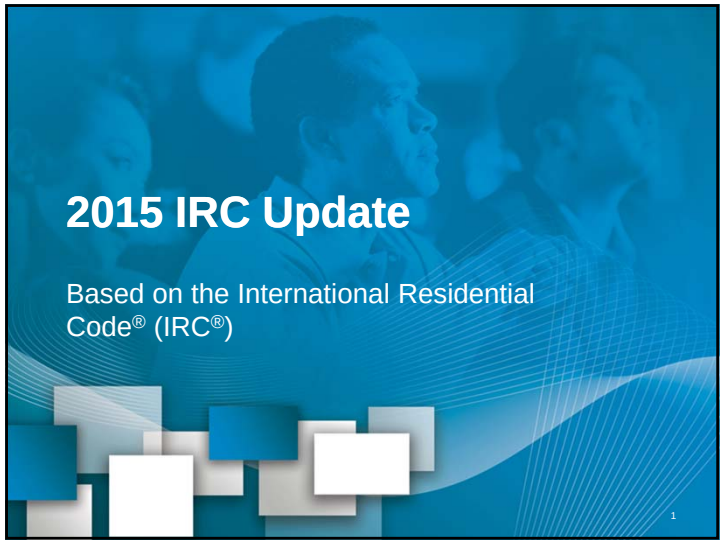

Description

- This seminar reviews and analyzes selected significant changes from the 2012 IRC to the 2015 IRC.
- It assists code users in identifying the specific code changes that have occurred, and more importantly, understanding the reason behind the change.
- It focuses on those code changes selected due to their frequency of application, special significance or change in application.

Objectives

- Upon completion, participants will be better able to:
  - Identify the most significant differences between the 2012 IRC and the 2015 IRC.
  - Explain the differences between the current and previous edition.
  - Identify key changes in organization and code requirements.
  - Identify the applicability of design, plan review and inspection requirements.

Welcome

- Rules for the course,
- Breaks,
- Restroom location,
- Introduction of instructor and participants,
- Other

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Chapter 1

Scope and Administration

5

R101.2, R202 Scope—Accessory Structures

2015	2012
R101.2, R202	R101.2, R202

- **Change Type:** Modification
  - The maximum height for accessory structures has been increased from two to three stories above grade plane. Technical requirements have been removed from the definition, and accessory structures are now permitted to be unlimited in area.

2015 IRC Update 6

R104.11 Alternative Materials, Design, and Methods of Construction and Equipment

2015	2012
R104.11	R104.11

- **Change Type**: Addition
  - When proposed alternatives are not approved, the reason for the disapproval must be stated in writing by the building official.

2015 IRC Update 7

R105.3.1.1 Existing Buildings in Flood Hazard Areas

2015	2012
R105.3.1.1	R105.3.1.1 R112.2.1

- **Change Type:** Modification
  - Determination of substantial improvement for existing buildings in flood hazard areas is the responsibility of the building official. The related provisions are now consolidated in Section R105.3.1.1.

2015 IRC Update 8

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R106.1.4 Information for Construction in Flood Hazard Areas

2015	2012
R106.1.4	R106.1.4

- **Change Type:** Modification
  - Construction documents for dwellings in Coastal A Zones shall include the elevation of the bottom of the lowest horizontal structural member.

Chapter 3

Building Planning

ACTIVITY

Scope and Administration

1. What is the maximum number of square feet allowed for an accessory structure?

Unlimited Area or Square Feet

Table R301.2(1) Climatic and Geographic Design Criteria

- **Change Type:** Modification

2015	2012
Table R301.2(1)	Table R301.2(1)

TABLE R301.2(1) Climatic and Geographic Design Criteria

Ground Snow Load	Wind Design: Speed[d] (Mph)	Wind Design: Topographic effects[k]	Wind Design: Special wind region[l]	Wind Design: Wind borne debris zone[m]	Seismic Design Category[f]

(Portions of table and footnotes not shown remain unchanged)

l. In accordance with Figure R301.2(4)A, where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

m. In accordance with Section R301.2.1.2.1, the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

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R301.2, R202 Wind Design Criteria

2015	2012
R301.2, R202	R301.2, R202

- **Change Type:** Modification
  - Ultimate design wind speed values replace basic wind speed values for 3-sec gust wind speeds in Section R301.2.1. A wind speed conversion table has been added for conversion from ultimate design V_{ult} to nominal design wind speeds, V_{asd}.

TABLE R301.2.1.3 Wind Speed Conversions[a]

V_{ult}	110	115	120	130	140	150	160	170	180	190	200
V_{asd}	85	89	93	101	108	116	124	132	139	147	155

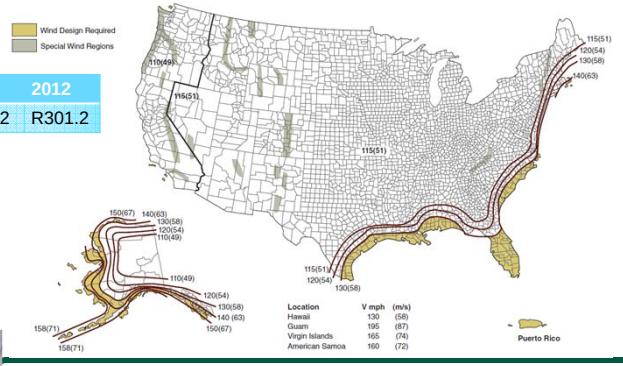
For SI: 1 mile per hour = 0.447 m/s.

a. Linear interpolation is permitted

R301.2 Wind Speed Maps

- **Change Type:** Modification

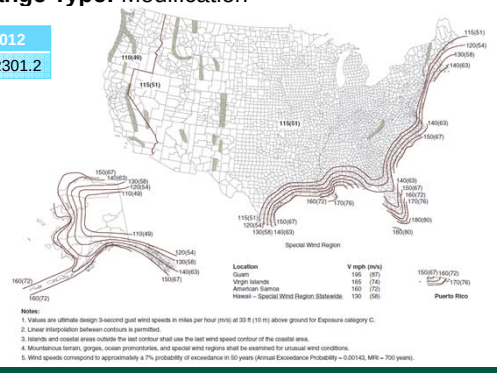
2015	2012
R301.2	R301.2



R301.2 Wind Speed Maps

- **Change Type:** Modification

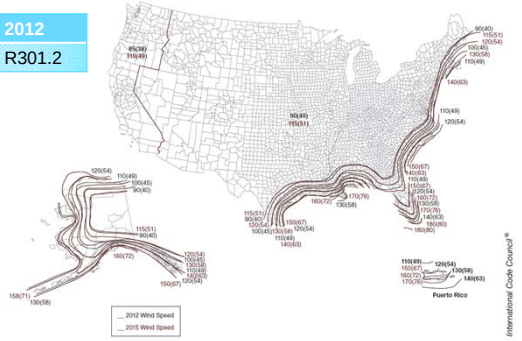
2015	2012
R301.2	R301.2



R301.2 Wind Speed Maps

- **Change Type:** Modification

2015	2012
R301.2	R301.2



Comparison of wind speed

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R301.2.1.1.1 Sunrooms

2015	2012
R301.2.1.1.1	-

Change Type: Addition

- The 2015 IRC requires sunrooms to comply with AAMA/NPEA/NSA 2100-12. The standard contains requirements for habitable and nonhabitable sunrooms.

R301.2.1.4 Wind Exposure Category

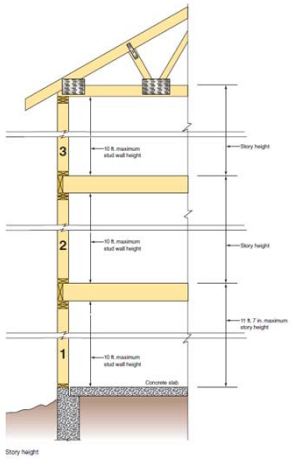
2015	2012
R301.2.1.4	R301.2.1.4

- **Change Type:** Modification
  - Wind Exposure Category A is a legacy category that no longer exists in the IBC and ASCE 7, which is the basis for determination of wind exposure categories.
    - In the 2015 IRC, Exposure Category A is deleted.
    - In the 2012 IRC, Wind Exposure Category D applied to regions adjacent to open water in non-hurricane-prone regions. Wind Exposure Category D now applies to open water, mud and salt flats, and unbroken ice fields. Exposure Category D also applies in hurricane-prone regions to residences on or near the ocean shore.

R301.3 Story Height

2015	2012
R301.3	R301.3

- **Change Type:** Modification
  - Story height of wood and steel wall framing, insulated concrete, and SIP walls may not exceed 11 feet, 7 inches. Masonry wall height is limited to 13 feet, 7 inches.



R302.1 Exterior Walls

2015	2012
R302.1	R302.1

- **Change Type:** Modification

TABLE R302.1(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	< 5 feet
	Not fire-resistance rated	0 hours	≥ 5 feet
Projections	Not allowed	N/A	< 2 feet
	Fire-resistance rated	1 hour on the underside[a,b]	≥ 2 feet to < 5 feet
	Not fire-resistance rated	0 hours	≥ 5 feet
Openings in walls	Not allowed	N/A	< 3 feet
	25% maximum of wall area	0 hours	3 feet
	Unlimited	0 hours	5 feet
Penetrations	All	Comply with Section R302.4	< 5 3 feet
		None required	5 3 feet

For SI: 1 foot = 304.8 mm.
N/A = Not Applicable
a. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave if fireblocking is provided from the wall top plate to the underside of the roof sheathing.
b. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave provided gable vent openings are not installed.

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R302.1 Exterior Walls

2015	2012
R302.1	R302.1

- **Change Type:** Modification

TABLE R302.1(2) Exterior Walls—Dwellings with Fire Sprinklers

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 the outside	0 feet
	Not fire-resistance rated	0 hours	3 feet[a]
Projections	Not allowed	N/A	< 2 feet
	Fire-resistance rated	1 hour on the underside[b,c]	2 feet[a]
	Not fire-resistance rated	0 hours	3 feet
Openings in walls	Not allowed	N/A	< 3 feet
	Unlimited	0 hours	3 feet[a]
Penetrations	All	Comply with Section R302.4	< 3 feet
		None required	3 feet[a]

For SI: 1 foot = 304.8 mm.
N/A = Not Applicable
a. For residential subdivisions where all dwellings are equipped throughout with an automatic sprinkler system installed in accordance with Section P2904, the fire separation distance for non-rated exterior walls and rated projections shall be permitted to be reduced to zero feet, and unlimited unprotected openings and penetrations shall be permitted, where the adjoining lot provides an open setback yard that is 6 feet or more in width on the opposite side of the property line.
b. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave if fireblocking is provided from the wall top plate to the underside of the roof sheathing.
c. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave provided gable vent openings are not installed.

