# 2000 International Residential Code Errata

(Portions of text and tables not shown are unaffected by the errata)

**1st through 15th PRINTING (Posted: 11-29-2011)**

## CHAPTER 3
## BUILDING PLANNING

Figure R301.2(5) corrections as follows:

1. At the center of the State of North Dakota, the ground snow load shown as 36 should read 35.
2. At the State of Pennsylvania, the elevation shown as 700 (2 places) should read 1700.

# 2000 International Residential Code Errata

(Portions of text and tables not shown are unaffected by the errata)

**1st through 15th PRINTING (July 25, 2011)**

## APPENDIX H
## PATIO COVER

**AH105.1 General**….shall be provided with exits conforming to the provisions of Section ~~R310~~ R311 of this code.

# ERRATA TO THE
# 2000 INTERNATIONAL RESIDENTIAL CODE ®
## Fifth Printing
**(Updated June 23, 2003)**

**202 Definitions. Hot water.** Revise temperature from 120° F (49° C) to 110° F (43° C).

**Table R301.2.1.2 Windborne Debris Protection Fastening Schedule for Wood Structural Panels** Revise as follows:
Footnote a: Change to read: "This table is based on 130 ..."
Footnote c: Delete footnote c
Footnote d: Re-letter to "c"

**R301.2.2.1.2 Alternative determination of Seismic Design Category E.** Revise as follows:
In Item 2.3: Change reference section from R301.2.2.6 to "R302.2.2.7".

**R301.2.2.9 Irregular buildings in Seismic Design Categories $D_1$ and $D_2$.** Revise as follows:
In title: Add Seismic Design Category C.

**R402.2 Concrete.** Revise as follows:
In 9th line, change to read: "... of cementitious materials specified in ACI 318"

**Figure R403.3 Air-Freezing Index** Revise as follows: In Note: Change 325°F to "32°F"

**Figure R404.1.5(1) Foundation Wall Clay Masonry Curtain Wall With Concrete Masonry Piers.**
At upper figure at galvanized or stainless steel straps, Revise as follows:
The straps are to be continuous into the footing and hidden vertical portion is to be shown dotted.

**Table R502.3.1(1) Floor Joist Spans for Common Lumber Species**
Revise as follows: In 12" Joist spacing, 6th (2x12) column, Southern Pine #2: Change from 18-8 to "24-2"

**Figure R502.8 Cutting, Notching and Drilling.** Revise as follows:
At Rafter/Ceiling Joists: Change referenced section from (802.6) to "(802.7.1)"

**FIGURE R602.3(1) TYPICAL WALL, FLOOR AND ROOF FRAMING** Revise as follows:
WALL STUD - Change "R606.6" to read "R602.6".
1 IN x 4 IN. RIBBON - Change leader arrow to point beneath joist nailed to stud.
BAND JOIST - Change leader arrow to point to band joist or blocking.

**FIGURE R602.3(2) FRAMING DETAILS** Revise as follows:
Note at top center: Change to read, " Cut plate tied with 16 gage steel strap."

**Table R602.3.1 Maximum Allowable Length of Wood Wall Studs Expose to Wind Speeds ...**
Revise as follows: In footnote b, change to read: "..... exceeding 25 psf, $f_b$ not ....."

**R602.10.2 Cripple wall bracing:** Table reference , two places, now reads ...Table R602.10.1

**R602.10.5 Continuous structural panel sheathing.**: 2nd table reference now reads ...Table R602.10.1

**Table R602.10.11** : Table reference, in second column heading ,now reads ...Table R602.10.1

**R603.8.1.2 Braced wall lines.** : 2nd paragraph, line 9 now reads ...Section R702.3.5
**R611.7.1.1 Location** Revise as follows: In 2nd line delete "not" after shall.

**R1001.12.1 Option 1** Revise as follows: In 2nd line, revise to read: "..... area of at least ....."

**FIGURE R1003.1 Fireplace and Chimney Details** Revise as follows:
Figure on Right side, Lower left corner, Hearth Extension: Change letter G to "C".

**Table P2701.1.** In 13th row, Nonvitreous ceramic plumbing fixtures, revise to read: ASME A112.19.9 M.

**P2705.1 General.** Revise number 3 as follows: Where fixtures come in contact with walls and floors the contact area shall be water tight.

**Table P2904.4.1.** In 8th row revise crosslinked polybutylene to polyethylene and 11th row revise polybutylene to polyethylene.

**Table P3002.1.** Delete 95 under CISPI 310.

**Table P3002.2.** Delete M under CSA B602.

**P3003.3.5.** Delete ASTM C445 and replace with ASTM C425.

**Table 3105.1.** Revise conversion from 1 inch per foot = 0.0833 mm/m to 83.3 mm/m.

**Figure P3108.1(3).** Delete reference to lavatory between water closets and tub. Delete the following pipe sizes between the water closets and tub: 3-inch, 2-inch and 11/4-inch.

**P3109.2.** Revise as follows: See Figure P3109.2 for typical waste stack venting.

**P3201.5.** Revise number 3 as follows: "S" traps (except as permitted under Section P3105.3).

**REFERENCED STANDARDS**

**ASTM:**

**B813-93.** Change reference section from P3004.10 to Section P2904.10.

**B828-92e**. Change reference section from P3004.10 to P2904.10.

**C425-98.** Add reference section P3005.5.5.

**C445.** Delete reference.

## Fourth Printing
## (November 2001)

**R308.4 Hazardous locations.**

**Exception:** Delete Item 4 from exception and renumber remaining items.

**R404.1.5.1 Pier and curtain wall foundations** Revise as follows:
Item 3, last line: Change referenced sections from R608.1.1 and 608.1.1.2 to "R606.8.1.1 and R606.8.1.2."

**Table R602.3(1) Fastener Schedule for Structural Members** Revise as follows:
In column 1, 11th row: Change 48 inch to "24 inch."

**Figure R602.3(2) Framing Details** Revise as follows:
In upper right hand corner: Revise to read "Stagger Joints 24 in. or"

**R602.10.4 Length of braced panels** Revise as follows:
In 1st line, change to read: "For Methods 2, 3, 4, 6, 7 and 8....."

**Table R802.4(1) Ceiling Joist Spans for Common Lumber Species** Revise as follows:
In table heading: Revise live load from 20 psf to "10 psf."

**Table P2903.7 Minimum Size of Water Meters, Mains and Distribution Piping Based on Water Supply Fixture Unit Valves** Revise as follows:
In title: Change "Valves" to "Values."

**P3201.5 Prohibited trap designs.** Revise as follows:
Item 3: delete the words "except as permitted under Section P3102.3."

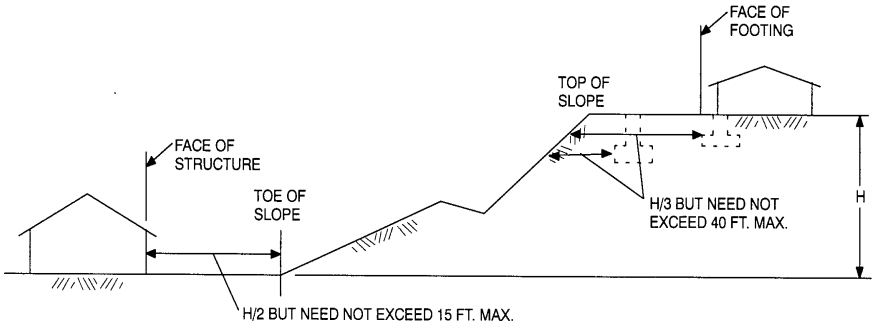
**Chapter 43 – Referenced Standards** Revise as follows:
**AGA** 7-90: Delete

**Section R301.2.2.1.1 Alternate determination of seismic design category.** Revise as follows:
In last sentence: Change Table reference from "Table R602.10.3 to Table R602.10.1."

**Section R308.4 Hazardous locations.** Revise as follows:
Item 2: Change Item 1, 5 or 6 to "Item 1, 6 or 7."
Item 3: Change Item 5 to "Item 6."
Item 4: Change Item 5 to "Item 6."
Item 5: Change Item 6 to "Item 7."
Item 6: Change Item 6 to "Item 7."

**Section R314.9 Bulkhead enclosure stairways.** Revise as follows:
In 6th line: "..... adjacent to the stairway does not exceed 8 feet (2438 mm) and the grade level opening to the stairway....."

**Figure R403.1.7.1 Foundation Clearance From Slopes** Revise as follows:




For SI: 1 foot = 304.8 mm.

**FIGURE R403.1.7.1**
**FOUNDATION CLEARANCE FROM SLOPES**

**Section R403.1.8.1 Expansive soils classifications.** Revise as follows:
Item 4: Change standard reference from "UBC Standard 18-1" to "UBC Standard 18-2."

