2003 INTERNATIONAL RESIDENTIAL CODE
MODIFICATIONS INDEX

Number	Section	New / Continued
IRC 2003 01	R202	New
IRC 2003 02	Figure R301.2(2)	New
IRC 2003 03	R301, R403, R404, R602, R606, R611, R703 & R1003	New
IRC 2003 04	R301.2.2	New
IRC 2003 05	R307.2	New
IRC 2003 06	R311.4.3	New
IRC 2003 07	R311.5.3.1 & R311.5.3.2	New
IRC 2003 08	R311.5.6.1	New
IRC 2003 09	R402.2	New
IRC 2003 10	R403.1.4.2	New
IRC 2003 11	R403.1.6	New
IRC 2003 12	R403.1.7, R403.1.7.1, R403.1.7.2, R403.1.7.3, R403.1.7.4 & Figure R403.1.7.1	New
IRC 2003 13	R403.1.8	Continued (IRC 2000 09)
IRC 2003 14	Figure 404.1.5(1)	Continued (IRC 2000 03)
IRC 2003 15	R408.3	Continued (IRC 2000 16)
IRC 2003 16	Table R502.5(1)	New
IRC 2003 17	R502.11.4	New
IRC 2003 18	R602.10.5	New
IRC 2003 19	R703.7.2, R703.7.2.1 & R703.7.2.2	Continued (IRC 2000 10)
IRC 2003 20	R802.10.1	New
IRC 2003 21	Chapter 11	New
IRC 2003 22	M1411.4	New

SOUTH CAROLINA MODIFICATIONS
TO THE 2003 EDITION OF THE
INTERNATIONAL RESIDENTIAL CODE

As authorized by Section 6-9-60(C) of the South Carolina Code of Laws, 1976 as amended, the South Carolina Building Codes Council has approved the following modifications to the 2003 edition of the International Residential Code (IRC). Approved modifications under Section 6-9-60(C) are mandatory for all local jurisdictions and must be incorporated into the International Residential Code.

The modifications are arranged by the affected IRC section numbers in ascending order. Modifications that have been continued from the prior building code cycle were renumbered to coincide with the 2003 building code cycle numbering, and are distinguished by a note and reference to the prior modification number.

Modification Number: IRC 2003 01.

Section: R202 Definitions.

Modification: The definition of the word “Story” was expanded to include language, to allow single and two family residences to be built in accordance with the International Residential Code when there are three habitable stories above a usable story, which is not habitable but exists for the purpose of raising the house above the flood plain.

The definition will now read: “Story - That portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above. For the purpose of determining the appropriate code to be used, when the first story is built in the flood plain, a ‘Story’ must be ‘Habitable Space. “

Reason: To allow single and two family dwellings to be built to the residential code when there are three habitable stories above a usable story, which is not habitable, but exists for the purpose of raising the house above the flood plain.

Proponent: Home Builders Association of South Carolina.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 02.

Figure: R301.2(2) Seismic Design Categories – Site Class D.

Modification: The seismic design map was replaced with a later version of the same map. The later version of the map includes a new seismic zone designated as D_0 (D sub zero).