R302.1 Exterior Walls

2015	2012
R302.1	R302.1

- **Change Type:** Modification

TABLE 3-2 Fire Resistance of Roof Overhang Projections

Condition	Minimum Fire Separation Distance			
	5 feet	3 feet	2 feet	0 feet
Dwellings Without Sprinkler System	0 hours	1 hour on underside	1 hour on underside	NP
Dwellings with Sprinkler System	0 hours	0 hours	1 hour on underside	NP
Fireblocking above Top Plate	0 hours	0 hours	0 hours	NP
Sprinklers in All Dwellings and 6-Foot Setback on Adjoining Lot	N/A	N/A	N/A	1 hour on underside
4-Inch Overhang on Detached Garage	N/A	N/A	N/A	1 hour on underside

NP = Not Permitted
N/A = Not Applicable

R302.2 Townhouse Separation

2015	2012
R302.2	R302.2

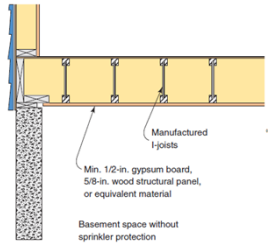
- **Change Type:** Modification
  - The provisions for separating townhouses with structurally independent fire-resistant-rated walls in accordance with Section R302.1 have been removed in favor of the common wall provisions of Section R302.2. Common walls separating townhouses must now be rated for 2 hours when an automatic fire sprinkler system is not installed in the townhouse dwelling units.

R302.13 Fire Protection of Floors

Change Type: Clarification

2015	2012
R302.13	R501.3

- The provisions for fire protection of floors have been relocated from Chapter 5 to the fire-resistant construction provisions of Section R302. New language clarifies that the code does not regulate penetrations or openings in the fire protection membrane.



Fire protection of floors

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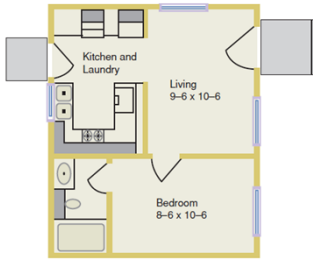
R304.1
Minimum Habitable Room Area

2015	2012
R304.1	R304.1

- **Change Type:** Modification
  - The requirement for one habitable room with a minimum floor area of 120 square feet has been removed from the code.



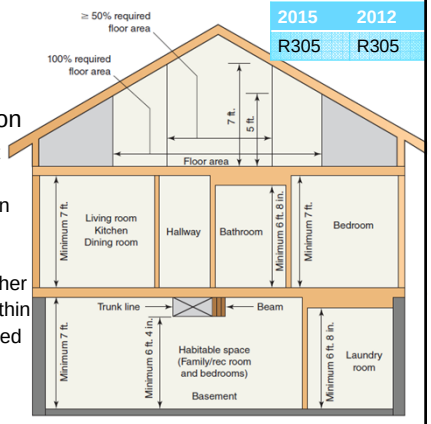
Small dwelling complying with minimum area requirements

R305
Ceiling Height

2015	2012
R305	R305

Change Type: Modification

- The minimum ceiling height for bathrooms, toilet rooms, and laundry rooms has been reduced to 6 feet 8 inches. The exception for allowing beams, girders, ducts, or other obstructions to project to within 6 feet, 4 inches of the finished floor has been expanded to include basements with habitable space.

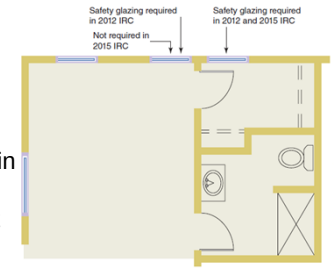


Ceiling height

R308.4.2
Glazing Adjacent to Doors

2015	2012
R308.4.2	R308.4.2

- **Change Type:** Modification
  - Glazing installed perpendicular to a door in a closed position and within 24 inches of the door only requires safety glazing if it is on the hinge side of an in-swinging door.

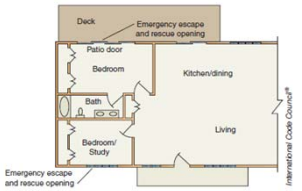


Glazing in windows adjacent and perpendicular to door

R310 Emergency Escape and Rescue Openings

2015	2012
R310	R310

- **Change Type:** Clarification
  - The emergency escape and rescue openings provisions have been reorganized. Separate provisions spell out the requirements for windows and doors used for emergency escape and rescue.



Typical use of patio doors and windows as emergency escape and rescue openings

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R311.1
Means of Egress

2015	2012
R311.1	R311.1

Change Type: Clarification

- The required egress door of a dwelling unit must open directly into a public way or to a yard or court that opens to a public way.

R311.8
Ramps

2015	2012
R311.8	R311.8

Change Type: Modification

- Ramps that do not serve the required egress door are now permitted to have a slope not greater than 1 unit vertical in 8 units horizontal.

R314
Smoke Alarms

2015	2012
R314	R314

- **Change Type:** Modification
  - Battery-operated smoke alarms are permitted for satisfying the smoke alarm power requirements when alterations, repairs, and additions occur. Household fire alarm systems no longer require monitoring by an approved supervising station. New provisions address smoke alarms installed near bathrooms and cooking appliances.

R315
Carbon Monoxide Alarms

2015	2012
R315	R315

- **Change Type:** Modification
  - Carbon monoxide alarms now require connection to the house wiring system with battery backup. Exterior work such as roofing, siding, windows, doors, and deck and porch additions no longer trigger carbon monoxide alarm provisions for existing buildings.

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R322.1, R322.2 Flood Hazards

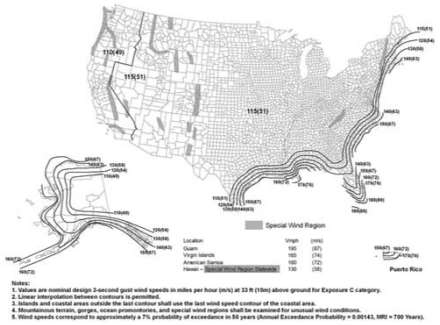
2015	2012
R322.1, R322.2	R322.1, R322.2

Change Type: Modification

- This provision applies to existing buildings in flood hazard areas where 50 percent or more of the structure has damage and requires restoration. Minimum elevation allowed for dwellings in flood hazard areas is limited and the section defines a Coastal A zone.

Building Planning

2. What is the V_{ult} wind speed in your local area?



Depending upon the local area, most of country is now 115 mph. Check the map in Figure R301.2(4)A.

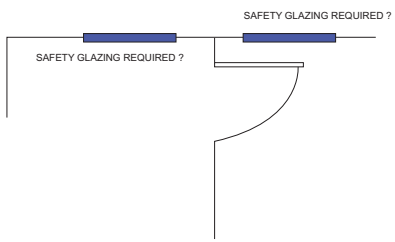
Building Planning

3. Is a common wall or structurally separated wall now considered the typical wall between townhouse units?

Common wall considered the typical townhome dividing wall in Section R302.2, Townhouses.

Building Planning

4. Does the glazing in the figure need to be safety glazing?



Glazing to the left does not require safety glazing. Glazing on the right, where potentially a person may be pushed through the window, requires safety glazing.

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ACTIVITY

Building Planning

5. For existing buildings with alterations requiring a permit, do smoke alarms have to be wired into the electrical system?

No, battery-powered smoke alarms may be added in some situations.

R403.1.1 Minimum Footing Size

2015	2012
R403.1.1	R403.1.1

- **Change Type:** Modification

TABLE R403.1(1) Minimum Width and Thickness for Concrete Footings for Light Frame Construction (inches)[a,b]

Snow Load or Roof Live Load	Story and Type of Structure with Light Frame	Load-Bearing Value of Soil (psf) 1500	2000	2500	3000	3500	4000
20 psf	1 story - slab on grade	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	1 story - with crawl space	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	1 story - plus basement	18 × 6	14 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	2 story - slab on grade	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	2 story - with crawl space	16 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	2 story - plus basement	22 × 6	16 × 6	13 × 6	12 × 6	12 × 6	12 × 6
	3 story - slab on grade	14 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	3 story - with crawl space	19 × 6	14 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	3 story - plus basement	25 × 8	19 × 6	15 × 6	13 × 6	12 × 6	12 × 6
30 psf	1 story - slab on grade	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	1 story - with crawl space	13 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	1 story - plus basement	19 × 6	14 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	2 story - slab on grade	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	2 story - with crawl space	17 × 6	13 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	2 story - plus basement	23 × 6	17 × 6	14 × 6	12 × 6	12 × 6	12 × 6
	3 story - slab on grade	15 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	3 story - with crawl space	20 × 6	15 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	3 story - plus basement	26 × 8	20 × 6	16 × 6	13 × 6	12 × 6	12 × 6

(continues)

Chapter 4

Foundations

R403.1.1 Minimum Footing Size

2015	2012
R403.1.1	R403.1.1

- **Change Type**: Modification

TABLE R403.1(1) (Continued)

Snow Load or Roof Live Load	Story and Type of Structure with Light Frame	Load-Bearing Value of Soil (psf) 1500	2000	2500	3000	3500	4000
50 psf	1 story - slab on grade	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	1 story - with crawl space	16 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	1 story - plus basement	21 × 6	16 × 6	13 × 6	12 × 6	12 × 6	12 × 6
	2 story - slab on grade	14 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	2 story - with crawl space	19 × 6	14 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	2 story - plus basement	25 × 7	19 × 6	15 × 6	12 × 6	12 × 6	12 × 6
	3 story - slab on grade	17 × 6	13 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	3 story - with crawl space	22 × 6	17 × 6	13 × 6	12 × 6	12 × 6	12 × 6
	3 story - plus basement	28 × 9	21 × 6	17 × 6	14 × 6	12 × 6	12 × 6
70 psf	1 story - slab on grade	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	1 story - with crawl space	18 × 6	13 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	1 story - plus basement	24 × 7	18 × 6	14 × 6	12 × 6	12 × 6	12 × 6
	2 story - slab on grade	16 × 6	12 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	2 story - with crawl space	21 × 6	16 × 6	13 × 6	12 × 6	12 × 6	12 × 6
	2 story - plus basement	27 × 9	20 × 6	16 × 6	14 × 6	12 × 6	12 × 6
	3 story - slab on grade	19 × 6	14 × 6	12 × 6	12 × 6	12 × 6	12 × 6
	3 story - with crawl space	25 × 7	18 × 6	15 × 6	12 × 6	12 × 6	12 × 6
	3 story - plus basement	30 × 10	23 × 6	18 × 6	15 × 6	13 × 6	12 × 6

a. Interpolation allowed. Extrapolation is not allowed.
b. Based on 32 foot wide house with load-bearing center wall that carries half of the tributary attic, and floor framing. For every 2 feet of adjustment to the width of the house add or subtract 2 inches of footing width and 1 inch of footing thickness (but not less than 6 inches thick).