**Section R505.2 Structural framing.** Revise as follows:
1st sentence: Change "Figure R505.2.1(1)" to "Figure R505.2(1)".

**Table R602.3(1) Fastener Schedule for Structural Members** Revise as follows:
Revise footnotes g, 2nd line: "When ..... speed is greater than 100 mph, .....".

**Section R602.6 Drilling and notching—studs.** Revise as follows:
In last line delete: "[see Figures R602.6(1) and R602.6(2).]".

**Section R603.8.1.4 Attachment of braced walls to foundations and floor and roof diaphragms.**
Replace as follows:
1st paragraph, last sentence (line 11): Change "sans" to "spans".

**Figure R603.8.1.4(2).** Revise as follows:
Small diagram: Change 43 mil "bldg" to 43 mil "by".

**Table R611.7(6) Minimum Bottom Bar ICF Lintel Reinforcement for Large Clear Spans in Load-Bearing Walls** Revise as follows:

In footnote e: Change Refer to "Section R611.4(2)" to "Section R611.4".

**Section R613.7 Windborne debris protection.** Revise as follows:

Delete this section. (Identical to Sec. R613.4)

**Table R703.4 Weather-Resistant Siding Attachment and Minimum Thickness** Revise as follows:

In Table heading delete "footnotes" after Thickness in title.

In 1st column, 2nd and 3rd row:

**Table R703.4**
**Weather-Resistant Siding Attachment and Minimum Thickness** ~~a,b,c,e,f,g,h,i,j,k,l,m,n,o,p,q,r~~

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Hardboard[l]<br>Panel siding-vertical | 7/16 | Note "g" | Note "g" | Note o | Note o | Note o | Note o | 6" panel edges<br>12" inter. sup.[p] |
| Hardboard<br>Siding vertical<br>Lap-siding-horizontal | <br>7/16<br>7/16 | <br>Note g<br>Note r | <br>Note g<br>Note r | Note q | Note q | Note q | Note q | Same as stud spacing<br>2 per bearing |

**Tables R802.4(1) through R802.5.1(8) Rafter Spans for Common Lumber Species.**

Revise as follows:

In Column 2, Heading: Correct spelling of "Specie" to "Species".

**Table R802.5.1(3) thru R802.5.1(6) Rafter Spans for Common Lumber Species.**

Revise as follows:

In column 7, under 2x12 (feet-inches) add a second "Note b", above 24-8 (2nd line).

**Section R905.10.4 Attachment.** Revise as follows:

Item 2: Change "allow" to "alloy".

**Section R1001.8.1 Residential-type appliances.** Revise as follows:

Item 4, 2nd line: ".. Softening or corrosion, flue gases." (Remove "and" between corrosion and flue)

**Section R1001.11 Flue area (appliance).** Revise as follows:

In 3rd line: Change table references to "[see Tables R1001.11(1) and R1001.11(2)].

**Table R1001.11(1) Net Cross-Sectional Area of Round Flue Sizes**

Revise as follows:

In column 2, under cross-sectional area, row 2, change 28 to "38."

**Table R1003.1 Summary of Requirements for Masonry Fireplaces and Chimneys.**

Revise as follows:

Columns 1, 2, and 3— rows 7(G), 8(H), 9(J), 10(K), 11(L), and 13(N).

| | | |
|---|---|---|
| Smoke chamber wall thickness<br>Unlined walls | G | 6"<br>8" |
| Chimney<br>Vertical reinforcing[b] | H | Four No. 4 full-length bars for chimney up to 40" wide. Add two No. 4 bars for each additional 40" or fraction of width or each additional flue. |
| Horizontal reinforcing | J | 1/4" ties at 18" and two ties at each bend in vertical steel. |
| Bond beams | K | No specified requirements. |
| NO CHANGE | L | NO CHANGE |
| — | N | — |

**Section N1102.2 Maximum solar heat gain coefficient for fenestration products.**

Revise as follows:

In 4th line: "locations with 3500 or fewer heating degree days shall not exceed 0.40."

**Table G2409.2 (308.2) Reduction of Clearances with Specified Forms of Protection**

Revise as follows:

In column 1: Remove all superscript letters.

In title, after the last word (Protection) insert the following: "(a, b, c, d, e, f, g, h, i, j, k)"

**Section P3101.2 Trap and seal protection.** Revise as follows:

In 5th line (last): "..... more than 1 inch of water "column"....."

**Section P3102.1 Main vent required.** Revise as follows:

Change section title to "Stack required"

In 1st line: "Every building shall have a vent stack or a stack vent."

**Chapter 43 – Referenced Standards**

**ASTM:** D 4990—97a: Revise as follows:

Correct spelling: Specication to "Specification"

D 6083—97a Revise as follows:

Correct spelling: Acyrlic to "Acrylic"

**Index** Revise as follows:

**Dryers**

Domestic clothes ..... Chapter "15"

**Lists**

Definition "applied" to electrical equipment ..... E3401

**Pressure**

Maximum ..... "P2903.3.1"

**Walls**

Thickness "," masonry chimney ..... "R1001.7" , R1001.8

# Second Printing
# (March 2001)

**Section R112.2.1 Determination of substantial improvement in areas prone to flooding.**
Revise as follows:
Item 1: End of sentence to read: "..... safe living conditions; or".

**Table R301.2(1) Climatic and Geographic Design Criteria.** Revise as follows:
In third column: Delete footnote f in Seismic Design Category heading,

**Section R309.5 Flood hazard areas.** Revise as follows:
Item 1: End of sentence to read: "... in Section R327; or".

**Section R403.1.4 Minimum depth.** Revise as follows:
In last sentence, of the last paragraph, change "18 inches (457 mm)" to "12 inches (305 mm)".

**Figure R404.1.5(1) Foundation Wall Clay Masonry Curtain Wall with Concrete Masonry Piers.** Revise as follows:
In upper left corner: Change Galvanized or stainless steel straps, min. 4.25 in. wide..... to "$2\ ^{1}/_{16}$"".

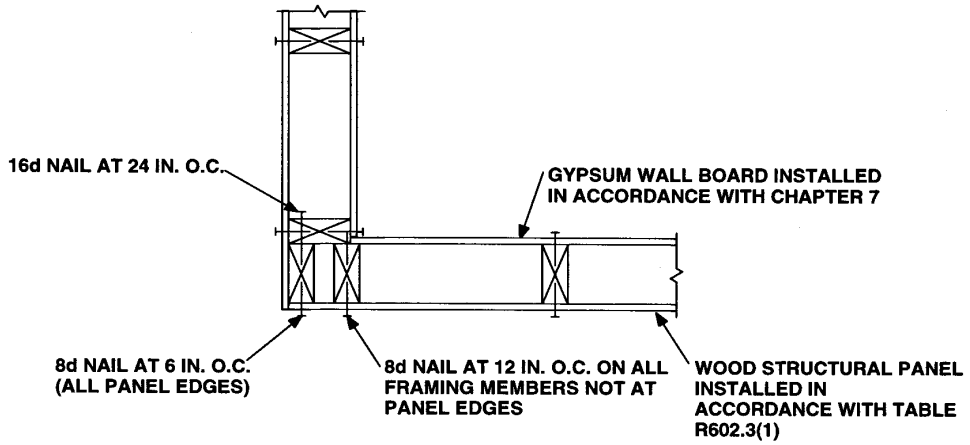
**Section R406.1 Concrete and masonry foundation dampproofing.** Revise as follows:
In first sentence revise reference section from R406.1 to read: "..... required to be waterproofed by Section R406.2".

**Figure R502.2 Floor Construction** Revise as follows:
On left side of figure, in the Solid Blocking area – Lap Joist ..... or Splice
Revise the arrows to point toward the middle girder where the lap or splice is shown.

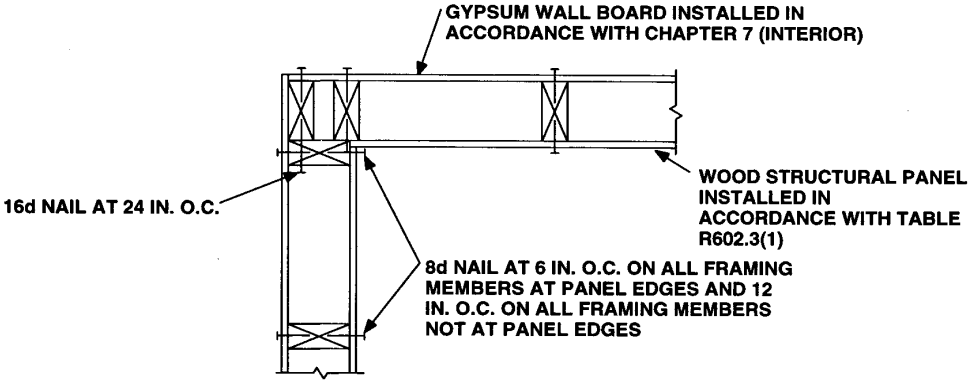
**Table R502.3.1(2) Floor Joist Spans for Common Lumber Species** Revise as follows:
Revise footnotes a and b by changing footnote a to "Note" and footnote b to become footnote "a".