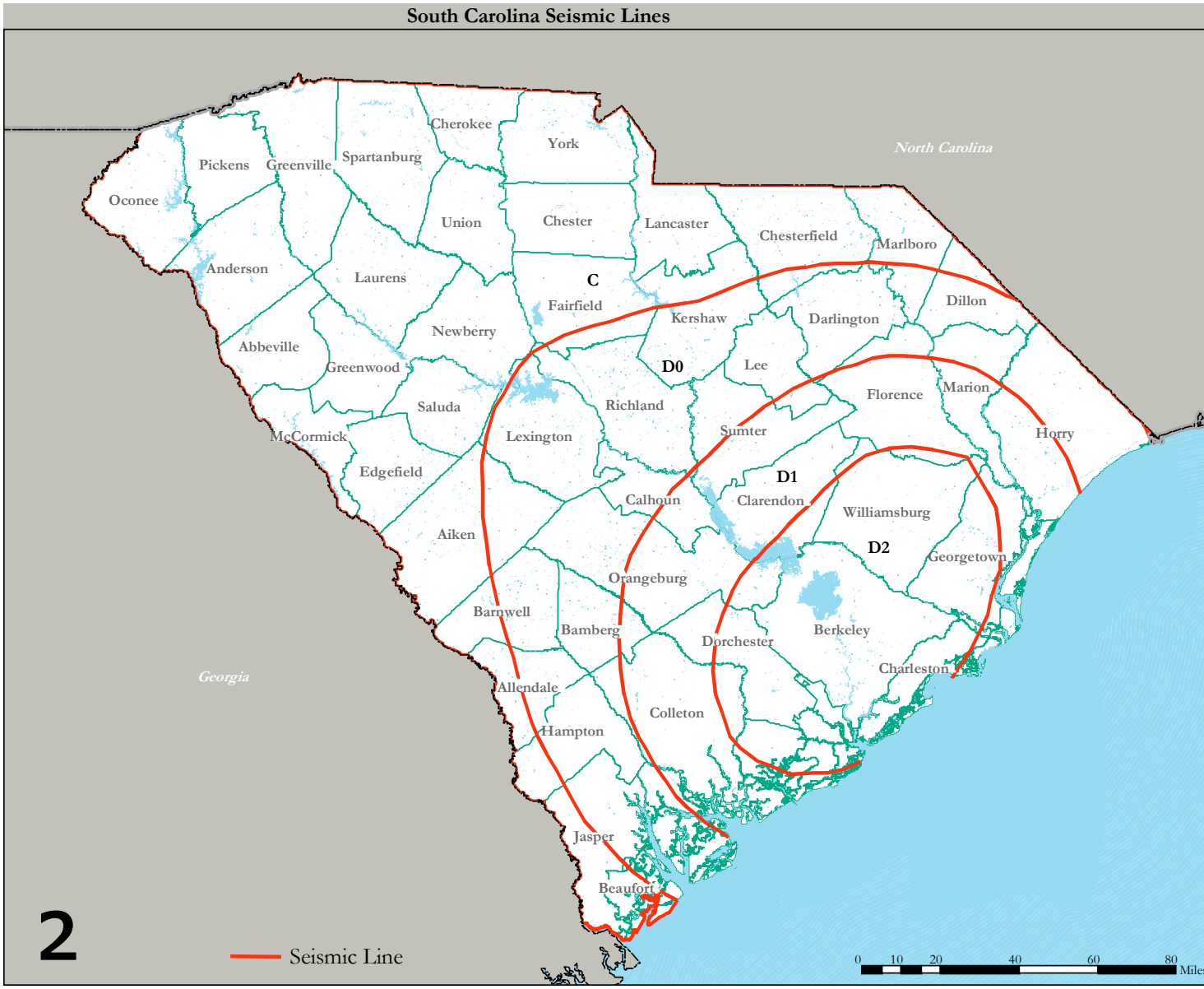
Reason: The Building Codes Council determined that since the latest map is conclusive and available now, it should be used.

Note: The later version of the seismic design map has also been approved by the International Code Council and will be included in the 2006 Edition of the International Residential Code.

Proponent: Home Builders Association of Greater Columbia.

Effective Date: July 1, 2005.

SEISMIC DESIGN CATEGORIES INCLUDING D0



Modification Number: IRC 2003 03.

Sections: R301 Design criteria, R403 Footings, R404 Foundation walls, R602 Wood wall framing, R606 General masonry construction, R611 Insulating concrete form wall construction, R703 Exterior covering and R1003 Masonry fireplaces.

Modification: All affected sections were revised to incorporate the design provisions for the new Seismic Design Category D_0 (D sub zero).

Reason: To establish the design criteria for the new D_0 seismic zone created by modification IRC 2003 02.

Note: This modification has also been approved by the International Code Council and will be included in the 2006 Edition of the International Residential Code.

Proponent: Home Builders Association of South Carolina.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 04.

Section: R301.2.2 Seismic provisions.