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Minimum Required Footing

- **Two-story house with slab on grade foundation:**
  - Light-frame construction
  - Soil-bearing strength 5 1500 psf
  - Roof Live Load 5 20 psf
  - 32ft. wide building with interior load-bearing wall

Minimum Footing Width		
2012	**2015**	Smaller footing width allowed
15×6	12×6	

Slab on grade

R403.1.6 Foundation Anchorage

2015	2012
R403.1.6	R403.1.6

Change Type: Modification

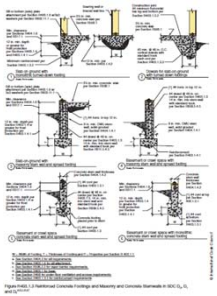
- Anchor bolts are now required to be placed in the middle third of the sill plate. Approved anchors may be used instead of ½-inch anchor bolts.

R403.1.3 Footing and Stem Wall Reinforcing in Seismic Design Categories D_0, D_1, and D^2

2015	2012
R403.1.3	R403.1.3

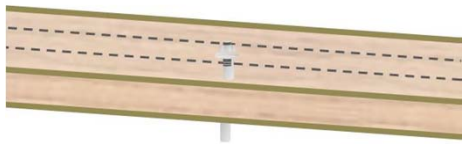
Change Type: Clarification

- Updated figures and code provisions in Section R403.1.3 now clearly define minimum required reinforcement in footings and stem walls located in Seismic Design Categories (SDC) D_0, D_1, and D_2.



ACTIVITY

6. Is the anchor bolt in the figure correctly located in the sill plate?



No, the anchor bolt is not within the middle third of the sill plate.

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Chapter 5

Floors

45

Tables R502.3.1(1), R502.3.1(2) Floor Joist Spans for Common Lumber Species

- **Change Type:** Modification

2015	2012
Tables R502.3.1(1), R502.3.1(2)	Tables R502.3.1(1), R502.3.1(2)

TABLE R502.3.1(1) Floor Joist Spans for Common Lumber Species (Residential sleeping areas, live load = 30 psf, L/Δ = 360)[a]

Joist Spacing (inches)	Species and Grade		Dead Load = 10 psf 2×6	2×8	2×10	2×12	Dead Load = 20 psf 2×6	2×8	2×10	2×12
			Maximum floor joist spans (ft - in.)				(ft - in.)			
12	Douglas fir-larch	SS	12-6	16-6	21-0	25-7	12-6	16-6	21-0	25-7
	Douglas fir-larch	#1	12-0	15-10	20-3	24-8	12-0	15-7	19-0	22-0
	Douglas fir-larch	#2	11-10	15-7	19-10	23-4	11-8	14-9	18-0	20-11
	Douglas fir-larch	#3	9-11	12-7	15-5	17-10	8-11	11-3	13-6	16-0
	Hem-fir	SS	11-10	15-7	19-10	24-2	11-10	15-7	19-10	24-2
	Hem-fir	#1	11-7	15-3	19-5	23-7	11-7	15-3	18-6	21-6
	Hem-fir	#2	11-0	14-6	18-6	22-6	11-0	14-4	17-6	20-4
	Hem-fir	#3	9-8	12-4	15-0	17-5	8-8	11-0	13-5	15-7
	Southern pine	SS	12-3	16-2	20-8	25-1	12-3	16-2	20-8	25-1
	Southern pine	#1	11-10	15-7	19-10	24-2	11-10	15-7	18-7	22-0
	Southern pine	#2	11-3	14-11	18-1	21-4	10-9	13-8	16-2	19-1
	Southern pine	#3	9-2	11-6	14-0	16-6	8-2	10-3	12-6	14-9
	Spruce-pine-fir	SS	11-7	15-3	19-5	23-7	11-7	15-3	19-5	23-7
	Spruce-pine-fir	#1	11-3	14-11	19-0	23-0	11-3	14-7	17-9	20-7
	Spruce-pine-fir	#2	11-3	14-11	19-0	23-0	11-3	14-7	17-9	20-7
	Spruce-pine-fir	#3	9-8	12-4	15-0	17-5	8-8	11-0	13-5	15-7

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

Note: Check sources for availability of lumber in lengths greater than 20 feet.

a. Dead load limits for townhouses in Seismic Design Category C and all structures in Seismic Design Categories D_0, D_1, and D_2 shall be determined in accordance with Section R301.2.2.2.1.

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FOR EXAMPLE

Floor Spans

- **#1 Bedroom**
  - Dead load 5 10 psf
  - 2310 joists
  - 160 o.c. spacing
  - Southern Pine (SP) #2

Maximum Span Allowed	2012	2015
	18′-0″	15′-8″

  - The SP #2 span length is significantly reduced from the 2012 IRC span length.
  - Note: An SP #1 joist will span about the same length in the 2015 IRC Table R502.3.1(1) or R502.3.1(2) as the SP #2 did in the tables in the 2012 IRC.

2015 IRC Update 47

R507.1, R507.4 Decking

Change Type: Modification

- The code sets the maximum allowable spacing for deck joists supporting the various types of common decking materials.

2015	2012
R507.1, R507.4	R507.1,

TABLE R507.4 Maximum joist spacing

Material type and nominal size	Maximum on-center joist spacing: Perpendicular to joist	Diagonal to joist[a]
1 1/4-inch thick wood	16 inches	12 inches
2-inch thick wood	24 inches	16 inches
Plastic composite	In accordance with Section R507.3	In accordance with Section R507.3

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.01745 rad.

a. Maximum angle of 45 degrees from perpendicular for wood deck boards

2015 IRC Update 48

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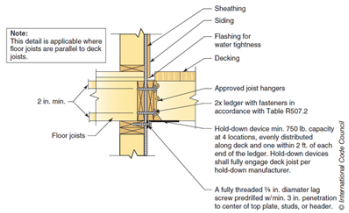
R507.2.4 Alternative Deck Lateral Load Connection

2015	2012
R507.2.4	R507.2.3

Change Type: Modification

- When the prescriptive deck lateral load connection that has appeared in the previous editions of the code is chosen as a design option, the code now requires the two hold-down devices to be within 2 feet of the ends of the deck. A new lateral load connection option prescribes four hold-downs installed below the deck structure.



Alternative deck attachment for lateral loads

R507.5, R507.6, R507.7 Deck Joists and Beams

2015	2012
R507.5, R507.6, R507.7	-

- **Change Type:** Addition
  - Provide prescriptive methods for joists and beams in deck construction. Section R507.5 describes requirements for deck joists, Section R507.6 lists requirements for deck beams, and Section R507.7 describes minimum bearing requirements for joists and beams.

R507.5, R507.6, R507.7 Deck Joists and Beams

2015	2012
R507.5, R507.6, R507.7	-

TABLE R507.5 Deck Joist Spans for Common Lumber Species[f] (ft.-in.)

Species[a]	Size	Spacing of Deck Joists With No Cantilever[b] (inches)			Spacing of Deck Joists With Cantilevers[c] (inches)		
		12	16	24	12	16	24
Southern pine	2 × 6	9-11	9-0	7-7	6-8	6-8	6-8
	2 × 8	13-1	11-10	9-8	10-1	10-1	9-8
	2 × 10	16-2	14-0	11-5	14-6	14-0	11-5
	2 × 12	18-0	16-6	13-6	18-0	16-6	13-6
Douglas fir-larch[d], hem-fir[d] spruce-pine-fir[d]	2 × 6	9-6	8-8	7-2	6-3	6-3	6-3
	2 × 8	12-6	11-1	9-1	9-5	9-5	9-1
	2 × 10	15-8	13-7	11-1	13-7	13-7	11-1
	2 × 12	18-0	15-9	12-10	18-0	15-9	12-10
Redwood, western cedars, ponderosa pine[e], red pine[e]	2 × 6	8-10	8-0	7-0	5-7	5-7	5-7
	2 × 8	11-8	10-7	8-8	8-6	8-6	8-6
	2 × 10	14-11	13-0	10-7	12-3	12-3	10-7
	2 × 12	17-5	15-1	12-4	16-5	15-1	12

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

a. No. 2 grade with wet service factor.
b. Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360.
c. Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360 at main span, L/Δ = 180 at cantilever with a 220-pound point load applied to end.
d. Includes incising factor.
e. Northern species with no incising factor
f. Cantilevered spans not exceeding the nominal depth of the joist are permitted.

R507.5, R507.6, R507.7 continues

R507.5, R507.6, R507.7 Deck Joists and Beams

2015	2012
R507.5, R507.6, R507.7	-

TABLE R507.6 Deck Beam Span Lengths[a,b,f] (ft.-in.)

Species[c]	Size[d]	Deck Joist Span Less Than or Equal to: (feet)						
		6	8	10	12	14	16	18
Southern pine	2 – 2 × 6	6-11	5-11	5-4	4-10	4-6	4-3	4-0
	2 – 2 × 8	8-9	7-7	6-9	6-2	5-9	5-4	5-0
	2 – 2 × 10	10-4	9-0	8-0	7-4	6-9	6-4	6-0
	2 – 2 × 12	12-2	10-7	9-5	8-7	8-0	7-6	7-0
	3 – 2 × 6	8-2	7-5	6-8	6-1	5-8	5-3	5-0
	3 – 2 × 8	10-10	9-6	8-6	7-9	7-2	6-8	6-4
	3 – 2 × 10	13-0	11-3	10-0	9-2	8-6	7-11	7-6
	3 – 2 × 12	15-3	13-3	11-10	10-9	10-0	9-4	8-10
Douglas fir-larch[g], hem-fir[g], spruce-pine-fir[g], redwood, western cedars, ponderosa pine[g], red pine[g]	3 × 6 or 2 – 2 × 6	5-5	4-8	4-2	3-10	3-6	3-1	2-9
	3 × 8 or 2 – 2 × 8	6-10	5-11	5-4	4-10	4-6	4-1	3-8
	3 × 10 or 2 – 2 × 10	8-4	7-3	6-6	5-11	5-6	5-1	4-8
	3 × 12 or 2 – 2 × 12	9-8	8-5	7-6	6-10	6-4	5-11	5-7
	4 × 6	6-5	5-6	4-11	4-6	4-2	3-11	3-8
	4 × 8	8-5	7-3	6-6	5-11	5-6	5-2	4-10
	4 × 10	9-11	8-7	7-8	7-0	6-6	6-1	5-8
	4 × 12	11-5	9-11	8-10	8-1	7-6	7-0	6-7
	3 – 2 × 6	7-4	6-8	6-0	5-6	5-1	4-9	4-6
	3 – 2 × 8	9-8	8-6	7-7	6-11	6-5	6-0	5-8
	3 – 2 × 10	12-0	10-5	9-4	8-6	7-10	7-4	6-11
	3 – 2 × 12	13-11	12-1	10-9	9-10	9-1	8-6	8-1

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

a. Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360 at main span, L/Δ = 180 at cantilever with a 220-pound point load applied at the end.
b. Beams supporting deck joists from one side only.
c. No 2 grade, wet service factor.
d. Beam depth shall be greater than or equal to depth of joists with a flush beam condition.
e. Includes incising factor.
f. Northern species. Incising factor not included.