**Table R602.10.3 Wall Bracing** Revise as follows:
Renumber Table R602.10.3 to "Table R602.10.1".
(Also revise references to it in Sections R301.2.2.1.1, R301.2.2.3, R602.10.1, R602.10.2, R602.10.11 and R602.10.11.1)
(Pg's. 39, 39, 116, 116, 116, 119 respectfully)

**Figure R602.10.5 Exterior Corner Framing** Replace as follows:




(a) OUTSIDE CORNER DETAIL




(b) INSIDE CORNER DETAIL

For SI: 1 inch = 25.4 mm.

FIGURE R602.10.5
Exterior Corner Framing

**Section R602.11.1 Wall anchorage.** Revise as follows:

In second sentence, revise to read as follows:

"Plate washers ..... of 3/16 inch by 2 inches by 2 inches..."

**Table R702.3.5 Minimum Thickness and Application of Gypsum Board.**

Revise as follows:

Delete the line in first column under the ½" and 5/8" rows to read as follows:

| THICKNESS OF GYPSUM BOARD (inches) | APPLICATION | ORIENTATION OF GYPSUM BOARD TO FRAMING | MAXIMUM SPACING OF FRAMING MEMBERS (inches o.c.) | MAXIMUM SPACING OF FASTENERS (inches) | | SIZE OF NAILS FOR APPLICATION TO WOOD FRAMING[3] |
|---|---|---|---|---|---|---|
| | | | | Nails[1] | Screws[2] | |
| **Application without adhesive** | | | | | | |
| 1/2 | Ceiling | Either direction | 16 | 7 | 12 | 13 gage, 1 3/8 long, 19/64 head; 0.0980 diameter, 1 1/4 long, annular-ringed; 5d cooler nail, 0.0860 diameter, 1 5/8 long, 15/64 head; or gypsum board nail, 0.0860 diameter, 1 5/8 long, 9/32 head. |
| | Ceiling[d] | Perpendicular | 24 | 7 | 12 | |
| | Wall | Either direction | 24 | 8 | 12 | |
| | Wall | Either direction | 16 | 8 | 16 | |
| 5/8 | Ceiling | Either direction | 16 | 7 | 12 | 13 gage, 1 5/8 long, 19/64 head; 0.0980 diameter, 1 3/8 long, annular-ringed; 6d cooler nail, 0.0920 diameter, 1 7/8 long, 1/4 head; or gypsum board nail, 0.09150 diameter, 1 7/8 long, 19/64 head. |
| | Ceiling | Perpendicular | 24 | 7 | 12 | |
| | Wall | Either direction | 24 | 8 | 12 | |
| | Wall | Either direction | 16 | 8 | 16 | |

**Table R703.7.1 Allowable Spans for Lintels Supporting Masonry Veneer.**

Revise as follows:

Table number: Change from R703.7.1 to "R703.7.3".

In fifth column heading, **No. of ½" or Equivalent Reinforcing Bars**;

Change superscript c to "superscript b".

**Section R703.7.3 Lintels.** Revise as follows:

In fifth line: " ..... set forth in Table R703.7.3".

**Tables R802.5.1(3) through R802.5.1(6) Rafter Spans for Common Lumber Species.**

Revise as follows: Incorrect lines (breakup) of tables. See following tables.

**Table R802.5.1(3)**
**RAFTER SPANS FOR COMMON LUMBER SPECIES**
**(Ground snow load=30 psf, ceiling not attached to rafters, L/Δ=180)**