Modification: A moratorium was placed on enforcement of the D_0 (D sub zero) seismic design requirements for those areas in South Carolina designated as D_0, until adoption of the 2006 International Residential Code. The requirements for the Seismic Design Category C will be in effect for those areas in South Carolina designated as D_0.

Reason: To delay enforcement pending final approval of the seismic design requirements for the area designated as D_0.

Proponent: Home Builders Association of Greater Columbia.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 05.

Figure: R307.2 Minimum Fixture Clearances.

Modification: Change the minimum dimension for the side clearance between bathtubs and water closets and bidets from 15 inches to 12 inches.

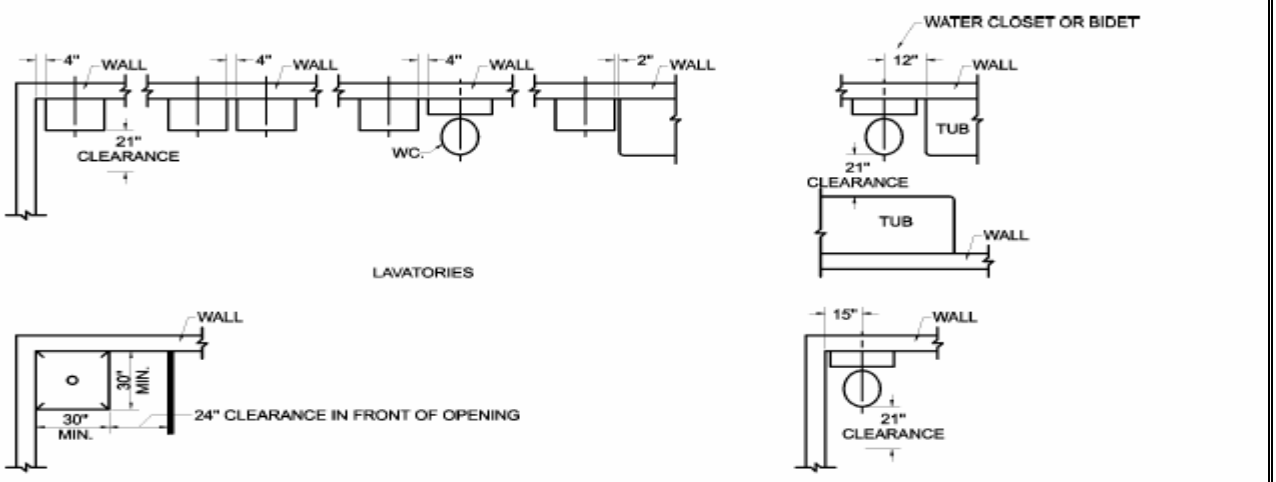


FIGURE 307.2
MINIMUM FIXTURE CLEARANCES

Reason: No valid reason exists to justify a minimum clearance of 15 inches.

Proponent: Home Builders Association of South Carolina.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 06.

Section: R311.4.3 Landings at doors.

Modification: Additional language was added to the section and exception.

The modified section will now read: “The floor or landing at the interior side of the exit door required by Section R311.4.1 shall not be more than 1.5 inches (38 mm) lower than the top of the threshold. The floor or landing at exterior doors other than the exit door required by Section R311.4.12 shall not be required to comply with this requirement but shall have a rise no greater than that permitted in Section R311.5.3.
Exception: The landing at an exterior/exit doorway shall not be more than 7 ¾ inches (196 mm) below the top of the threshold, provided the door, other than an exterior storm or screen door does not swing over the landing.”

Reason: To prevent water intrusion at exterior/exit doors.

Proponent: Home Builders Association of South Carolina.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 07.

Sections: R311.5.3.1 Riser height and R311.5.3.2 Tread depth.

Modification: Deleted and replaced with substitute language.

The section will now read: “When risers are closed, all treads may have a uniform projection not to exceed 1 ½ inches. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch. The greatest tread run within any flight of stairs shall not exceed the smallest by more than 3/8 inch. Stairways shall not be less than 3 feet in clear width, and the headroom, rise and run shall conform to Figure R-213.1. Handrails may project from each side of a stairway a distance of 3 ½ inches into the required width.”