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R507.8
Deck Posts

2015	2012
R507.8	-

Change Type: Addition

- New Section R507.8 establishes minimum sizes of wood posts supporting wood decks and describes the requirements for connection of deck posts to the footing.

TABLE R507.8 Deck Post Height[a]

Deck Post Size	Maximum Height
4 × 4	8′
4 × 6	8′
6 × 6	14′

For SI: 1 foot = 304.8 mm.

a. Measured to the underside of the beam.

Chapter 6

Wall Construction

ACTIVITY

Floors

7. Are there prescriptive requirements within the IRC for the length of deck joists and beams?

- Yes, the IRC now contains span tables for the maximum length of deck joists and beams.

Table R602.3(1) Fastening Schedule—Roof Requirements

- **Change Type:** Modification

2015	2012
Table R602.3(1)	Table R602.3(1)

TABLE R602.3(1) Fastening Schedule ~~for Structural Members~~

Item	Description of Building Elements	Number and Type of Fastener[a, b, c]	Spacing and Location ~~of Fasteners~~
	Roof		
1	Blocking between ceiling joists or rafters to top plate, ~~toe nail~~	~~3-8d~~ 4-8d box (2½″ × 0.113″); or 3-8d common (2½″ × 0.131″); or 3-10d box (3″ × 0.128″); or 3-3″ × 0.131″ nails	Toe nail
2	Ceiling joists to top plate, ~~toe nail~~	~~3-8d~~ 4-8d box (2½″ × 0.113″); or 3-8d common (2½″ × 0.131″); or 3-10d box (3″ × 0.128″); or 3-3″ × 0.131″ nails	Per joist, toe nail
3	Ceiling joist not attached to parallel rafter, laps over partitions, ~~face nail~~ (See Sections R802.3.1, R802.3.2, Table R802.5.1(9)]	~~3-10d~~ 4-10d box (3″ × 0.128″); or 3-16d common (3½″ × 0.162″); or 4-3″ × 0.131″ nails	Face nail
4	Ceiling joist attached to parallel rafter [heel joint] (See Sections R802.3.1, R802.3.2, Table R802.5.1(9)]	Per Table R802.5.1(9)	Face nail
5	Collar tie to rafter, face nail or 1¼″ × 20 gage ridge strap to rafter	~~3-10d~~ 4-10d box (3″ × 0.128″); or 3-10d common (3″ × 0.148″); or 4-3″ × 0.131″ nails	Face nail each rafter
6	Rafter or roof truss to plate, ~~toe nail~~	3-16d box nails (3½″ × 0.135″); or 3-10d common nails (3″ × 0.148″); or 4-10d box (3″ × 0.128″); or 4-3″ × 0.131 nails	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss[i]
7	Roof rafters to ridge, valley or hip rafters or roof rafter to minimum 2″ ridge beam, ~~toe nail face nail~~	4-16d box (3½″ × 0.135″); or 3-10d common (3½″ × 0.148″); or 4-10d box (3″ × 0.128″); or 4-3″ × 0.131″ nails 3-16d box (3½″ × 0.135″) 2-16d common (3½″ × 0.162″); or 3-10d box (3″ × 0.128″); or 3-3″ × 0.131″ nails	Toe nail End nail

(Footnotes not shown for brevity and clarity.)

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Table R602.3(1) Fastening Schedule—Roof Requirements

- **Change Type:** Modification

2015	2012
Table R602.3(1)	Table R602.3(1)

Item	Description of Building Elements	Number and Type of Fastener[a, b, c]	Spacing ~~of Fasteners~~ and Location
	Wall		
17	Top plates, laps at corners and intersections~~, face nail~~	~~2-10d~~ 3-10d box (3" × 0.128"); or 2-16d common (3½" × 0.162"); or 3-3" × 0.131" nails	Face nail
18	1" brace to each stud and plate~~, face nail~~	~~2-8d~~ 3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 2-10d box (3" × 0.128"); or 2 staples 1¾"	Face nail
19	1" × 6" sheathing to each bearing~~, face nail~~	~~2-8d~~ 3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 2-10d box (3" × 0.128"); or 2 staples ~~1¾~~; 1" crown, 16 ga., 1⅜" long	Face nail
20	1" × 8" and wider sheathing to each bearing~~, face nail~~	~~2-8d~~ 3-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3 staples ~~1¾~~; 1" crown, 16 ga., 1¾" long	Face nail
	Wider than 1" × 8"	~~3-8d~~ 4-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 4 staples ~~1¾~~; 1" crown, 16 ga., 1¾" long	Face nail

(Footnotes not shown for brevity and clarity.)

R602.3.1 Stud Size, Height, and Spacing

2015	2012
R602.3.1	Table R602.3(1)

- **Change Type:** Modification
  - Table R602.3.1 is deleted and the exception for walls greater than 10 feet tall is added to the text of Section R602.3.1. If studs in a tall wall meet Exception 2, they meet the requirements of the IRC and do not need engineering or use of an alternate standard.

Table R602.3(1) Fastening Schedule—Floor Requirements

- **Change Type:** Modification

2015	2012
Table R602.3(1)	Table R602.3(1)

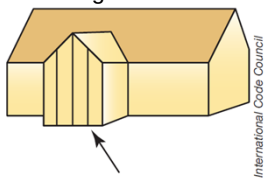
TABLE R602.3(1) Fastening Schedule for Structural Members

Item	Description of Building Elements	Number and Type of Fastener[a, b, c]	Spacing of Fasteners and Location
	Floor		
21	Joist to sill, top plate or girder	4-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Toe nail
22	Rim joist, band joist, or blocking to sill or top plate (roof applications also)	8d box (2½" × 0.113")	4" o.c. toe nail
		8d common (2½" × 0.131"); or 10d box (3" × 0.128"); or 3" × 0.131" nails	6" o.c. toe nail
23	1" × 6" subfloor or less to each joist	3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 2 staples, 1" crown, 16 ga. 1¾" long	Face nail
24	2" subfloor to joist or girder~~, blind and face nail~~	~~3-16d~~ 3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162")	Blind and face nail
25	2" planks (plank & beam - floor & roof)	~~2-16d~~ 3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162")	At each bearing, face nail
26	Band or rim Joist to joist	3 – 16d common (3½" × 0.162"); or 4 -10 box (3" × 0.128); or 4 – 3" × 0.131" nails; or 4 – 3" × 14 gage staples, 7/16" crown	End nail
27	Built-up girders and beams, 2-inch lumber layers	20d common (4" × 0.192"); or	Nail each layer as follows: 32" o.c. at top and bottom and staggered. ~~Two nails at ends and at each splice.~~
		10d box (3" × 0.128"); or 3-3" × 0.131" nails	24" o.c. face nail at top and bottom staggered on opposite sides
		And: 2-20d common (4" × 0.192"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Face nail at ends and at each splice
28	Ledger strip supporting joists or rafters	~~3-16d~~ 4-16d box (3½" × 0.135"); or 3-16d common (3½" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	At each joist or rafter, face nail
29	Bridging to joist	2-10d (3" × 0.128")	Each end, toenail

(Footnotes not shown for brevity and clarity.)

Prescriptive Tall Walls

- **2 x 6 Continuous Studs Used in an 18-Foot Gable end Wall**
  - The gable end wall studs do not support a roof load. They form a non-load-bearing wall. From Table R602.3(5), non-bearing walls may have studs up to 20 feet tall when using 2 x 6 lumber.



Tall wall studs in gable, no roof load

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R602.7 Headers

2015	2012
R602.7	Tables R502.5(1), R502.5(2), R602.7.1

Change TYPE: Modification

- The girder and header span tables of Chapter 5 have been moved into Chapter 6, to the header section. Multi-ply and single header tables are combined. A new section describing rim board headers is added.

TABLE R602.7(3) Girder and Header Spans[a] for Open Porches (Maximum Span for Douglas Fir-Larch, Hem-Fir, Southern Pine, and Spruce-Pine-Fir[b])

	Supporting Roof Ground Snow Load[c] (psf)						Supporting Floor	
	30		50		70			
	Depth of Porch[d] (feet)							
Size	8	14	8	14	8	14	8	14
2-2 × 6	7-6	5-8	6-2	4-8	5-4	4-0	6-4	4-9
2-2 × 8	10-1	7-7	8-3	6-2	7-1	5-4	8-5	6-4
2-2 × 10	12-4	9-4	10-1	7-7	8-9	6-7	10-4	7-9
2-2 × 12	14-4	10-10	11-8	8-10	10-1	7-8	11-11	9-0

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

a. Spans are given in feet and inches.
b. Tabulated values assume #2 grade lumber, wet service and incising for refractory species. Use 30 psf ground snow load for cases in which ground snow load is less than 30 psf and the roof live load is equal to or less than 20 psf.
c. Porch width is measured horizontally from building face to the centerline of the header. For widths between those shown, spans are permitted to be interpolated.

R602.7 Headers

2015	2012
R602.7	Tables R502.5(1), R502.5(2), R602.7.1

- **Change Type:** Modification
  - The girder and header span tables of Chapter 5 have been moved into Chapter 6, to the header section. Multi-ply and single header tables are combined. A new section describing rim board headers is added.

TABLE R602.7.5 Minimum Number of Full Height Studs at Each End of Headers in Exterior Walls

	Maximum Stud Spacing (in.) per Table R602.3(5)	
Header Span (feet)	16	24
≤3	1	1
4	2	1
8	3	2
12	5	3
16	6	4

Table R602.10.5 Contributing Length of Method CS-PF Braced Wall Panels

- **Change Type:** Modification

2015	2012
Table R602.10.5	Table R602.10.5

TABLE R602.10.5 Minimum Length of Braced Wall Panels

		Minimum Length[a] (in.)					
		Wall Height					
Method (See Table R602.10.4)		8 ft.	9 ft.	10 ft.	11 ft.	12 ft.	Contributing Length (in.)
CS-PF	SDC A, B, and C	16	18	20	22[e]	24[e]	1.5 × Actual[b]
	SDC D_0, D_1, and D_2	16	18	20	22[e]	24[e]	Actual[b]

(Portions of table and footnotes not shown for brevity and clarity.)

R602.10.11 Cripple Wall Bracing

2015	2012
R602.10.11	R602.10.11

- **Change Type:** Modification
  - A reduction is no longer required in determining the maximum distance between braced wall panels in a cripple wall. References to the bracing length adjustment tables clarify that increased bracing is required if gypsum wall finish is not applied to the cripple walls.

