319)	47" (330)

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kPa.

- a. Spans are based on minimum design properties for No. 2 grade lumber of Douglas fir-larch, hem-fir, ~~southern pine~~ and spruce-pine-fir for repetitive (three or more) members. No. 1 or better grade lumber shall be used for southern pine.
- b. Ratio of backspan to cantilever span shall be at least 2:1.
- c. Connections capable of resisting the indicated uplift force shall be provided at the backspan support.
- d. Uplift force is for a backspan to cantilever span ratio of 2:1. Tabulated uplift values are permitted to be reduced by multiplying by a factor equal to 2 divided by the actual backspan ratio provided (2/backspan ratio).
- e. A full-depth rim joist shall be provided at the unsupported end of the cantilever joists. Solid blocking shall be provided at the supported end.
- f. Linear interpolation shall be permitted for ground snow loads other than shown.

2012 NC Residential Code

R101.2 Scope. Accessory Buildings and Structures. (130910 Item B-10)

R101.2 Scope. The provisions of the *North Carolina 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 detached one- and two-family dwellings and townhouses not more than three stories above *grade plane* in height with a separate means of egress and their *accessory buildings and structures*.

Exception: Live/work units complying with the requirements of Section 419 of the *North Carolina 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 *North Carolina Building Code* when constructed under the *North Carolina Residential Code for One- and Two-family Dwellings* shall conform to Section 903.3.1.3 of the *International Building Code*.

R101.2.1 Accessory buildings. Accessory buildings with any dimension greater than 12 feet (3658mm) must meet the provisions of this code. Accessory buildings may be constructed without a masonry or concrete foundation, except in coastal high hazard or ocean hazard areas, provided all of the following conditions are met:

1. The accessory building shall not exceed 400 square feet (37m²) or one story in height;
2. The building is supported on a wood foundation of minimum 2x6 or 3x4 mudsill of approved wood in accordance with Section R317; and
3. The building is 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 20 psf (958 Pa) times the plan area of the building.

R101.2.2 Accessory structures. Accessory structures are not required to meet the provisions of this code except decks, gazebos, retaining walls as required by Section R404.4, detached masonry chimneys built less than 10' from other buildings, pools or spas per appendix G, or detached carports.

Exception: Portable lightweight aluminum or canvas type carports not exceeding 400 sq ft or 12' mean roof height and tree houses supported solely by a tree are exempt from the provisions of this code.

The delayed effective date of this Rule is January 1, 2015.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.

2012 NC Residential Code
R202 Definitions. (130910 Item B-11)

ACCESSORY BUILDING. In one- and two-family dwellings not more than three stories high with separate means of egress, a building, the use of which is incidental to that of the main building and which is detached and located on the same lot. An accessory building is a building that is roofed over and more than 50% of its exterior walls are enclosed. Examples of accessory buildings are garages, storage buildings, workshops, and boat houses.

ACCESSORY STRUCTURE. An accessory structure is any structure not roofed over and enclosed more than 50% of its perimeter walls, that is not considered an accessory building located on one- and two-family dwelling sites which is incidental to that of the main building. Examples of accessory structures are fencing, decks, gazebos, arbors, retaining walls, barbecue pits, detached chimneys, tree houses (supported by tree only), playground equipment, and yard art. Accessory structures are not required to meet the provisions of this code except decks, gazebos, retaining walls as required by Section R404.4, detached masonry chimneys built less than 10' from other buildings, pools or spas per appendix G, or detached carports. are not required to meet the provisions of this code.

The delayed effective date of this Rule is January 1, 2015.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.