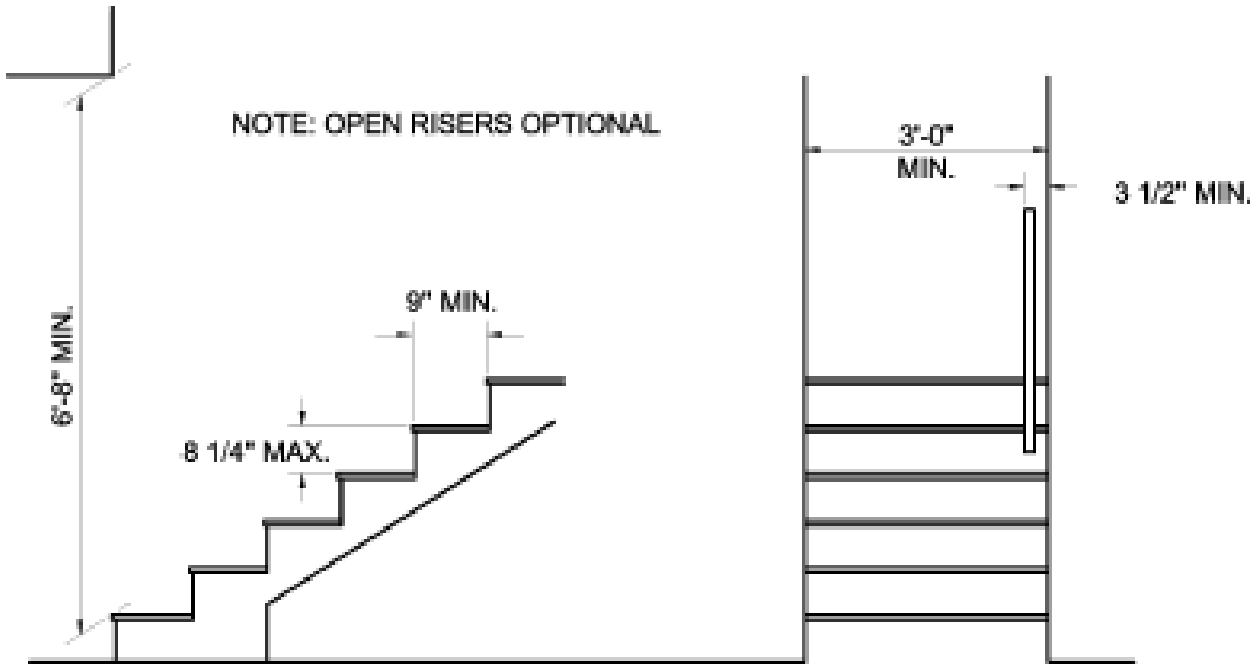


FIGURE NO. R-213.1
STAIRWAYS

Reason: To allow more logical and flexible design criteria for the stairways.

Proponent: Home Builders Association of Greater Columbia.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 08.

Section: R311.5.6.1 Height.

Modification: The minimum height for handrails for stairs and ramps was reduced from 34 inches to 30 inches.

The modified section will now read: “Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finished surface of ramp slope, shall be not less than 30 inches and not more than 38 inches (965 mm).”

Reason: To be consistent with prior editions of the code and prior construction practices in South Carolina.

Proponent: Home Builders Association of Greater Spartanburg.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 09.

Table: R402.2 Minimum specified compressive strength of concrete.

Modification: Language was deleted from the last line of the first column to eliminate the requirement for air-entrained concrete for garage floor slabs.

The modified table will now read: “Porches, carport slabs and steps exposed to the weather”

Reason: Air-entrained concrete is required for exterior surfaces that are exposed to water and have the potential for freezing. The requirement for air-entrained concrete for garage floors was determined to be unnecessary in all areas in South Carolina.

Proponent: Home Builders Association of Greater Columbia.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 10.

Section: R403.1.4.2 Seismic conditions.

Modification: The requirement for interior footings supporting bearing or bracing walls and cast monolithically with a slab on grade in Seismic Design Categories D_1 and D_2 was reduced from 18 inches below the top of the slab, to 12 inches below the top of the slab.