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R602.12
Simplified Wall Bracing

2015	2012
R602.12	R602.12

- **Change Type:** Modification

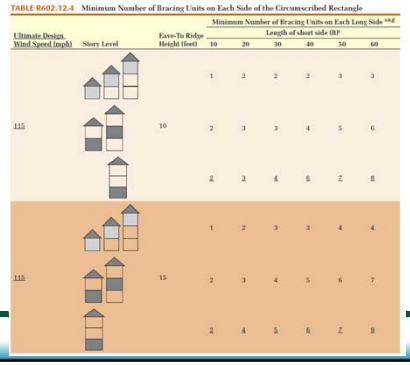
TABLE R602.12.4 Minimum Number of Bracing Units on Each Side of the Circumscribed Rectangle

Minimum Number of Bracing Units on Each Long Side [a,b,d]

Ultimate Design Wind Speed (mph)	Story Level	Eave-To-Ridge Height (feet)	Length of short side (ft)[c] 10	20	30	40	50	60
115		10	1	2	2	2	3	3
			2	3	3	4	5	6
			2	3	4	6	7	8
115		15	1	2	3	3	4	4
			2	3	4	5	6	7
			2	4	5	6	7	9

R602.12
Simplified Wall Bracing

2015	2012
R602.12	R602.12

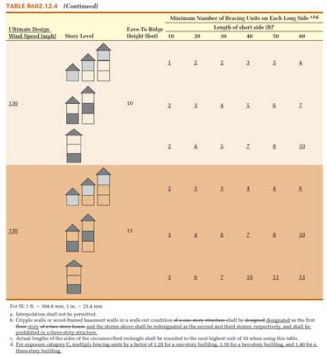
TABLE R602.12.4 (Continued)

Minimum Number of Bracing Units on Each Long Side [a,b,d]

Ultimate Design Wind Speed (mph)	Story Level	Eave-To-Ridge Height (feet)	Length of short side (ft)[c] 10	20	30	40	50	60
130		10	1	2	2	3	3	4
			2	3	4	5	6	7
			2	4	5	7	8	10
130		15	2	3	3	4	4	5
			3	4	5	7	8	10
			3	5	7	10	11	13

For SI: 1 ft. = 304.8 mm, 1 in. = 25.4 mm

a. Interpolation shall not be permitted.

b. Cripple walls or wood-framed basement walls in a walk-out condition ~~of a one-story structure~~ shall be ~~designed~~ designated as the first ~~floor~~ story ~~of a two-story house~~ and the stories above shall be redesignated as the second and third stories, respectively, and shall be prohibited in a three-story structure.

c. Actual lengths of the sides of the circumscribed rectangle shall be rounded to the next highest unit of 10 when using this table.

d. For segments category G, multiply bracing units by a factor of 1.10 for a one-story building, 1.30 for a two-story building, and 1.40 for a three-story building.

R606
Masonry Walls

2015	2012
R606	R606, R607, R608, R609

- **Change Type:** Reorganization
  - Sections R606, R607, R608, and R609 have been organized into one section providing requirements for masonry construction of single- and two-family dwellings and townhouses.

R606
Masonry Walls

2015	2012
R606	R606, R607, R608, R609

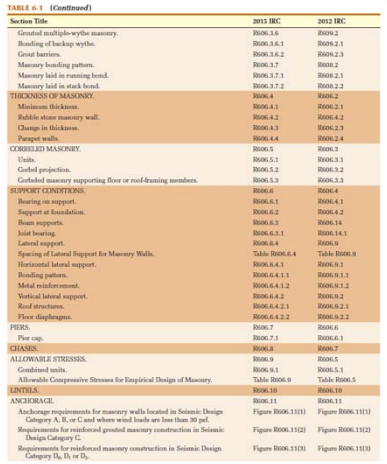
TABLE 6-1 (Continued)

Section Title	2015 IRC	2012 IRC
Grouted multiple-wythe masonry.	R606.3.6	R609.2
Bonding of backup wythe.	R606.3.6.1	R609.2.1
Grout barriers.	R606.3.6.2	R609.2.3
Masonry bonding pattern.	R606.3.7	R608.2
Masonry laid in running bond.	R606.3.7.1	R608.2.1
Masonry laid in stack bond.	R606.3.7.2	R608.2.2
THICKNESS OF MASONRY.	R606.4	R606.2
Minimum thickness.	R606.4.1	R606.2.1
Rubble stone masonry wall.	R606.4.2	R606.4.2
Change in thickness.	R606.4.3	R606.2.3
Parapet walls.	R606.4.4	R606.2.4
CORBELED MASONRY.	R606.5	R606.3
Units.	R606.5.1	R606.3.1
Corbel projection.	R606.5.2	R606.3.2
Corbeled masonry supporting floor or roof-framing members.	R606.5.3	R606.3.3
SUPPORT CONDITIONS.	R606.6	R606.4
Bearing on support.	R606.6.1	R606.4.1
Support at foundation.	R606.6.2	R606.4.2
Beam supports.	R606.6.3	R606.14
Joist bearing.	R606.6.3.1	R606.14.1
Lateral support.	R606.6.4	R606.9
Spacing of Lateral Support for Masonry Walls.	Table R606.6.4	Table R606.9
Horizontal lateral support.	R606.6.4.1	R606.9.1
Bonding pattern.	R606.6.4.1.1	R606.9.1.1
Metal reinforcement.	R606.6.4.1.2	R606.9.1.2
Vertical lateral support.	R606.6.4.2	R606.9.2
Roof structures.	R606.6.4.2.1	R606.9.2.1
Floor diaphragms.	R606.6.4.2.2	R606.9.2.2
PIERS.	R606.7	R606.6
Pier cap.	R606.7.1	R606.6.1
CHASES.	R606.8	R606.7
ALLOWABLE STRESSES.	R606.9	R606.5
Combined units.	R606.9.1	R606.5.1
Allowable Compressive Stresses for Empirical Design of Masonry.	Table R606.9	Table R606.5
LINTELS.	R606.10	R606.10
ANCHORAGE.	R606.11	R606.11
Anchorage requirements for masonry walls located in Seismic Design Category A, B, or C and where wind loads are less than 30 psf.	Figure R606.11(1)	Figure R606.11(1)
Requirements for reinforced grouted masonry construction in Seismic Design Category C.	Figure R606.11(2)	Figure R606.11(2)
Requirements for reinforced masonry construction in Seismic Design Category D_0, D_1, or D_2.	Figure R606.11(3)	Figure R606.11(3)

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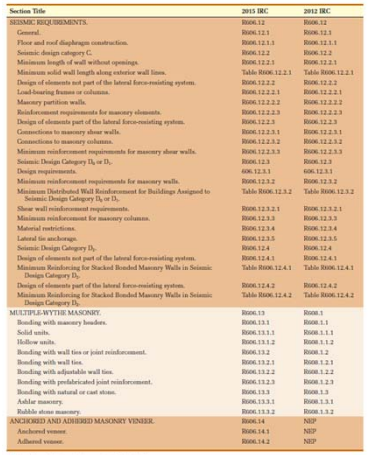
R606 Masonry Walls

2015	2012
R606	R606, R607, R608, R609



Section Title	2015 IRC	2012 IRC
SEISMIC REQUIREMENTS.	R606.12	R606.12
General.	R606.12.1	R606.12.1
Floor and roof diaphragm construction.	R606.12.1.1	R606.12.1.1
Seismic design category C.	R606.12.2	R606.12.2
Minimum length of wall without openings.	R606.12.2.1	R606.12.2.1
Minimum solid wall length along exterior wall lines.	Table R606.12.2.1	Table R606.12.2.1
Design of elements not part of the lateral force-resisting system.	R606.12.2.2	R606.12.2.2
Load-bearing frames or columns.	R606.12.2.2.1	R606.12.2.2.1
Masonry partition walls.	R606.12.2.2.2	R606.12.2.2.2
Reinforcement requirements for masonry elements.	R606.12.2.2.3	R606.12.2.2.3
Design of elements part of the lateral force-resisting system.	R606.12.2.3	R606.12.2.3
Connections to masonry shear walls.	R606.12.2.3.1	R606.12.2.3.1
Connections to masonry columns.	R606.12.2.3.2	R606.12.2.3.2
Minimum reinforcement requirements for masonry shear walls.	R606.12.2.3.3	R606.12.2.3.3
Seismic Design Category D_0 or D_1.	R606.12.3	R606.12.3
Design requirements.	606.12.3.1	606.12.3.1
Minimum reinforcement requirements for masonry walls.	R606.12.3.2	R606.12.3.2
Minimum Distributed Wall Reinforcement for Buildings Assigned to Seismic Design Category D_0 or D_1	Table R606.12.3.2	Table R606.12.3.2
Shear wall reinforcement requirements.	R606.12.3.2.1	R606.12.3.2.1
Minimum reinforcement for masonry columns.	R606.12.3.3	R606.12.3.3
Material restrictions.	R606.12.3.4	R606.12.3.4
Lateral tie anchorage.	R606.12.3.5	R606.12.3.5
Seismic Design Category D_2.	R606.12.4	R606.12.4
Design of elements not part of the lateral force-resisting system.	R606.12.4.1	R606.12.4.1
Minimum Reinforcing for Stacked Bonded Masonry Walls in Seismic Design Category D_2	Table R606.12.4.1	Table R606.12.4.1
Design of elements part of the lateral force-resisting system.	R606.12.4.2	R606.12.4.2
Minimum Reinforcing for Stacked Bonded Masonry Walls in Seismic Design Category D_2	Table R606.12.4.2	Table R606.12.4.2
MULTIPLE-WYTHE MASONRY.	R606.13	R606.1
Bonding with masonry headers.	R606.13.1	R606.1.1
Solid units.	R606.13.1.1	R606.1.1.1
Hollow units.	R606.13.1.2	R606.1.1.2
Bonding with wall ties or joint reinforcement.	R606.13.2	R606.1.2
Bonding with wall ties.	R606.13.2.1	R606.1.2.1
Bonding with adjustable wall ties.	R606.13.2.2	R606.1.2.2
Bonding with prefabricated joint reinforcement.	R606.13.2.3	R606.1.2.3
Bonding with natural or cast stone.	R606.13.3	R606.1.3
Ashlar masonry.	R606.13.3.1	R606.1.3.1
Rubble stone masonry.	R606.13.3.2	R606.1.3.2
ANCHORED AND ADHERED MASONRY VENEER.	R606.14	NEP
Anchored veneer.	R606.14.1	NEP
Adhered veneer.	R606.14.2	NEP

NEP = No equivalent provision, new to the 2015 IRC

Wall Construction

ACTIVITY

8. A two-story single family dwelling is located in Wind Exposure Category C. Can the Simplified Wall Bracing procedure be used for the dwelling?

Yes, if the design meets the criteria for Simplified Wall Bracing.

Chapter 7

Wall Covering

R703.3 Siding Material Thickness and Attachment

Change Type: Modification

2015	2012
R703.3	R703.4

TABLE R703.3.1 Limits for Attachment per Table R703.3(1)

Ultimate Wind Speed (mph, 3-second gust)	Maximum Mean Roof Height Exposure B	C	D
115	NL	50′	20′
120	NL	30′	DR
130	60′	15′	DR
140	35′	DR	DR

For SI: 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s
NL = not limited by Table R703.3.1, DR = Design Required

- Table R703.4, Weather Resistant Siding Attachment and Minimum Thickness, is simplified. New code language is added to Section R703 to clarify limitations of use of the table and to describe fastener type, length, and penetration.