| RAFTER SPACING (inches) | SPECIE AND GRADE | | DEAD LOAD = 10 psf | | | | | DEAD LOAD = 20 psf | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2x4 | 2x6 | 2x8 | 2x10 | 2x12 | 2x4 | 2x6 | 2x8 | 2x10 | 2x12 |
| | | | Maximum rafter spans[a] | | | | | | | | | |
| | | | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) |
| 12 | Douglas Fir-Larch | SS | 10- 0 | 15- 9 | 20- 9 | Note[b] | Note[b] | 10- 0 | 15- 9 | 20- 1 | 24- 6 | Note[b] |
| | Douglas Fir-Larch | #1 | 9- 8 | 14- 9 | 18- 8 | 22- 9 | Note[b] | 9- 0 | 13- 2 | 16- 8 | 20- 4 | 23- 7 |
| | Douglas Fir-Larch | #2 | 9- 5 | 13- 9 | 17- 5 | 21- 4 | 24- 8 | 8- 5 | 12- 4 | 15- 7 | 19- 1 | 22- 1 |
| | Douglas Fir-Larch | #3 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 | 6- 4 | 9- 4 | 11- 9 | 14- 5 | 16- 8 |
| | Hem-Fir | SS | 9- 6 | 14-10 | 19- 7 | 25- 0 | Note[b] | 9- 6 | 14-10 | 19- 7 | 24- 1 | Note[b] |
| | Hem-Fir | #1 | 9- 3 | 14- 4 | 18- 2 | 22- 2 | 25- 9 | 8- 9 | 12-10 | 16- 3 | 19-10 | 23- 0 |
| | Hem-Fir | #2 | 8-10 | 13- 7 | 17- 2 | 21- 0 | 24- 4 | 8- 4 | 12- 2 | 15- 4 | 18- 9 | 21- 9 |
| | Hem-Fir | #3 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 | 6- 4 | 9- 4 | 11- 9 | 14- 5 | 16- 8 |
| | Southern Pine | SS | 9-10 | 15- 6 | 20- 5 | Note[b] | Note[b] | 9-10 | 15- 6 | 20- 5 | Note[b] | Note[b] |
| | Southern Pine | #1 | 9- 8 | 15- 2 | 20- 0 | 24- 9 | Note[b] | 9- 8 | 14-10 | 18- 8 | 22- 2 | Note[b] |
| | Southern Pine | #2 | 9- 6 | 14- 5 | 18- 8 | 22- 3 | Note[b] | 9- 0 | 12-11 | 16- 8 | 19-11 | 23- 4 |
| | Southern Pine | #3 | 7- 7 | 11- 2 | 14- 3 | 16-10 | 20- 0 | 6- 9 | 10- 0 | 12- 9 | 15- 1 | 17-11 |
| | Spruce-Pine-Fir | SS | 9- 3 | 14- 7 | 19- 2 | 24- 6 | Note[b] | 9- 3 | 14- 7 | 18- 8 | 22- 9 | Note[b] |
| | Spruce-Pine-Fir | #1 | 9- 1 | 13- 9 | 17- 5 | 21- 4 | 24- 8 | 8- 5 | 12- 4 | 15- 7 | 19- 1 | 22- 1 |
| | Spruce-Pine-Fir | #2 | 9- 1 | 13- 9 | 17- 5 | 21- 4 | 24- 8 | 8- 5 | 12- 4 | 15- 7 | 19- 1 | 22- 1 |
| | Spruce-Pine-Fir | #3 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 | 6- 4 | 9- 4 | 11- 9 | 14- 5 | 16- 8 |
| 16 | Douglas Fir-Larch | SS | 9- 1 | 14- 4 | 18-10 | 23- 9 | Note[b] | 9- 1 | 13- 9 | 17- 5 | 21- 3 | 24- 8 |
| | Douglas Fir-Larch | #1 | 8- 9 | 12- 9 | 16- 2 | 19- 9 | 22-10 | 7-10 | 11- 5 | 14- 5 | 17- 8 | 20- 5 |
| | Douglas Fir-Larch | #2 | 8- 2 | 11-11 | 15- 1 | 18- 5 | 21- 5 | 7- 3 | 10- 8 | 13- 6 | 16- 6 | 19- 2 |
| | Douglas Fir-Larch | #3 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 | 5- 6 | 8- 1 | 10- 3 | 12- 6 | 14- 6 |
| | Hem-Fir | SS | 8- 7 | 13- 6 | 17-10 | 22- 9 | Note[b] | 8- 7 | 13- 6 | 17- 1 | 20-10 | 24- 2 |
| | Hem-Fir | #1 | 8- 5 | 12- 5 | 15- 9 | 19- 3 | 22- 3 | 7- 7 | 11- 1 | 14- 1 | 17- 2 | 19-11 |
| | Hem-Fir | #2 | 8- 0 | 11- 9 | 14-11 | 18- 2 | 21- 1 | 7- 2 | 10- 6 | 13- 4 | 16- 3 | 18-10 |
| | Hem-Fir | #3 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 | 5- 6 | 8- 1 | 10- 3 | 12- 6 | 14- 6 |
| | Southern Pine | SS | 8-11 | 14- 1 | 18- 6 | 23- 8 | Note[b] | 8-11 | 14- 1 | 18- 6 | 23- 8 | Note[b] |
| | Southern Pine | #1 | 8- 9 | 13- 9 | 18- 1 | 21- 5 | 25- 7 | 8- 8 | 12-10 | 16- 2 | 19- 2 | 22-10 |
| | Southern Pine | #2 | 8- 7 | 12- 6 | 16- 2 | 19- 3 | 22- 7 | 7-10 | 11- 2 | 14- 5 | 17- 3 | 20- 2 |
| | Southern Pine | #3 | 6- 7 | 9- 8 | 12- 4 | 14- 7 | 17- 4 | 5-10 | 8- 8 | 11- 0 | 13- 0 | 15- 6 |
| | Spruce-Pine-Fir | SS | 8- 5 | 13- 3 | 17- 5 | 22- 1 | 25- 7 | 8- 5 | 12- 9 | 16- 2 | 19- 9 | 22-10 |
| | Spruce-Pine-Fir | #1 | 8- 2 | 11-11 | 15- 1 | 18- 5 | 21- 5 | 7- 3 | 10- 8 | 13- 6 | 16- 6 | 19- 2 |
| | Spruce-Pine-Fir | #2 | 8- 2 | 11-11 | 15- 1 | 18- 5 | 21- 5 | 7- 3 | 10- 8 | 13- 6 | 16- 6 | 19- 2 |
| | Spruce-Pine-Fir | #3 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 | 5- 6 | 8- 1 | 10- 3 | 12- 6 | 14- 6 |
| 19.2 | Douglas Fir-Larch | SS | 8- 7 | 13- 6 | 17- 9 | 25- 2 | 8- 7 | 8- 7 | 12- 6 | 15-10 | 19- 5 | 22- 6 |
| | Douglas Fir-Larch | #1 | 7-11 | 11- 8 | 14- 9 | 20-11 | 7- 1 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 |
| | Douglas Fir-Larch | #2 | 7- 5 | 10-11 | 13- 9 | 19- 6 | 6- 8 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 |
| | Douglas Fir-Larch | #3 | 5- 7 | 8- 3 | 10- 5 | 14- 9 | 5- 0 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 |
| | Hem-Fir | SS | 8- 1 | 12- 9 | 16- 9 | 24- 8 | 8- 1 | 8- 1 | 12- 4 | 15- 7 | 19- 1 | 22- 1 |
| | Hem-Fir | #1 | 7- 9 | 11- 4 | 14- 4 | 20- 4 | 6-11 | 6-11 | 10- 2 | 12-10 | 15- 8 | 18- 2 |
| | Hem-Fir | #2 | 7- 4 | 10- 9 | 13- 7 | 19- 3 | 6- 7 | 6- 7 | 9- 7 | 12- 2 | 14-10 | 17- 3 |
| | Hem-Fir | #3 | 5- 7 | 8- 3 | 10- 5 | 14- 9 | 5- 0 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 |
| | Southern Pine | SS | 8- 5 | 13- 3 | 17- 5 | Note[b] | 8- 5 | 8- 5 | 13- 3 | 17- 5 | 22- 0 | 25- 9 |
| | Southern Pine | #1 | 8- 3 | 13- 0 | 16- 6 | 23- 4 | 7-11 | 7-11 | 11- 9 | 14- 9 | 17- 6 | 20-11 |
| | Southern Pine | #2 | 7-11 | 11- 5 | 14- 9 | 20- 7 | 7- 1 | 7- 1 | 10- 2 | 13- 2 | 15- 9 | 18- 5 |
| | Southern Pine | #3 | 6- 0 | 8-10 | 11- 3 | 15-10 | 5- 4 | 5- 4 | 7-11 | 10- 1 | 11-11 | 14- 2 |
| | Spruce-Pine-Fir | SS | 7-11 | 12- 5 | 16- 5 | 23- 4 | 7-11 | 7-11 | 11- 8 | 14- 9 | 18- 0 | 20-11 |
| | Spruce-Pine-Fir | #1 | 7- 5 | 10-11 | 13- 9 | 16-10 | 19- 6 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 |
| | Spruce-Pine-Fir | #2 | 7- 5 | 10-11 | 13- 9 | 16-10 | 19- 6 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 |
| | Spruce-Pine-Fir | #3 | 5- 7 | 8- 3 | 10- 5 | 12- 9 | 14- 9 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 |
| 24 | Douglas Fir-Larch | SS | 7-11 | 12- 6 | 15-10 | 19- 5 | 22- 6 | 7- 8 | 11- 3 | 14- 2 | 17- 4 | 20- 1 |
| | Douglas Fir-Larch | #1 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 | 6- 4 | 9- 4 | 11- 9 | 14- 5 | 16- 8 |
| | Douglas Fir-Larch | #2 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 5-11 | 8- 8 | 11- 0 | 13- 6 | 15- 7 |
| | Douglas Fir-Larch | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 6 | 6- 7 | 8- 4 | 10- 2 | 11-10 |
| | Hem-Fir | SS | 7- 6 | 11-10 | 15- 7 | 19- 1 | 22- 1 | 7- 6 | 11- 0 | 13-11 | 17- 0 | 19- 9 |
| | Hem-Fir | #1 | 6-11 | 10- 2 | 12-10 | 15- 8 | 18- 2 | 6- 2 | 9- 1 | 11- 6 | 14- 0 | 16- 3 |
| | Hem-Fir | #2 | 6- 7 | 9- 7 | 12- 2 | 14-10 | 17- 3 | 5-10 | 8- 7 | 10-10 | 13- 3 | 15- 5 |
| | Hem-Fir | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 6 | 6- 7 | 8- 4 | 10- 2 | 11-10 |
| | Southern Pine | SS | 7-10 | 12- 3 | 16- 2 | 20- 8 | 25- 1 | 7-10 | 12- 3 | 16- 2 | 19- 8 | 23- 0 |
| | Southern Pine | #1 | 7- 8 | 11- 9 | 14- 9 | 17- 6 | 20-11 | 7- 1 | 10- 6 | 13- 2 | 15- 8 | 18- 8 |
| | Southern Pine | #2 | 7- 1 | 10- 2 | 13- 2 | 15- 9 | 18- 5 | 6- 4 | 9- 2 | 11- 9 | 14- 1 | 16- 6 |
| | Southern Pine | #3 | 5- 4 | 7-11 | 10- 1 | 11-11 | 14- 2 | 4- 9 | 7- 1 | 9- 0 | 10- 8 | 12- 8 |
| | Spruce-Pine-Fir | SS | 7- 4 | 11- 7 | 14- 9 | 18- 0 | 20-11 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 |
| | Spruce-Pine-Fir | #1 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 5-11 | 8- 8 | 11- 0 | 13- 6 | 15- 7 |
| | Spruce-Pine-Fir | #2 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 5-11 | 8- 8 | 11- 0 | 13- 6 | 15- 7 |
| | Spruce-Pine-Fir | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 6 | 6- 7 | 8- 4 | 10- 2 | 11-10 |

**Table R802.5.1(4)**
**RAFTER SPANS FOR COMMON LUMBER SPECIES**
**(Ground snow load=50 psf, ceiling not attached to rafters, L/Δ=180)**