The modified section will now read: “In seismic design categories D_1 and D_2, interior footings supporting bearing or bracing walls and cast monolithically with a slab on grade shall extend to a depth of not less than 12 inches (305 mm) below the top of slab.”

Reason: To allow interior footings to be placed at a depth where adequate bearing capacity is provided, but not require them to extend to a point that is deeper than the exterior footings.

Note: This modification has also been approved by the International Code Council and will be included in the 2006 Edition of the International Residential Code.

Proponent: Charleston Trident Home Builders Association.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 11.

Section: R403.1.6 Foundation anchorage.

Modification: Exceptions 2 and 3 were added to the existing language.

The modified section will now read: "When braced wall panels are supported directly on continuous foundations, the wall wood sill plate or cold-formed steel bottom track shall be anchored to the foundation in accordance with this section. The wood sole plate at exterior walls on monolithic slabs and wood sill plate shall be anchored to the foundation with anchor bolts spaced a maximum of 6 feet (1829 mm) on center. There shall be a minimum of two bolts per plate section with one bolt located not more than 12 inches (305 mm) or less than seven bolt diameters from each end of the plate section. In Seismic Design Categories D_1 and D_2, anchor bolts shall also be spaced at 6 feet (1829mm) on center and located within 12 inches (305 mm) from the ends of each plate section at interior braced wall lines when required by Section R602.10.9 to be supported on a continuous foundation. Bolts shall be at least 1/2 inch (12.7 mm) in diameter and shall extend a minimum of 7 inches (178 mm) into masonry or concrete. Interior bearing wall sole plates on monolithic slab foundations shall be positively anchored with approved fasteners. A nut and washer shall be tightened on each bolt to the plate. Sills and sole plates shall be protected against decay and termites where required by Sections R318 and R319. Cold-formed steel framing systems shall be fastened to the wood sill plates or anchored directly to the foundation as required in Section R505.3.1 or R603.1.1.
Exception: Foundation anchor straps, spaced as required to provide equivalent anchorage to 1/2-inch-diameter (12.7 mm) anchor bolts.
Exception 2. Walls 24" total length or shorter connecting offset braced wall panels shall be anchored to the foundation with a minimum of one anchor bolt located in the center third of the plate section and shall be attached to adjacent braced wall panels per Figure R602.10.5 at corners.
Exception 3. Walls 12" total length or shorter connecting offset braced wall panels shall be permitted to be connected to the foundation without anchor bolts. The wall shall be attached to adjacent braced wall panels per Figure R602.10.5 at corners."

Reason: In instances where a wood sill plate is 24 inches in length or less, such as short walls that provide offsets to long braced wall panels, the requirement for a minimum of two anchor bolts is excessive. The modification will allow short walls, which do not provide any significant strength in the main force resisting direction, to be attached with fewer bolts, while still maintaining uplift protection. The uplift protection will be provided through the proper attachment of the short offset walls to the main braced wall line per the attachment requirements listed in the code.

Note: This modification has also been approved by the International Code Council and will be included in the 2006 Edition of the International Residential Code.

Proponent: Home Builders Association of Greater Columbia.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 12.

Sections: Sections R403.1.7 Footings on or adjacent to slopes, R402.1.7.1 Building clearances from ascending slopes, R403.1.7.2 Footing setback from descending slope surfaces, R403.1.7.3 Foundation elevation, R403.1.7.4 Alternate setback and clearances and Figure R403.1.7.1 Foundation clearance from slopes.

Modification: Deleted without substitution.

Reason: The sections referenced establish limitations for sites with varying topography that may be more appropriate in local zoning ordinances.

Proponent: Home Builders Association of South Carolina.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 13.

Section: R403.1.8.

Modification: Deleted without substitution.

Reason: The section would increase seismic standards in areas of the state where lower standards would be adequate.

Note: Modification (IRC 2000 09) continued from the 2000 building code cycle.

Proponent: Home Builders Association of South Carolina.

Effective Date: November 15, 2001.

Modification Number: IRC 2003 14.

Section: Figure 404.1.5(1).

Modification: Deleted without substitution.