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R703.3 Siding Material Thickness and Attachment

2015	2012
R703.3	R703.3

TABLE R703.3.2 Optional Siding Attachment Schedule for Fasteners Where No Stud Penetration Necessary

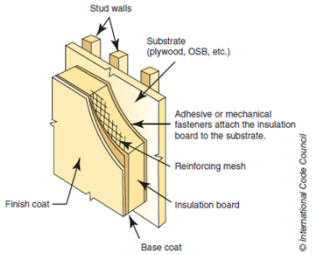
Application	Number and type of Fastener	Spacing of Fasteners[b]
Exterior wall covering (weighing 3 psf or less) attachment to wood structural panel sheathing, either direct or over foam sheathing a maximum of 2 inches thick.[a]	Ring shank roofing nail (0.120″ min. dia.)	12″ o.c.
	Ring shank nail (0.148″ min. dia.)	15″ o.c.
Note: Does not apply to vertical siding.	No. 6 screw (0.138″ min. dia.)	12″ o.c.
	No. 8 screw (0.164″ min. dia.)	16″ o.c.

a. Fastener length shall be sufficient to penetrate back side of the wood structural panel sheathing by at least ¼ inch. The wood structural panel sheathing shall be not less than $^{7}/_{16}$ inch in thickness.
b. Spacing of fasteners is per 12 inches of siding width. For other siding widths, multiply spacing of fasteners above by a factor of 12/s, where s is the siding width in inches. Fastener spacing shall never be greater than the manufacturer's minimum recommendations.

R703.9 Exterior Insulation and Finish Systems (EIFS)

2015	2012
R703.9	R703.9

- **Change Type:** Modification
  - Limitations for exterior insulation and finish systems with and without drainage have been added to the 2015 IRC.



EIFS composition

R703.11.1 Vinyl Siding Attachment

2015	2012
R703.11.1	-

- **Change Type:** Addition
  - Nailing penetration and spacing requirements for horizontal and vertical vinyl siding.

R703.13, R703.14 Insulated Vinyl Siding and Polypropylene Siding

2015	2012
R703.13, R703.14	-

- **Change Type:** Addition
  - New sections set minimum requirements for insulated vinyl siding and polypropylene siding.

- **Insulated Vinyl Siding.** A vinyl cladding product with manufacturer-installed foam plastic insulating material as an integral part of the cladding product, having a minimum thermal resistance of not less than R-2.
- **Polypropylene Siding.** A shaped material, made principally from polypropylene homopolymer, or copolymer, that in some cases contains fillers or reinforcements, that is used to clad exterior walls or buildings.

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R703.15, R703.16, R703.17 Cladding Attachment over Foam Sheathing

2015	2012
R703.15, R703.16, R703.1	-

- **Change Type:** Addition
  - Three new sections set minimum requirements for cladding attachment over foam sheathing to wood framing (R703.15), cold formed steel framing (R703.16) and masonry or concrete walls (R703.17). For light-frame construction, prescriptive requirements are given.

Chapter 8

Roof-Ceiling Construction

Tables R802.4, R802.5 Ceiling Joist and Rafter Tables

- **Change Type:** Modification

2015	2012
Tables R802.4, R802.5	Tables R802.4, R802.5 .1

TABLE R802.4(1) Ceiling Joist Spans for Common Lumber Species (Uninhabitable attics without storage, live load = 10 psf, L/Δ = 240)

Ceiling Joist Spacing (inches)	Species and Grade		Dead Load = 5 psf: 2×4 Maximum ceiling joist spans (feet - inches)	2×6 (feet - inches)	2×8 (feet - inches)	2×10 (feet - inches)
16	Douglas fir-larch	SS	11-11	18-9	24-8	Note a
	Douglas fir-larch	#1	11-6	18-1	23-10	Note a
	Douglas fir-larch	#2	11-3	17-8	23-4	Note a
	Douglas fir-larch	#3	9-7	14-1	17-10	21-9
	Hem-fir	SS	11-3	17-8	23-4	Note a
	Hem-fir	#1	11-0	17-4	22-10	Note a
	Hem-fir	#2	10-6	16-6	21-9	Note a
	Hem-fir	#3	9-5	13-9	17-5	21-3
	Southern pine	SS	11-9	18-5	24-3	Note a
	Southern pine	#1	11-3	17-8	23-10	Note a
	Southern pine	#2	10-9	16-11	21-7	25-7
	Southern pine	#3	8-9	12-11	16-3	19-9
	Spruce-pine-fir	SS	11-0	17-4	22-10	Note a
	Spruce-pine-fir	#1	10-9	16-11	22-4	Note a
	Spruce-pine-fir	#2	10-9	16-11	22-4	Note a
	Spruce-pine-fir	#3	9-5	13-9	17-5	21-3

(Portions of table not shown for brevity and clarity.)

FOR EXAMPLE

Ceiling Joint Spans

#1 Uninhabitable attic with limited storage

- LL 5 20 psf
- DL 5 10 psf
- 2310 joists
- 160 o.c. spacing
- SP #2

Maximum Span Allowed	2012	2015
	20′-9″	18′-1″

- The SP #2 span length is significantly reduced from the 2012 IRC span length.
- **Note:** An SP #1 joist will span about the same length in the 2015 IRC Table R802.4(1) or R802.4(2) as the SP #2 did in the tables in the 2012 IRC.

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R806.1
Attic Ventilation

2015	2012
R806.1	R806.1

- **Change Type:** Deletion
  - The 2012 IRC exception allowing the building official to waive ventilation requirements due to atmospheric or climatic conditions has been deleted.

Chapter 9

Roof Assemblies

ACTIVITY

Roof-Ceiling Construction

9. Why did changes in span length occurred in the rafter span tables?

The rafter lengths changed due to the capacity (or strength) of today's Southern Pine, Douglas Fir and Hemlock Fir lumber changing.

R905.1.1
Underlayment

2015	2012
R905.1.1	Multiple Sections

- **Change Type:** Modification

TABLE R905.1.1(1) Underlayment Types

Roof Covering	Section	Maximum Ultimate Design Wind Speed, V_{ult} < 140 mph	Maximum Ultimate Design Wind Speed, V_{ult} ≥ 140 mph
Asphalt shingles	R905.2	ASTM D 226 Type I; ASTM D 4869 Type I, II, III, or IV; ASTM D 6757	ASTM D 226 Type II; ASTM D 4869 Type IV; ASTM D 6757
Clay and concrete tile	R905.3	ASTM D 226 Type II; ASTM D 2626 Type I; ASTM D 6380 Class M mineral surfaced roll roofing	ASTM D 226 Type II; ASTM D 2626 Type I; ASTM D 6380 Class M mineral surfaced roll roofing
Metal roof shingles	R905.4	ASTM D 226 Type I or II; ASTM D 4869 Type I, II, III, or IV	ASTM D 226 Type II; ASTM D 4869 Type IV
Mineral-surfaced roll roofing	R905.5	ASTM D 226 Type I or II; ASTM D 4869 Type I, II, III, or IV	ASTM D 226 Type II; ASTM D 4869 Type IV
Slate and slate-type shingles	R905.6	ASTM D 226 Type I; ASTM D 4869 Type I, II, III, or IV	ASTM D 226 Type II; ASTM D 4869 Type IV
Wood shingles	R905.7	ASTM D 226 Type I or II; ASTM D 4869 Type I, II, III, or IV	ASTM D 226 Type II; ASTM D 4869 Type IV
Wood shakes	R905.8	ASTM D 226 Type I or II; ASTM D 4869 Type I, II, III, or IV	ASTM D 226 Type II; ASTM D 4869 Type IV
Metal panels	R905.10	Manufacturer's instructions	ASTM D 226 Type II; ASTM D 4869 Type IV

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R905.1.1 Underlayment

- **Change Type:** Modification

2015	2012
R905.1.1	Multiple Sections

TABLE R905.1.1(2) Underlayment Application

Roof Covering	Section	Maximum Ultimate Design Wind Speed, V_{ult} < 140 mph	Maximum Ultimate Design Wind Speed, V_{ult} ≥ 140 mph
Asphalt shingles	R905.2	For roof slopes from two units vertical in 12 units horizontal (2:12), up to four units vertical in 12 units horizontal (4:12), underlayment shall be two layers applied in the following manner. Apply a 19-inch strip of underlayment felt parallel to and starting at the eaves. Starting at the eaves, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be one layer applied in the following manner. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. End laps shall be 4 inches and shall be offset by 6 feet.	Same as Maximum Ultimate Design Wind Speeds, V_{ult} < 140 mph except all laps shall be a minimum of 4 inches.
Clay and concrete tile	R905.3	For roof slopes from two and one-half units vertical in 12 units horizontal (2 ½:12), up to four units vertical in 12 units horizontal (4:12), underlayment shall be a minimum of two layers applied as follows: starting at the eave, apply a 19-inch strip of underlayment parallel with the eave. Starting at the eave, apply 36-inch-wide strips of underlayment felt, overlapping successive sheets 19 inches. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be a minimum of one layer of underlayment felt-applied shingle fashion, parallel to and starting from the eaves and lapped 2 inches. End laps shall be 4 inches and shall be offset by 6 feet.	Same as Maximum Ultimate Design Wind Speeds, V_{ult} < 140 mph except all laps shall be a minimum of 4 inches.
Metal roof shingles	R905.4		
Mineral-surfaced roll roofing	R905.5		
Slate and slate-type shingles	R905.6		
Wood shingles	R905.7	Apply in accordance with the manufacturer's installation instructions.	
Wood shakes	R905.8		For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be one layer applied in the following manner: underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 4 inches. End laps shall be 4 inches and shall be offset by 6 feet.
Metal panels	R905.10		

R905.7.5 Wood Shingle Application

2015	2012
R905.7.5	R905.7.5

Change Type: Modification

- The minimum requirements for application of wood shingles are expanded. Fastener type is clarified and a new table lists minimum sizes for box nails. Labeling requirements for fastener packaging have also been added.