| RAFTER SPACING (inches) | SPECIE AND GRADE | | DEAD LOAD = 10 psf | | | | | DEAD LOAD = 20 psf | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2x4 | 2x6 | 2x8 | 2x10 | 2x12 | 2x4 | 2x6 | 2x8 | 2x10 | 2x12 |
| | | | Maximum rafter spans[a] | | | | | | | | | |
| | | | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) |
| 12 | Douglas Fir-Larch | SS | 8- 5 | 13- 3 | 17- 6 | 22- 4 | 26- 0 | 8- 5 | 13- 3 | 17- 0 | 20- 9 | 24- 0 |
| | Douglas Fir-Larch | #1 | 8- 2 | 12- 0 | 15- 3 | 18- 7 | 21- 7 | 7- 7 | 11- 2 | 14- 1 | 17- 3 | 20- 0 |
| | Douglas Fir-Larch | #2 | 7- 8 | 11- 3 | 14- 3 | 17- 5 | 20- 2 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 |
| | Douglas Fir-Larch | #3 | 5-10 | 8- 6 | 10- 9 | 13- 2 | 15- 3 | 5- 5 | 7-10 | 10- 0 | 12- 2 | 14- 1 |
| | Hem-Fir | SS | 8- 0 | 12- 6 | 16- 6 | 21- 1 | 25- 6 | 8- 0 | 12- 6 | 16- 6 | 20- 4 | 23- 7 |
| | Hem-Fir | #1 | 7-10 | 11- 9 | 14-10 | 18- 1 | 21- 0 | 7- 5 | 10-10 | 13- 9 | 16- 9 | 19- 5 |
| | Hem-Fir | #2 | 7- 5 | 11- 1 | 14- 0 | 17- 2 | 19-11 | 7- 0 | 10- 3 | 13- 0 | 15-10 | 18- 5 |
| | Hem-Fir | #3 | 5-10 | 8- 6 | 10- 9 | 13- 2 | 15- 3 | 5- 5 | 7-10 | 10- 0 | 12- 2 | 14- 1 |
| | Southern Pine | SS | 8- 4 | 13- 0 | 17- 2 | 21-11 | Note[b] | 8- 4 | 13- 0 | 17- 2 | 21-11 | Note[b] |
| | Southern Pine | #1 | 8- 2 | 12-10 | 16-10 | 20- 3 | 24- 1 | 8- 2 | 12- 6 | 15- 9 | 18- 9 | 22- 4 |
| | Southern Pine | #2 | 8- 0 | 11- 9 | 15- 3 | 18- 2 | 21- 3 | 7- 7 | 10-11 | 14- 1 | 16-10 | 19- 9 |
| | Southern Pine | #3 | 6- 2 | 9- 2 | 11- 8 | 13- 9 | 16- 4 | 5- 9 | 8- 5 | 10- 9 | 12- 9 | 15- 2 |
| | Spruce-Pine-Fir | SS | 7-10 | 12- 3 | 16- 2 | 20- 8 | 24- 1 | 7-10 | 12- 3 | 15- 9 | 19- 3 | 22- 4 |
| | Spruce-Pine-Fir | #1 | 7- 8 | 11- 3 | 14- 3 | 17- 5 | 20- 2 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 |
| | Spruce-Pine-Fir | #2 | 7- 8 | 11- 3 | 14- 3 | 17- 5 | 20- 2 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 |
| | Spruce-Pine-Fir | #3 | 5-10 | 8- 6 | 10- 9 | 13- 2 | 15- 3 | 5- 5 | 7-10 | 10- 0 | 12- 2 | 14- 1 |
| 16 | Douglas Fir-Larch | SS | 7- 8 | 12- 1 | 15-10 | 19- 5 | 22- 6 | 7- 8 | 11- 7 | 14- 8 | 17-11 | 20-10 |
| | Douglas Fir-Larch | #1 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 | 6- 7 | 9- 8 | 12- 2 | 14-11 | 17- 3 |
| | Douglas Fir-Larch | #2 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 |
| | Douglas Fir-Larch | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 8 | 6-10 | 8- 8 | 10- 6 | 12- 3 |
| | Hem-Fir | SS | 7- 3 | 11- 5 | 15- 0 | 19- 1 | 22- 1 | 7- 3 | 11- 5 | 14- 5 | 17- 8 | 20- 5 |
| | Hem-Fir | #1 | 6-11 | 10- 2 | 12-10 | 15- 8 | 18- 2 | 6- 5 | 9- 5 | 11-11 | 14- 6 | 16-10 |
| | Hem-Fir | #2 | 6- 7 | 9- 7 | 12- 2 | 14-10 | 17- 3 | 6- 1 | 8-11 | 11- 3 | 13- 9 | 15-11 |
| | Hem-Fir | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 8 | 6-10 | 8- 8 | 10- 6 | 12- 3 |
| | Southern Pine | SS | 7- 6 | 11-10 | 15- 7 | 19-11 | 24- 3 | 7- 6 | 11-10 | 15- 7 | 19-11 | 23-10 |
| | Southern Pine | #1 | 7- 5 | 11- 7 | 14- 9 | 17- 6 | 20-11 | 7- 4 | 10-10 | 13- 8 | 16- 2 | 19- 4 |
| | Southern Pine | #2 | 7- 1 | 10- 2 | 13- 2 | 15- 9 | 18- 5 | 6- 7 | 9- 5 | 12- 2 | 14- 7 | 17- 1 |
| | Southern Pine | #3 | 5- 4 | 7- 11 | 10- 1 | 11-11 | 14- 2 | 4-11 | 7- 4 | 9- 4 | 11- 0 | 13- 1 |
| | Spruce-Pine-Fir | SS | 7- 1 | 11- 2 | 14- 8 | 18- 0 | 20-11 | 7- 1 | 10- 9 | 13- 8 | 15-11 | 19- 4 |
| | Spruce-Pine-Fir | #1 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 |
| | Spruce-Pine-Fir | #2 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 |
| | Spruce-Pine-Fir | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 8 | 6-10 | 8- 8 | 10- 6 | 12- 3 |
| 19.2 | Douglas Fir-Larch | SS | 7- 3 | 11- 4 | 14- 6 | 17- 8 | 20- 6 | 7- 3 | 10- 7 | 13- 5 | 16- 5 | 19- 0 |
| | Douglas Fir-Larch | #1 | 6- 6 | 9- 6 | 12- 0 | 14- 8 | 17- 1 | 6- 0 | 8-10 | 11- 2 | 13- 7 | 15- 9 |
| | Douglas Fir-Larch | #2 | 6- 1 | 8-11 | 11- 3 | 13- 9 | 15-11 | 5- 7 | 8- 3 | 10- 5 | 12- 9 | 14- 9 |
| | Douglas Fir-Larch | #3 | 4- 7 | 6- 9 | 8- 6 | 10- 5 | 12- 1 | 4- 3 | 6- 3 | 7-11 | 9- 7 | 11- 2 |
| | Hem-Fir | SS | 6-10 | 10- 9 | 14- 2 | 17- 5 | 20- 2 | 6-10 | 10- 5 | 13- 2 | 16- 1 | 18- 8 |
| | Hem-Fir | #1 | 6- 4 | 9- 3 | 11- 9 | 14- 4 | 16- 7 | 5-10 | 8- 7 | 10-10 | 13- 3 | 15- 5 |
| | Hem-Fir | #2 | 6- 0 | 8- 9 | 11- 1 | 13- 7 | 15- 9 | 5- 7 | 8- 1 | 10- 3 | 12- 7 | 14- 7 |
| | Hem-Fir | #3 | 4- 7 | 6- 9 | 8- 6 | 10- 5 | 12- 1 | 4- 3 | 6- 3 | 7-11 | 9- 7 | 11- 2 |
| | Southern Pine | SS | 7- 1 | 11- 2 | 14- 8 | 18- 9 | 22-10 | 7- 1 | 11- 2 | 14- 8 | 18- 7 | 21- 9 |
| | Southern Pine | #1 | 7- 0 | 10- 8 | 13- 5 | 16- 0 | 19- 1 | 6- 8 | 9-11 | 12- 5 | 14-10 | 17- 8 |
| | Southern Pine | #2 | 6- 6 | 9- 4 | 12- 0 | 14- 4 | 16-10 | 6- 0 | 8- 8 | 11- 2 | 13- 4 | 15- 7 |
| | Southern Pine | #3 | 4-11 | 7- 3 | 9- 2 | 10-10 | 12-11 | 4- 6 | 6- 8 | 8- 6 | 10- 1 | 12- 0 |
| | Spruce-Pine-Fir | SS | 6- 8 | 10- 6 | 13- 5 | 16- 5 | 19- 1 | 6- 8 | 9-10 | 12- 5 | 15- 3 | 17- 8 |
| | Spruce-Pine-Fir | #1 | 6- 1 | 8-11 | 11- 3 | 13- 9 | 15-11 | 5- 7 | 8- 3 | 10- 5 | 12- 9 | 14- 9 |
| | Spruce-Pine-Fir | #2 | 6- 1 | 8-11 | 11- 3 | 13- 9 | 15-11 | 5- 7 | 8- 3 | 10- 5 | 12- 9 | 14- 9 |
| | Spruce-Pine-Fir | #3 | 4- 7 | 6- 9 | 8- 6 | 10- 5 | 12- 1 | 4- 3 | 6- 3 | 7-11 | 9- 7 | 11- 2 |
| 24 | Douglas Fir-Larch | SS | 6-8 | 10-3 | 13-0 | 15-10 | 18-4 | 6-6 | 9-6 | 12-0 | 14-8 | 17-0 |
| | Douglas fir-larch | #1 | 5-10 | 8-6 | 10-9 | 13-2 | 15-3 | 5-5 | 7-10 | 10-0 | 12-2 | 14-1 |
| | Douglas fir-larch | #2 | 5-5 | 7-11 | 10-1 | 12-4 | 14-3 | 5-0 | 7-4 | 9-4 | 11-5 | 13-2 |
| | Douglas fir-larch | #3 | 4-1 | 6-0 | 7-7 | 9-4 | 10-9 | 3-10 | 5-7 | 7-1 | 8-7 | 10-0 |
| | Hem-Fir | SS | 6- 4 | 9-11 | 12- 9 | 15- 7 | 18- 0 | 6- 4 | 9- 4 | 11- 9 | 14- 5 | 16- 8 |
| | Hem-Fir | #1 | 5- 8 | 8- 3 | 10- 6 | 12-10 | 14-10 | 5- 3 | 7- 8 | 9- 9 | 11-10 | 13- 9 |
| | Hem-Fir | #2 | 5- 4 | 7-10 | 9-11 | 12- 1 | 14- 1 | 4-11 | 7- 3 | 9- 2 | 11- 3 | 13- 0 |
| | Hem-Fir | #3 | 4- 1 | 6- 0 | 7- 7 | 9- 4 | 10- 9 | 3-10 | 5- 7 | 7- 1 | 8- 7 | 10- 0 |
| | Southern Pine | SS | 6- 7 | 10- 4 | 13- 8 | 17- 5 | 21- 0 | 6- 7 | 10- 4 | 13- 8 | 16- 7 | 19- 5 |
| | Southern Pine | #1 | 6- 5 | 9- 7 | 12- 0 | 14- 4 | 17- 1 | 6- 0 | 8-10 | 11- 2 | 13- 3 | 15- 9 |
| | Southern Pine | #2 | 5-10 | 8- 4 | 10- 9 | 12-10 | 15- 1 | 5- 5 | 7- 9 | 10- 0 | 11-11 | 13-11 |
| | Southern Pine | #3 | 4- 4 | 6- 5 | 8- 3 | 9- 9 | 11- 7 | 4- 1 | 6- 0 | 7- 7 | 9- 0 | 10- 8 |
| | Spruce-Pine-Fir | SS | 6- 2 | 9- 6 | 12- 0 | 14- 8 | 17- 1 | 6- 0 | 8-10 | 11- 2 | 13- 7 | 15- 9 |
| | Spruce-Pine-Fir | #1 | 5- 5 | 7-11 | 10- 1 | 12- 4 | 14- 3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 |
| | Spruce-Pine-Fir | #2 | 5- 5 | 7-11 | 10- 1 | 12- 4 | 14- 3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 |
| | Spruce-Pine-Fir | #3 | 4- 1 | 6- 0 | 7- 7 | 9- 4 | 10- 9 | 3-10 | 5- 7 | 7- 1 | 8- 7 | 10- 0 |