Reason: The text of Section 404.1.5 does not make reference to Figure 404.1.5(1) and the construction methods between the two are not consistent. The result will be inconsistent enforcement at the local level.

Note: Modification (IRC 2000 03) continued from the 2000 building code cycle.

Proponent: Home Builders Association of South Carolina.

Effective Date: January 26, 2001.

Modification Number: IRC 2003 15.

Section: R408.3. Access.

Modification: Deleted and replaced with substitute language.

The section will now read: “Access. An Access crawl hole 18 inches by 24 inches (457 mm by 610 mm) shall be provided to the under-floor space.”

Reason: To remove the reference to Section M1305.1.4.

Note: Modification (IRC 2000 16) continued from the 2000 building code cycle.

Proponent: Home Builders Association of South Carolina.

Effective Date: February 27, 2002.

Modification Number: IRC 2003 16.

Table: R502.5(1) Girder Spans and Header Spans for Exterior Bearing Walls.

Modification: An additional table identified as Table R502.5(1)(A) was included with the existing table.

Reason: To allow for the use of standard lumber as an alternative to engineered wood for the fabrication of headers over 6 feet in length.

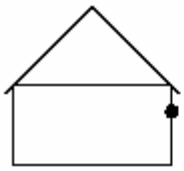
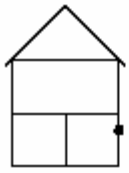
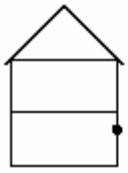
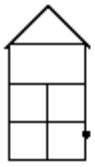
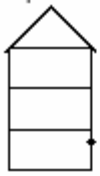
Proponent: Home Builders Association of Greater Spartanburg.

Effective Date: July 1, 2005.

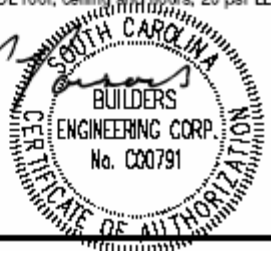
ALTERNATE TABLE R502.5(1)

Alternative to IRC Table R502.5(1)

Number of Jack Studs and Maximum Spans for No. 2 SYP Girders and Headers in Exterior Bearing Walls with 10 psf Ground Snow Load