TABLE R905.7.5(2) Nail Requirements for Wood Shakes and Wood Shingles

Shakes	Nail Type and Minimum Length	Minimum Head Size	Minimum Shank Diameter
18" Straight-Split	5d Box 1¾"	0.19"	0.08"
18" and 24" Handsplit and Resawn	6d Box 2"	0.19"	0.0915"
24" Tapersplit	5d Box 1¾"	0.19"	0.08"
18" and 24" Tapersawn	6d Box 2"	0.19"	0.0915"
Shingles	**Nail Type and Minimum Length**	**Minimum Head Size**	**Minimum Shank Diameter**
16" and 18"	3d Box 1¼"	0.19"	0.08"
24"	4d Box 1½"	0.19"	0.08"

R905.1.1 Underlayment

- **Change Type:** Modification

2015	2012
R905.1.1	Multiple Sections

TABLE R905.1.1(3) Underlayment Attachment

Roof Covering	Section	Maximum Ultimate Design Wind Speed, V_{ult} ≤ 140 mph	Maximum Ultimate Design Wind Speed, V_{ult} ≥ 140 mph
Asphalt shingles	R905.2	Fastened sufficiently to hold in place	The underlayment shall be attached with corrosion-resistant fasteners in a grid pattern of 12 inches between side laps with a 6-inch spacing at the side laps. Underlayment shall be attached using metal or plastic cap nails or cap staples with nominal cap diameter of not less than 1 inch. Metal caps shall have a thickness not less than 32-gauge sheet metal. Power-driven metal caps shall have a minimum thickness of 0.010 inch. Minimum thickness of the outside edge of plastic caps shall be 0.035 inch. The cap-nail shank shall be not less than 0.083 inch for ring shank cap nails and 0.091 inch for smooth shank cap nails. Staple gage shall be not less than 21 gage. Cap-nail shank and cap staple legs shall have a length sufficient to penetrate through the roof sheathing or not less than ¾ inch into the roof sheathing.
Clay and concrete tile	R905.3		
Metal roof shingles	R905.4	Manufacturer's installation instructions.	The underlayment shall be attached with corrosion resistant fastenors in a grid pattern of 12 inches between side laps with a 6-inch spacing at the side laps. Underlayment shall be attached using metal or plastic cap nails or cap staples with nominal cap diameter of not less than 1 inch. Metal caps shall have a thickness of at least 32-gauge sheet metal. Power-driven metal caps shall have a minimum thickness of 0.010 inch. Minimum thickness of the outside edge of plastic caps shall be 0.035 inch. The cap-nail shank shall be not less than 0.083 inch for ring shank cap nails and 0.091 inch for smooth shank cap nails. Staple gage shall be not less than 21 gage. Cap-nail shank and cap staple legs shall have a length sufficient to penetrate through the roof sheathing or not less than ¾ inch into the roof sheathing.
Mineral-surfaced roll roofing	R905.5		
Slate and slate-type shingles	R905.6		
Wood Shingles	R905.7		
Wood shakes	R905.8		
Metal panels	R905.10		

R905.8.6 Wood Shake Application

2015	2012
R905.8.6	R905.8.6

- **Change Type:** Modification
  - The minimum requirements for application of wood shakes are expanded. Fastener type is clarified, and a new table lists minimum sizes for box nails. Labeling requirements for fastener packaging have also been added.

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R905.16 Photovoltaic Shingles

2015	2012
R905.16	R905.16

- **Change Type:** Modification
  - Additional requirements and limits for photovoltaic shingles have been added to Section R905.16.

- R905.16 Photovoltaic shingles.
- R905.16.1 Deck requirements.
- R905.16.2 Deck slope.
- R905.16.3 Underlayment.
- R905.16.4 Underlayment application.
- R905.16.4.1 Ice barrier.
- R905.16.4.2 Underlayment and high winds.

Part 4
Chapter 11

Energy Conservation

R907 Rooftop-Mounted Photovoltaic Systems

- **Change Type:** Addition
  - This code provision describes the requirements and limits of rooftop-mounted photovoltaic systems.

2015	2012
R907	R907

N1101.13 Compliance Paths

2015	2012
N1101.13	N1101.15

Change Type: Modification

- The compliance paths in the energy provisions have been clarified. The mandatory provisions combined with either the prescriptive provisions or the performance provisions are deemed to comply with the code.

1. Sections N1101.14 through N1104.
2. Section N1105 and the provisions of Sections N1101.14 through N1104 labeled “Mandatory.”
3. An energy rating index (ERI) approach in Section N1106.

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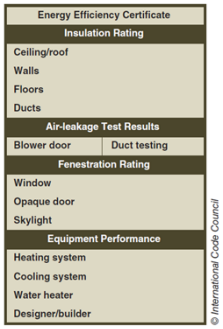
N1101.14 Permanent Energy Certificate

2015	2012
N1101.14	N1101.16

- **Change Type:** Modification
  - The code now requires the permanent energy certificate to be placed on a wall in proximity to the furnace, in a utility room, or in another approved location inside the building.

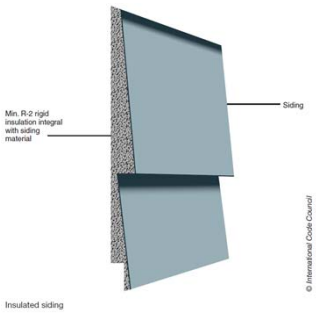


Permanent energy certificate

N1102.1.3 *R*-Value Computation—Insulated Siding

2015	2012
N1102.1.3	N1102.1.2

- **Change Type:** Modification
  - Insulated siding is allowed in the calculation for satisfying the wall insulation R-value. The labeled R-value for the siding must be reduced by 0.6 for calculation purposes.



Insulated siding

N1102.2.8, Floor Framing Cavity Insulation

2015	2012
N1102.2.8	N1102.2.7

- **Change Type:** Modification
  - An air space is allowed above the required insulation installed in a floor framing cavity above unconditioned space.

N1103.3 Duct Sealing and Testing

2015	2012
N1103.3	N1103.2

- **Change Type:** Modification
  - The duct sealing and testing provisions have been reorganized to clarify the application. The maximum duct leakage rates are now prescriptive rather than mandatory provisions to accommodate design flexibility.

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N1103.5 Heated Water Circulation and Temperature Maintenance Systems

2015	2012
N1103.5	N1103.4

- **Change Type:** Modification
  - Automatic controls to maintain hot water temperature for heated water circulation systems and for heat trace temperature maintenance systems when such systems are installed. To save energy, continuously operating circulation pumps are no longer permitted. Heat trace systems must comply with one of the referenced standards.

Chapter 15

Exhaust Systems

ACTIVITY

Energy Conservation

10. Where may a permanent energy certificate be placed?

The permanent energy certificate may now be placed in multiple locations, including on a wall near the furnace or in a utility room.

M1502.4.4, M1502.4.5 Dryer Exhaust Duct Power Ventilators

2015	2012
M1502.4.4, M1502.4.5	M1502.4.4

- **Change Type:** Addition
  - The code now recognizes the use of dryer exhaust duct power ventilators (DEDPVs) to increase the allowable exhaust duct length for clothes dryers.

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M1502.4.6
Dryer Duct Length Identification

2015	2012
M1502.4.6	M1502.4.5

- **Change Type:** Modification
  - A permanent label identifying the concealed length of the dryer exhaust duct is no longer required where the equivalent duct length does not exceed 35 feet. For the dryer exhaust duct exceeding 35 feet, a label or tag is required whether the duct is concealed or not.

M1506.2
Exhaust Duct Length

2015	2012
M1506.2	-

- **Change Type:** Addition
  - The code establishes maximum exhaust duct lengths based on duct diameter, type of duct and the exhaust fan airflow rating.

TABLE M1506.2 Duct Length

Duct Type	Flex Duct									Smooth-Wall Duct						
Fan airflow rating (CFM @ 0.25 inch wc[a])	50	80	100	125	150	200	250	300	50	80	100	125	150	200	250	300
Diameter[b] (inches)	Maximum length[c, d, e] (feet)															
3	X	X	X	X	X	X	X	X	5	X	X	X	X	X	X	X
4	56	4	X	X	X	X	X	X	114	31	10	X	X	X	X	X
5	NL	81	42	16	2	X	X	X	NL	152	91	51	28	4	X	X
6	NL	NL	158	91	55	18	1	X	NL	NL	NL	168	112	53	25	9
7	NL	NL	NL	NL	161	78	40	19	NL	NL	NL	NL	NL	148	88	54
8 and above	NL	NL	NL	NL	NL	189	111	69	NL	NL	NL	NL	NL	NL	198	133

a. Fan airflow rating shall be in accordance with ANSI/AMCA 210-ANSI/ASHRAE 51.
b. For non-circular ducts, calculate the diameter as four times the cross-sectional area divided by the perimeter.
c. This table assumes that elbows are not used. Fifteen feet (5 m) of allowable duct length shall be deducted for each elbow installed in the duct run.
d. NL = no limit on duct length of this size.
e. X = not allowed. Any length of duct of this size with assumed turns and fittings will exceed the rated pressure drop.

ACTIVITY

Exhaust Systems

11. Do concealed dryer ducts require a permanent label stating their length?

No, all dryer ducts longer than 35 ft require a permanent label, concealed ducts less than 35 feet in length do not require a label stating their length.

Chapter 16

Duct Systems

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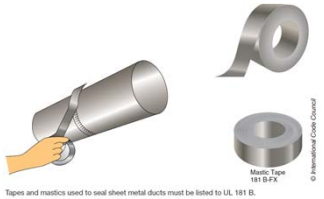
M1601.4 Duct Installation

2015	2012
M1601.4	M1601.4

Change Type: Modification

- Tapes and mastics used to seal sheet metal ducts must be listed to UL 181 B as has been required for sealing flexible ducts. Snap-lock and button-lock seams are no longer exempt from the sealing requirements.



Tapes and mastics used to seal sheet metal ducts must be listed to UL 181 B.

Part 6
Chapter 24

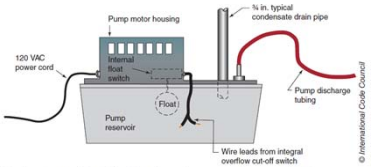
Fuel Gas

G2404.11 Condensate Pumps

2015	2012
G2404.11	-

Change Type: Addition

- Condensate pumps located in uninhabitable spaces must be connected to the appliance to shut down the equipment in the event of pump failure.

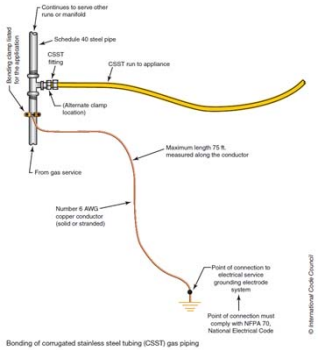


Condensate pumps located in attics and crawl spaces must be connected to the appliance such that when the pump fails the appliance shuts off.

G2411.1.1 Electrical Bonding of Corrugated Stainless Steel Tubing

2015	2012
G2411.1.1	G2411.1.1

- **Change Type:** Modification
  - The maximum allowable length of the bonding jumper for corrugated stainless steel tubing (CSST) is 75 feet. Bonding methods must comply with NFPA 70 and devices, such as clamps, must be listed in accordance with UL 467.



Bonding of corrugated stainless steel tubing (CSST) gas piping

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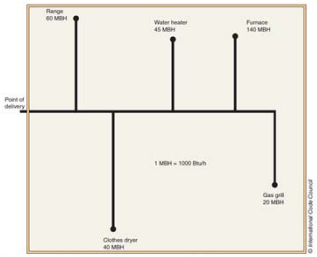
G2413.2
Maximum Gas Demand

2015	2012
G2413.2	G2413.2, Table G2413.2

Change Type: Modification

- Table G2413.2 and the reference to it were deleted to clarify that the code requires the actual maximum input rating of the appliances to be known and used for gas pipe sizing purposes.