**Table R802.5.1(5)**
**RAFTER SPANS FOR COMMON LUMBER SPECIES**
**(Ground snow load=30 psf, ceiling not attached to rafters, L/Δ=240)**

| RAFTER SPACING (inches) | SPECIE AND GRADE | | DEAD LOAD = 10 psf | | | | | DEAD LOAD = 20 psf | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2x4 | 2x6 | 2x8 | 2x10 | 2x12 | 2x4 | 2x6 | 2x8 | 2x10 | 2x12 |
| | | | Maximum rafter spans[a] | | | | | | | | | |
| | | | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) |
| 12 | Douglas Fir-Larch | SS | 9- 1 | 14- 4 | 18-10 | 24- 1 | Note[b] | 9- 1 | 14- 4 | 18-10 | 24- 1 | Note[b] |
| | Douglas Fir-Larch | #1 | 8- 9 | 13- 9 | 18- 2 | 22- 9 | Note[b] | 8- 9 | 13- 2 | 16- 8 | 20- 4 | 23- 7 |
| | Douglas Fir-Larch | #2 | 8- 7 | 13- 6 | 17- 5 | 21- 4 | 24- 8 | 8- 5 | 12- 4 | 15- 7 | 19- 1 | 22- 1 |
| | Douglas Fir-Larch | #3 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 | 6- 4 | 9- 4 | 11- 9 | 14- 5 | 16- 8 |
| | Hem-Fir | SS | 8- 7 | 13- 6 | 17-10 | 22- 9 | Note[b] | 8- 7 | 13- 6 | 17-10 | 22- 9 | Note[b] |
| | Hem-Fir | #1 | 8- 5 | 13- 3 | 17- 5 | 22- 2 | 25- 9 | 8- 5 | 12-10 | 16- 3 | 19-10 | 23- 0 |
| | Hem-Fir | #2 | 8- 0 | 12- 7 | 16- 7 | 21- 0 | 24- 4 | 8- 0 | 12- 2 | 15- 4 | 18- 9 | 21- 9 |
| | Hem-Fir | #3 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 | 6- 4 | 9- 4 | 11- 9 | 14- 5 | 16- 8 |
| | Southern Pine | SS | 8-11 | 14- 1 | 18- 6 | 23- 8 | Note[b] | 8-11 | 14- 1 | 18- 6 | 23- 8 | Note[b] |
| | Southern Pine | #1 | 8- 9 | 13- 9 | 18- 2 | 23- 2 | Note[b] | 8- 9 | 13- 9 | 18- 2 | 22- 2 | Note[b] |
| | Southern Pine | #2 | 8- 7 | 13- 6 | 17-10 | 22- 3 | Note[b] | 8- 7 | 12-11 | 16- 8 | 19-11 | 23- 4 |
| | Southern Pine | #3 | 7- 7 | 11- 2 | 14- 3 | 16-10 | 20- 0 | 6- 9 | 10- 0 | 12- 9 | 15- 1 | 17-11 |
| | Spruce-Pine-Fir | SS | 8- 5 | 13- 3 | 17- 5 | 22- 3 | Note[b] | 8- 5 | 13- 3 | 17- 5 | 22- 3 | Note[b] |
| | Spruce-Pine-Fir | #1 | 8- 3 | 12-11 | 17- 0 | 21- 4 | 24- 8 | 8- 3 | 12- 4 | 15- 7 | 19- 1 | 22- 1 |
| | Spruce-Pine-Fir | #2 | 8- 3 | 12-11 | 17- 0 | 21- 4 | 24- 8 | 8- 3 | 12- 4 | 15- 7 | 19- 1 | 22- 1 |
| | Spruce-Pine-Fir | #3 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 | 6- 4 | 9- 4 | 11- 9 | 14- 5 | 16- 8 |
| 16 | Douglas Fir-Larch | SS | 8- 3 | 13- 0 | 17- 2 | 21-10 | Note[b] | 8- 3 | 13- 0 | 17- 2 | 21- 3 | 24- 8 |
| | Douglas Fir-Larch | #1 | 8- 0 | 12- 6 | 16- 2 | 19- 9 | 22-10 | 7-10 | 11- 5 | 14- 5 | 17- 8 | 20- 5 |
| | Douglas Fir-Larch | #2 | 7-10 | 11-11 | 15- 1 | 18- 5 | 21- 5 | 7- 3 | 10- 8 | 13- 6 | 16- 6 | 19- 2 |
| | Douglas Fir-Larch | #3 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 | 5- 6 | 8- 1 | 10- 3 | 12- 6 | 14- 6 |
| | Hem-Fir | SS | 7-10 | 12- 3 | 16- 2 | 20- 8 | 25- 1 | 7-10 | 12- 3 | 16- 2 | 20- 8 | 24- 2 |
| | Hem-Fir | #1 | 7- 8 | 12- 0 | 15- 9 | 19- 3 | 22- 3 | 7- 7 | 11- 1 | 14- 1 | 17- 2 | 19-11 |
| | Hem-Fir | #2 | 7- 3 | 11- 5 | 14-11 | 18- 2 | 21- 1 | 7- 2 | 10- 6 | 13- 4 | 16- 3 | 18-10 |
| | Hem-Fir | #3 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 | 5- 6 | 8- 1 | 10- 3 | 12- 6 | 14- 6 |
| | Southern Pine | SS | 8- 1 | 12- 9 | 16-10 | 21- 6 | Note[b] | 8- 1 | 12- 9 | 16-10 | 21- 6 | Note[b] |
| | Southern Pine | #1 | 8- 0 | 12- 6 | 16- 6 | 21- 1 | 25- 7 | 8- 0 | 12- 6 | 16- 2 | 19- 2 | 22-10 |
| | Southern Pine | #2 | 7-10 | 12- 3 | 16- 2 | 19- 3 | 22- 7 | 7-10 | 11- 2 | 14- 5 | 17- 3 | 20- 2 |
| | Southern Pine | #3 | 6- 7 | 9- 8 | 12- 4 | 14- 7 | 17- 4 | 5-10 | 8- 8 | 11- 0 | 13- 0 | 15- 6 |
| | Spruce-Pine-Fir | SS | 7- 8 | 12- 0 | 15-10 | 20- 2 | 24- 7 | 7- 8 | 12- 0 | 15-10 | 19- 9 | 22-10 |
| | Spruce-Pine-Fir | #1 | 7- 6 | 11- 9 | 15- 1 | 18- 5 | 21- 5 | 7- 3 | 10- 8 | 13- 6 | 16- 6 | 19- 2 |
| | Spruce-Pine-Fir | #2 | 7- 6 | 11- 9 | 15- 1 | 18- 5 | 21- 5 | 7- 3 | 10- 8 | 13- 6 | 16- 6 | 19- 2 |