Headers Supporting	Size	Building Width (feet)							
		12		20		28		36	
		Span	NJ	Span	NJ	Span	NJ	Span	NJ
Roof and ceiling 	2-2x4	5-2	1	4-2	1	3-7	1	3-2	1
	2-2x6	7-6	1	6-0	1	5-1	1	4-7	1
	2-2x8	9-8	1	7-8	1	6-7	1	5-10	1
	2-2x10	11-7	1	9-2	1	7-10	1	7-0	1
	2-2x12	13-7	1	10-9	1	9-3	1	8-2	1
	3-2x8	12-8	1	10-2	1	8-8	1	7-8	1
	3-2x10	15-2	1	12-1	1	10-4	1	9-2	2
	3-2x12	17-9	1	14-2	1	12-2	2	10-9	2
	4-2x8	14-8	1	11-8	1	10-0	1	8-10	2
	4-2x10	17-7	1	14-0	1	12-0	2	10-8	2
	4-2x12	20-6	1	16-4	2	14-0	2	12-6	2
Roof, ceiling and one center-bearing floor 	2-2x4	---	---	3-3	1	2-9	1	2-6	1
	2-2x6	---	---	4-9	1	4-1	1	3-7	1
	2-2x8	---	---	6-2	1	5-3	1	4-8	1
	2-2x10	---	---	7-4	1	6-3	1	5-7	1
	2-2x12	---	---	8-7	1	7-4	2	6-6	2
	3-2x8	---	---	8-1	1	6-10	1	6-1	2
	3-2x10	---	---	9-8	1	8-4	2	7-3	2
	3-2x12	---	---	11-3	2	9-8	2	8-7	2
	4-2x8	---	---	9-4	1	8-0	2	7-1	2
	4-2x10	---	---	11-2	2	9-6	2	8-4	2
	4-2x12	---	---	13-1	2	11-2	2	9-10	2
Roof, ceiling and one clear span floor 	2-2x4	3-7	1	2-10	1	2-4	1	2-1	1
	2-2x6	5-2	1	4-1	1	3-6	1	3-1	1
	2-2x8	6-8	1	5-3	1	4-6	1	4-0	1
	2-2x10	8-0	1	6-3	1	5-4	2	4-8	2
	2-2x12	9-4	1	7-4	2	6-3	2	5-7	2
	3-2x8	8-9	1	6-10	1	5-10	2	5-2	2
	3-2x10	10-7	1	8-3	2	7-1	2	6-2	2
	3-2x12	12-4	2	9-8	2	8-3	2	7-3	2
	4-2x8	10-2	1	8-0	2	6-9	2	6-0	2
	4-2x10	12-2	2	9-7	2	8-1	2	7-2	2
	4-2x12	14-3	2	11-2	2	9-6	2	8-4	3
Roof, ceiling and two center-bearing floors 	2-2x4	---	---	2-10	1	2-4	1	2-1	1
	2-2x6	---	---	4-1	1	3-6	1	3-1	1
	2-2x8	---	---	5-4	1	4-6	1	4-0	1
	2-2x10	---	---	6-3	1	5-4	2	4-8	2
	2-2x12	---	---	7-4	2	6-3	2	5-7	2
	3-2x8	---	---	6-10	1	5-10	2	5-2	2
	3-2x10	---	---	8-3	2	7-1	2	6-2	2
	3-2x12	---	---	9-8	2	8-3	2	7-3	2
	4-2x8	---	---	8-0	2	6-9	2	6-0	2
	4-2x10	---	---	9-7	2	8-1	2	7-2	2
	4-2x12	---	---	11-2	2	9-6	2	8-4	3
Roof, ceiling and two clear span floors 	2-2x4	2-10	1	2-3	1	2-0	1	1-8	1
	2-2x6	4-2	1	3-3	1	2-9	1	2-6	1
	2-2x8	5-6	1	4-3	1	3-7	2	3-2	2
	2-2x10	6-6	1	5-1	2	4-3	2	3-9	2
	2-2x12	7-7	1	6-0	2	5-1	2	4-6	2
	3-2x8	7-2	1	5-7	2	4-9	2	4-2	2
	3-2x10	8-7	2	6-8	2	5-8	2	5-0	2
	3-2x12	10-0	2	7-9	2	6-8	2	5-10	3
	4-2x8	8-3	2	6-6	2	5-6	2	4-10	2
	4-2x10	9-10	2	7-8	2	6-7	2	5-9	3
	4-2x12	11-7	2	9-1	2	7-8	3	6-9	3

Building width is measured outside to outside and perpendicular to the ridge. For width between those shown, spans are permitted to be interpolated. Table assumes 1 ft. roof overhang, 10 psf DL roof, ceiling and floors, 20 psf LL roof (construction load) and 40 psf LL floors.



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January 8, 2004
Note: Check website for later revision

Modification Number: IRC 2003 17.

Section: R502.11.4 Truss design drawings.

Modification: The section was modified to eliminate the requirement for roof truss design approval prior to installation.

The modified section will now read: “Truss design drawings, prepared in compliance with Section R502.11.1, shall be provided to the building official at the time of inspection. Truss design drawings shall be provided with the shipment of trusses delivered to the job site. Truss design drawings shall include at a minimum the information specified below:”

Reason: The section was modified to allow the approval of roof truss design drawings by local building officials to occur at the time of the framing inspection, rather than at an undefined time prior to installation. The truss design drawings will be required to be provided with the shipment of trusses and be available on the construction site for review by an inspector before installation.

Proponent: Home Builders Association of Greater Columbia.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 18.

Section: R602.10.5 Continuous structural panel sheathing.