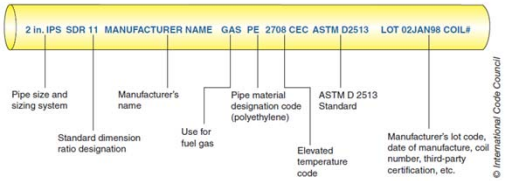
Gas piping size is based on the actual maximum input rating of the appliances

G2414.6
Plastic Pipe, Tubing and Fittings

2015	2012
G2414.6	G2414.6

Change Type: Modification

- PVC and CPVC pipe are expressly prohibited materials for supplying fuel gas.



Approved polyethylene gas piping with markings in accordance with the code and ASTM D 2513

G2415.7 Protection of Concealed Piping Against Physical Damage

2015	2012
G2415.7	G2415.7

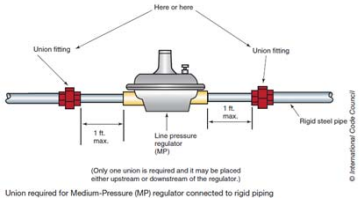
- **Change Type:** Modification
  - Piping parallel to framing members and piping within framing members are now addressed. Protection is required to extend well beyond the edge of members that are bored or notched.

G2421.2
Medium-Pressure Regulators

2015	2012
G2421.2	G2421.2

Change Type: Modification

- Medium-Pressure (MP) line regulators installed in rigid piping must have a union installed to allow removal of the regulator.



Union required for Medium-Pressure (MP) regulator connected to rigid piping

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G2426.7.1 Door Clearance to Vent Terminals

2015	2012
G2426.7.1	-

Change Type: Addition

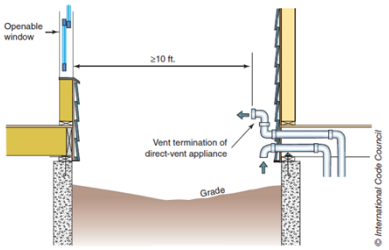
- An appliance vent terminal is not permitted in a location within 12 inches of the arc of a swinging door.

G2427.8 Venting System Termination Location

2015	2012
G2427.8	G2427.8

Change Type: Modification

- Category IV appliance vent system terminal locations must be at least 10 feet from an adjoining building opening when the vent discharges in the direction of the adjacent building.



A minimum 10-foot horizontal separation is required between a vent terminal and an opening of an adjacent building.

ACTIVITY

Fuel Gas

- Can CPVC pipe be used for natural gas supply lines?

No, neither PVC nor CPVC pipe may be used to supply fuel gas.

Chapter 25

Plumbing Administration

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P2502.1, P2503.4 Inspection and Tests for Building Sewers

2015	2012
P2502.1, P2503.4	P2502.1, P2503.4

- **Change Type:** Clarification
  - Internal examination is required to verify size, slope and condition of existing piping. A new provision prescribes a pressure test for a forced sewer at a test pressure of 5 psi greater than the pump rating.

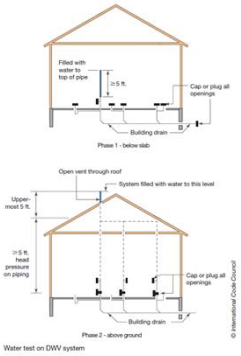
Chapter 26

General Plumbing Requirements

P2503.5 Drain, Waste, and Vent Systems Testing

2015	2012
P2503.5	P2503.5

- **Change Type:** Modification
  - The head pressure for a water test on drain, waste, and vent (DWV) systems has been reduced from 10 feet to 5 feet.

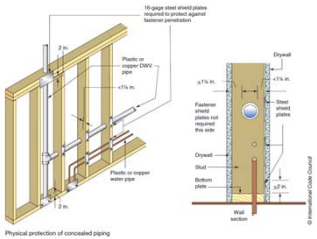


P2603.2.1 Protection Against Physical Damage

2015	2012
P2603.2.1	P2603.2.1

Change Type: Modification

- For piping installed through bored holes or in notches, the minimum clearance distance from the concealed piping to the edge of the framing member has been reduced from 1.5 inches to 1.25 inches. Protection is required for piping installed less than 1.25 inches from the edge of the framing member.



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Chapter 27

Plumbing Fixtures

121

P2702.1, P2706.1 Waste Receptors

2015	2012
P2702.1, P2706.1	P2702.1, P2706.1

Change Type: Modification

- A definition of waste receptor has been added to the code. Waste receptors are now permitted in bathrooms and closets.
- **WASTE RECEPTOR.** A floor sink, standpipe, hub drain or a floor drain that receives the discharge of one or more indirect waste pipes.

2015 IRC Update 122

Chapter 28

Water Heaters

123

P2801 Water Heater Drain Valves and Pans

2015	2012
P2801	P2801

Change Type: Modification

- Drain valves are required to have a threaded outlet for water heaters. The water heater pan requirements have been expanded to accept aluminum and plastic pans of the prescribed thickness. A pan drain is not required when a water heater is replaced and there is no existing drain.

2015 IRC Update 124

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Chapter 29

Water Supply and Distribution

125

P2901, P2910 through P2913 Nonpotable Water Systems

2015	2012
P2901, P2910 - P2913	P2901

- Change Type: Modification
  - Nonpotable water outlets, such as hose connections, that utilize nonpotable water must be identified with a warning and a symbol that nonpotable water is being used. The color purple is established for identifying distribution piping conveying nonpotable water. New Sections P2910 through P2913 are extracted from the International Green Construction Code (IgCC) and intend to provide guidance on the collection, storage, and distribution of various types of nonpotable water for residential buildings.

P2906.2 Lead Content of Drinking Water Pipe and Fittings

2015	2012
P2906.2	P2905.2

Change Type: Modification

- The code has a more stringent limitation for lead content in pipe, pipe fittings, joints, valves, faucets, and fixture fittings that convey water used for drinking and cooking.

Chapter 30

Sanitary Drainage

128

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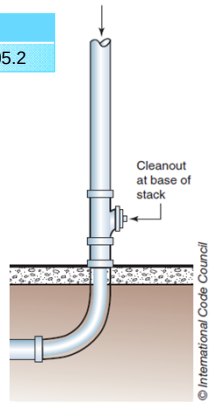
P3005.2 Cleanouts

2015	2012
P3005.2	P3005.2

Change Type: Modification

- The section on cleanouts has been completely reorganized and reworded for clarity. Brass cleanout plugs are only permitted for metallic piping.
- Where located at a finished wall, the cleanout must be within 1.5 inches of the finished surface.
- A cleanout is no longer required at the base of each waste or soil stack.



Cleanout on a stack

Chapter 31

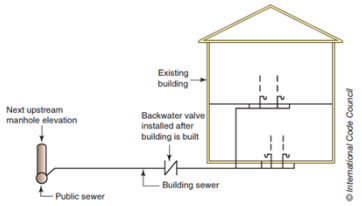
Vents

P3008.1 Backwater Valves

2015	2012
P3008.1	P3008.1

Change Type: Modification

- For existing buildings, fixtures that are located above the next upstream manhole cover are allowed to discharge through a backwater valve.



The exception allows this backwater valve arrangement only for existing buildings.

P3103.1, P3103.2 Vent Terminals

2015	2012
P3103.1, P3103.2	P3103.1, P3103.2

- **Change Type:** Modification
  - Vent terminations where roofs may be occupied and where very cold weather conditions occur are clarified.

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Chapter 32

Traps

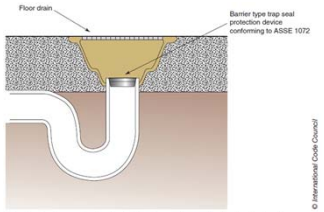
133

P3201.2 Trap Seal Protection Against Evaporation

2015	2012
P3201.2	P3201.2

Change Type: Modification

- Trap seal protection against evaporation can now be accomplished in a variety of ways, including trap seal primer valves supplied with nonpotable water and barrier-type trap seal protection devices.



A barrier-type trap seal protection device is one of four methods of protecting the floor drain trap seal from evaporation.

2015 IRC Update 134

ACTIVITY

Drain, Waste, Vent

13. For DWV systems, a head pressure of 6 feet is maintained. Does this meet the code minimum head height?

Yes, DWV system tests only require 5 feet of head.

2015 IRC Update 135

Chapter 39

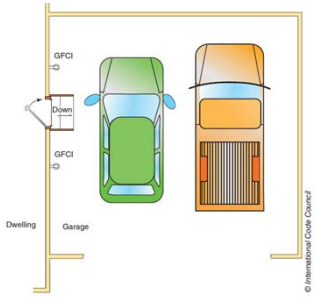
Power and Lighting Distribution

136

E3901.9 Receptacle Outlets for Garages

2015	2012
E3901.9	E3901.9

- **Change Type:** Modification
  - Garage receptacle outlets must be served by a separate branch circuit that does not supply other outlets. At least one receptacle outlet is required for each car space in a garage.

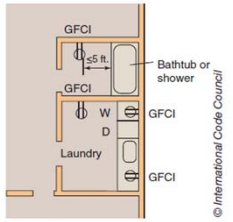


A minimum of two receptacle outlets are required for a two-stall garage.

E3902.8, E3902.9, E3902.10 Ground-Fault Circuit Interrupter Protection

2015	2012
E3902.8, E3902.9, E3902.10	-

- **Change Type:** Modification
  - Laundry areas have been added to the list of locations requiring ground-fault circuit interrupter (GFCI) protection. Receptacles within 6 feet of bathtubs and showers, and receptacles for dishwashers also require GFCI protection.



GFCI protection required for 125-volt, 15- and 20-amp receptacle outlets in laundry areas and near showers or bathtubs

ACTIVITY

Power and Lighting Distribution

14. Describe a new location requiring GFCI circuits.

Within 6 feet of a bathtub or shower, for use by a dishwasher, and in laundry areas.

Part 9

Appendices

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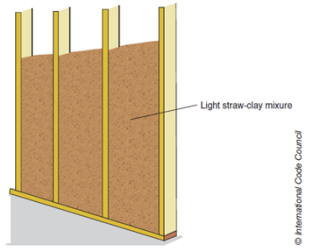
Appendix R
Light Straw-Clay Construction

2015	2012
Appendix R	-

Change Type: Addition

- Prescriptive provisions for light straw-clay construction have been added as an appendix to the 2015 IRC. Light straw-clay walls are nonbearing infill around a structural frame.



Light straw-clay wall construction

Appendix S
Strawbale Construction

2015	2012
Appendix S	-

- **Change Type:** Addition
  - Prescriptive provisions for strawbale construction have been added as an appendix to the 2015 IRC. Strawbale walls may be bearing walls or nonbearing infill around a structural frame depending upon the method of construction and detailing. Appendix S contains requirements for both construction methods.

Final Reflection

- This slide will help the learner to reflect on the day and what they will take back to the job and apply.

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