| | Spruce-Pine-Fir | #3 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 | 5- 6 | 8- 1 | 10- 3 | 12- 6 | 14- 6 |
| 19.2 | Douglas Fir-Larch | SS | 7- 9 | 12- 3 | 16- 1 | 20- 7 | 25- 0 | 7- 9 | 12- 3 | 15-10 | 19- 5 | 22- 6 |
| | Douglas Fir-Larch | #1 | 7- 6 | 11- 8 | 14- 9 | 18- 0 | 20-11 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 |
| | Douglas Fir-Larch | #2 | 7- 4 | 10-11 | 13- 9 | 16-10 | 19- 6 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 |
| | Douglas Fir-Larch | #3 | 5- 7 | 8- 3 | 10- 5 | 12- 9 | 14- 9 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 |
| | Hem-Fir | SS | 7- 4 | 11- 7 | 15- 3 | 19- 5 | 23- 7 | 7- 4 | 11- 7 | 15- 3 | 19- 1 | 22- 1 |
| | Hem-Fir | #1 | 7- 2 | 11- 4 | 14- 4 | 17- 7 | 20- 4 | 6-11 | 10- 2 | 12-10 | 15- 8 | 18- 2 |
| | Hem-Fir | #2 | 6-10 | 10- 9 | 13- 7 | 16- 7 | 19- 3 | 6- 7 | 9- 7 | 12- 2 | 14-10 | 17- 3 |
| | Hem-Fir | #3 | 5- 7 | 8- 3 | 10- 5 | 12- 9 | 14- 9 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 |
| | Southern Pine | SS | 7- 8 | 12- 0 | 15-10 | 20- 2 | 24- 7 | 7- 8 | 12- 0 | 15-10 | 20- 2 | 24- 7 |
| | Southern Pine | #1 | 7- 6 | 11- 9 | 15- 6 | 19- 7 | 23- 4 | 7- 6 | 11- 9 | 14- 9 | 17- 6 | 20-11 |
| | Southern Pine | #2 | 7- 4 | 11- 5 | 14- 9 | 17- 7 | 20- 7 | 7- 1 | 10- 2 | 13- 2 | 15- 9 | 18- 5 |
| | Southern Pine | #3 | 6- 0 | 8-10 | 11- 3 | 13- 4 | 15-10 | 5- 4 | 7-11 | 10- 1 | 11-11 | 14- 2 |
| | Spruce-Pine-Fir | SS | 7- 2 | 11- 4 | 14-11 | 19- 0 | 23- 1 | 7- 2 | 11- 4 | 14- 9 | 18- 0 | 20-11 |
| | Spruce-Pine-Fir | #1 | 7- 0 | 10-11 | 13- 9 | 16-10 | 19- 6 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 |
| | Spruce-Pine-Fir | #2 | 7- 0 | 10-11 | 13- 9 | 16-10 | 19- 6 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 |
| | Spruce-Pine-Fir | #3 | 5- 7 | 8- 3 | 10- 5 | 12- 9 | 14- 9 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 |
| 24 | Douglas Fir-Larch | SS | 7- 3 | 11- 4 | 15- 0 | 19- 1 | 22- 6 | 7- 3 | 11- 3 | 14- 2 | 17- 4 | 20- 1 |
| | Douglas Fir-Larch | #1 | 7- 0 | 10- 5 | 13- 2 | 16- 1 | 18- 8 | 6- 4 | 9- 4 | 11- 9 | 14- 5 | 16- 8 |
| | Douglas Fir-Larch | #2 | 6- 8 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 5-11 | 8- 8 | 11- 0 | 13- 6 | 15- 7 |
| | Douglas Fir-Larch | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 6 | 6- 7 | 8- 4 | 10- 2 | 11-10 |
| | Hem-Fir | SS | 6-10 | 10- 9 | 14- 2 | 18- 0 | 21-11 | 6-10 | 10- 9 | 13-11 | 17- 0 | 19- 9 |
| | Hem-Fir | #1 | 6- 8 | 10- 2 | 12-10 | 15- 8 | 18- 2 | 6- 2 | 9- 1 | 11- 6 | 14- 0 | 16- 3 |
| | Hem-Fir | #2 | 6- 4 | 9- 7 | 12- 2 | 14-10 | 17- 3 | 5-10 | 8- 7 | 10-10 | 13- 3 | 15- 5 |
| | Hem-Fir | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 6 | 6- 7 | 8- 4 | 10- 2 | 11-10 |
| | Southern Pine | SS | 7- 1 | 11- 2 | 14- 8 | 18- 9 | 22-10 | 7- 1 | 11- 2 | 14- 8 | 18- 9 | 22-10 |
| | Southern Pine | #1 | 7- 0 | 10-11 | 14- 5 | 17- 6 | 20-11 | 7- 0 | 10- 6 | 13- 2 | 15- 8 | 18- 8 |
| | Southern Pine | #2 | 6-10 | 10- 2 | 13- 2 | 15- 9 | 18- 5 | 6- 4 | 9- 2 | 11- 9 | 14- 1 | 16- 6 |
| | Southern Pine | #3 | 5- 4 | 7-11 | 10- 1 | 11-11 | 14- 2 | 4- 9 | 7- 1 | 9- 0 | 10- 8 | 12- 8 |
| | Spruce-Pine-Fir | SS | 6- 8 | 10- 6 | 13-10 | 17- 8 | 20-11 | 6- 8 | 10- 5 | 13- 2 | 16- 1 | 18- 8 |
| | Spruce-Pine-Fir | #1 | 6- 6 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 5-11 | 8- 8 | 11- 0 | 13- 6 | 15- 7 |
| | Spruce-Pine-Fir | #2 | 6- 6 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 5-11 | 8- 8 | 11- 0 | 13- 6 | 15- 7 |
| | Spruce-Pine-Fir | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 6 | 6- 7 | 8- 4 | 10- 2 | 11-10 |

**Table R802.5.1(6)**
**RAFTER SPANS FOR COMMON LUMBER SPECIES**
**(Ground snow load=50 psf, ceiling not attached to rafters, L/Δ=240)**