Modification: An exception was added to the existing section.
The modified section will now read: "When continuous wood structural panel sheathing is provided in accordance with Method 3 of R602.10.3 on all sheathable areas of all exterior walls, and interior braced wall lines, where required, including areas above and below openings, braced wall panel lengths shall be in accordance with Table R602.10.5. Wood structural panel sheathing shall be installed at corners in accordance with Figure R602.10.5. The bracing amounts in Table R602.10.1 for Method 3 shall be permitted to be multiplied by a factor of 0.9 for walls with a maximum opening height that does not exceed 85 percent of the wall height or a factor of 0.8 for walls with a maximum opening height that does not exceed 67 percent of the wall height.
Exception: Vertical wall segments in the first of one or first of two story buildings next to garage openings shall be permitted to have a 6:1 height-to-width ratio (with height being measured from top of header to sill plate) when constructed in accordance with the following provisions. Each panel shall have a length of not less than 16 inches (406 mm) and a height of not more tan 10 feet (3048 mm). Each panel shall be sheathed on one face with a single layer of 3/8-inch minimum-thickness (9.5 mm) wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Figure R602.10.5(2). The wood structural panel sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with Figure R602.10.5(2). The header shall extend between the inside faces of the first full-length outer studs of each panel. The clear span of the header between the inner studs of each panel shall be not less than six feet (1829 mm) and not more than 18 feet (5486 mm) in length. A strap with an uplift capacity of not less than 1000 pounds (454 kg) shall fasten the header to the side of the inner studs opposite the sheathing. Two anchor bolts shall be installed in accordance with Section R403.1.6, and flat washers shall be a minimum of 2 inches by 2 inches by 3/1 inch (51 mm by 51 mm by 4.8 mm) thick and shall be used on each bolt. This exception is only permitted in Seismic Design Categories A-C."

Reason: To provide an alternative bracing method for use adjacent to garage door openings.

Proponent: Home Builders Association of South Carolina.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 19.

Section: R703.7.2, R703.7.2.1 and R703.7.2.2.

Modification: Deleted without substitution.

Reason: A basis could not be established for the maximum roof pitch of 7:12, when the roof supports veneer.

Note: Modification (IRC 2000 10) continued from the 2000 building code cycle.

Proponent: Home Builders Association of South Carolina.

Effective Date: November 15, 2001.

Modification Number: IRC 2003 20.

Section: R802.10.1 Truss design drawings.

Modification: The section was modified to eliminate the requirement for floor truss design approval prior to installation.

The modified section will now read: Truss design drawings, prepared in compliance with Section R802.10.1, shall be provided to the building official at the time of inspection. Truss design drawings shall be provided with the shipment of trusses delivered to the job site. Truss design drawings shall include at a minimum the information specified below.

Reason: The section was modified to allow the approval of roof truss design drawings by local building officials to occur at the time of the framing inspection, rather than at an undefined time prior to installation. The truss design drawings will be required to be provided with the shipment of trusses and be available on the construction site for review by an inspector before installation.

Proponent: Home Builders Association of Greater Columbia.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 21.

Chapter: 11 Energy Efficiency.

Modification: Deleted without substitution.

Reason: The State of South Carolina has specific energy standards in statutory form (Re: Title 6, Chapter 9, Building Codes and Title 6, Chapter 10, Building Energy Efficiency Standard Act.). To eliminate any possible conflicts concerning the insulation requirements for single and two family residential buildings between the International Residential Code and state law, Chapter 11 was deleted.

Proponent: Home Builders Association of Greater Columbia.

Effective Date: July 1, 2005.

Modification Number: IRC 2003 22.

Section: M1411.4 Insulation of refrigerant piping.

Modification: The thermal resistivity of the insulation around refrigerant vapor lines was reduced from R 4.0 to R 2.5.

The modified section will now read: “Piping and fittings for refrigerant vapor (suction) lines shall be insulated with insulation have a thermal resistivity of at least R 2.5 hr. ft 2 F/Btu and having external surface permeance not exceeding 0.05 perms [2.87 ng/(s m2 Pa)] when tested in accordance with ASTM E 96.”

Reason: Section M1411.4 requires insulation of refrigerant lines to R 4. Further research is needed to determine if this insulating product is commercially available. To qualify for R 4 additional insulation may be required, which could limit the spaces in which refrigerant lines could be installed.

Proponent: Home Builders Association of Greater Columbia.

Effective Date: July 1, 2005.