| RAFTER SPACING (inches) | SPECIE AND GRADE | | DEAD LOAD = 10 psf | | | | | DEAD LOAD = 20 psf | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2x4 | 2x6 | 2x8 | 2x10 | 2x12 | 2x4 | 2x6 | 2x8 | 2x10 | 2x12 |
| | | | Maximum rafter spans[a] | | | | | | | | | |
| | | | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) | (feet - inches) |
| 12 | Douglas Fir-Larch | SS | 7- 8 | 12- 1 | 15-11 | 20- 3 | 24- 8 | 7- 8 | 12- 1 | 15-11 | 20- 3 | 24- 0 |
| | Douglas Fir-Larch | #1 | 7- 5 | 11- 7 | 15- 3 | 18- 7 | 21- 7 | 7- 5 | 11- 2 | 14- 1 | 17- 3 | 20- 0 |
| | Douglas Fir-Larch | #2 | 7- 3 | 11- 3 | 14- 3 | 17- 5 | 20- 2 | 7- 1 | 10- 5 | 13- 2 | 16- 1 | 18- 8 |
| | Douglas Fir-Larch | #3 | 5-10 | 8- 6 | 10- 9 | 13- 2 | 15- 3 | 5- 5 | 7-10 | 10- 0 | 12- 2 | 14- 1 |
| | Hem-Fir | SS | 7- 3 | 11- 5 | 15- 0 | 19- 2 | 23- 4 | 7- 3 | 11- 1 | 15- 0 | 19- 2 | 23- 4 |
| | Hem-Fir | #1 | 7- 1 | 11- 2 | 14- 8 | 18- 1 | 21- 0 | 7- 1 | 0-10 | 13- 9 | 16- 9 | 19- 5 |
| | Hem-Fir | #2 | 6- 9 | 10- 8 | 14- 0 | 17- 2 | 19-11 | 6- 9 | 10- 3 | 13- 0 | 15-10 | 18- 5 |
| | Hem-Fir | #3 | 5-10 | 8- 6 | 10- 9 | 13- 2 | 15- 3 | 5- 5 | 7-10 | 10- 0 | 12- 2 | 14- 1 |
| | Southern Pine | SS | 7- 6 | 11-10 | 15- 7 | 19-11 | 24- 3 | 7- 6 | 11-10 | 15- 7 | 19-11 | 24- 3 |
| | Southern Pine | #1 | 7- 5 | 11- 7 | 15- 4 | 19- 7 | 23- 9 | 7- 5 | 11- 7 | 15- 4 | 18- 9 | 22- 4 |
| | Southern Pine | #2 | 7- 3 | 11- 5 | 15- 0 | 18- 2 | 21- 3 | 7- 3 | 10-11 | 14- 1 | 16-10 | 19- 9 |
| | Southern Pine | #3 | 6- 2 | 9- 2 | 11- 8 | 13- 9 | 16- 4 | 5- 9 | 8- 5 | 10- 9 | 12- 9 | 15- 2 |
| | Spruce-Pine-Fir | SS | 7- 1 | 11- 2 | 14- 8 | 18- 9 | 22-10 | 7- 1 | 11- 2 | 14- 8 | 18- 9 | 22- 4 |
| | Spruce-Pine-Fir | #1 | 6-11 | 10-11 | 14- 3 | 17- 5 | 20- 2 | 6-11 | 10- 5 | 13- 2 | 16- 1 | 18- 8 |
| | Spruce-Pine-Fir | #2 | 6-11 | 10-11 | 14- 3 | 17- 5 | 20- 2 | 6-11 | 10- 5 | 13- 2 | 16- 1 | 18- 8 |
| | Spruce-Pine-Fir | #3 | 5-10 | 8- 6 | 10- 9 | 13- 2 | 15- 3 | 5- 5 | 7-10 | 10- 0 | 12- 2 | 14- 1 |
| 16 | Douglas Fir-Larch | SS | 7- 0 | 11- 0 | 14- 5 | 18- 5 | 22- 5 | 7- 0 | 11- 0 | 14- 5 | 17-11 | 20-10 |
| | Douglas Fir-Larch | #1 | 6- 9 | 10- 5 | 13- 2 | 16- 1 | 18- 8 | 6- 7 | 9- 8 | 12- 2 | 14-11 | 17- 3 |
| | Douglas Fir-Larch | #2 | 6- 7 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 |
| | Douglas Fir-Larch | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 8 | 6-10 | 8- 8 | 10- 6 | 12- 3 |
| | Hem-Fir | SS | 6- 7 | 10- 4 | 13- 8 | 17- 5 | 21- 2 | 6- 7 | 10- 4 | 13- 8 | 17- 5 | 20- 5 |
| | Hem-Fir | #1 | 6- 5 | 10- 2 | 12-10 | 15- 8 | 18- 2 | 6- 5 | 9- 5 | 11-11 | 14- 6 | 16-10 |
| | Hem-Fir | #2 | 6- 2 | 9- 7 | 12- 2 | 14-10 | 17- 3 | 6- 1 | 8-11 | 11- 3 | 13- 9 | 15-11 |
| | Hem-Fir | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 8 | 6-10 | 8- 8 | 10- 6 | 12- 3 |
| | Southern Pine | SS | 6-10 | 10- 9 | 14- 2 | 18- 1 | 22- 0 | 6-10 | 10- 9 | 14- 2 | 18- 1 | 22- 0 |
| | Southern Pine | #1 | 6- 9 | 10- 7 | 13-11 | 17- 6 | 20-11 | 6- 9 | 10- 7 | 13- 8 | 16- 2 | 19- 4 |
| | Southern Pine | #2 | 6- 7 | 10- 2 | 13- 2 | 15- 9 | 18- 5 | 6- 7 | 9- 5 | 12- 2 | 14- 7 | 17- 1 |
| | Southern Pine | #3 | 5- 4 | 7-11 | 10- 1 | 11-11 | 14- 2 | 4-11 | 7- 4 | 9- 4 | 11- 0 | 13- 1 |
| | Spruce-Pine-Fir | SS | 6- 5 | 10- 2 | 13- 4 | 17- 0 | 20- 9 | 6- 5 | 10- 2 | 13- 4 | 16- 8 | 19- 4 |
| | Spruce-Pine-Fir | #1 | 6- 4 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 |
| | Spruce-Pine-Fir | #2 | 6- 4 | 9- 9 | 12- 4 | 15- 1 | 17- 6 | 6- 2 | 9- 0 | 11- 5 | 13-11 | 16- 2 |
| | Spruce-Pine-Fir | #3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 | 4- 8 | 6-10 | 8- 8 | 10- 6 | 12- 3 |
| 19.2 | Douglas Fir-Larch | SS | 6- 7 | 10- 4 | 13- 7 | 17- 4 | 20- 6 | 6- 7 | 10- 4 | 13- 5 | 16- 5 | 19- 0 |
| | Douglas Fir-Larch | #1 | 6- 4 | 9- 6 | 12- 0 | 14- 8 | 17- 1 | 6- 0 | 8-10 | 11- 2 | 13- 7 | 15- 9 |
| | Douglas Fir-Larch | #2 | 6- 1 | 8-11 | 11- 3 | 13- 9 | 15-11 | 5- 7 | 8- 3 | 10- 5 | 12- 9 | 14- 9 |
| | Douglas Fir-Larch | #3 | 4- 7 | 6- 9 | 8- 6 | 10- 5 | 12- 1 | 4- 3 | 6- 3 | 7-11 | 9- 7 | 11- 2 |
| | Hem-Fir | SS | 6- 2 | 9- 9 | 12-10 | 16- 5 | 19-11 | 6- 2 | 9- 9 | 12-10 | 16- 1 | 18- 8 |
| | Hem-Fir | #1 | 6- 1 | 9- 3 | 11- 9 | 14- 4 | 16- 7 | 5-10 | 8- 7 | 10-10 | 13- 3 | 15- 5 |
| | Hem-Fir | #2 | 5- 9 | 8- 9 | 11- 1 | 13- 7 | 15- 9 | 5- 7 | 8- 1 | 10- 3 | 12- 7 | 14- 7 |
| | Hem-Fir | #3 | 4- 7 | 6- 9 | 8- 6 | 10- 5 | 12- 1 | 4- 3 | 6- 3 | 7-11 | 9- 7 | 11- 2 |
| | Southern Pine | SS | 6- 5 | 10- 2 | 13- 4 | 17- 0 | 20- 9 | 6- 5 | 10- 2 | 13- 4 | 17- 0 | 20- 9 |
| | Southern Pine | #1 | 6- 4 | 9-11 | 13- 1 | 16- 0 | 19- 1 | 6- 4 | 9-11 | 12- 5 | 14-10 | 17- 8 |
| | Southern Pine | #2 | 6- 2 | 9- 4 | 12- 0 | 14- 4 | 16-10 | 6- 0 | 8- 8 | 11- 2 | 13- 4 | 15- 7 |
| | Southern Pine | #3 | 4-11 | 7- 3 | 9- 2 | 10-10 | 12-11 | 4- 6 | 6- 8 | 8- 6 | 10- 1 | 12- 0 |
| | Spruce-Pine-Fir | SS | 6- 1 | 9- 6 | 12- 7 | 16- 0 | 19- 1 | 6- 1 | 9- 6 | 12- 5 | 15- 3 | 17- 8 |
| | Spruce-Pine-Fir | #1 | 5-11 | 8-11 | 11- 3 | 13- 9 | 15-11 | 5- 7 | 8- 3 | 10- 5 | 12- 9 | 14- 9 |
| | Spruce-Pine-Fir | #2 | 5-11 | 8-11 | 11- 3 | 13- 9 | 15-11 | 5- 7 | 8- 3 | 10- 5 | 12- 9 | 14- 9 |
| | Spruce-Pine-Fir | #3 | 4- 7 | 6- 9 | 8- 6 | 10- 5 | 12- 1 | 4- 3 | 6- 3 | 7-11 | 9- 7 | 11- 2 |
| 24 | Douglas Fir-Larch | SS | 6- 1 | 9- 7 | 12- 7 | 15-10 | 18- 4 | 6- 1 | 9- 6 | 12- 0 | 14- 8 | 17- 0 |
| | Douglas Fir-Larch | #1 | 5-10 | 8- 6 | 10- 9 | 13- 2 | 15- 3 | 5- 5 | 7-10 | 10- 0 | 12- 2 | 14- 1 |
| | Douglas Fir-Larch | #2 | 5- 5 | 7-11 | 10- 1 | 12- 4 | 14- 3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 |
| | Douglas Fir-Larch | #3 | 4- 1 | 6- 0 | 7- 7 | 9- 4 | 10- 9 | 3-10 | 5- 7 | 7- 1 | 8- 7 | 10- 0 |
| | Hem-Fir | SS | 5- 9 | 9- 1 | 11-11 | 15- 2 | 18- 0 | 5- 9 | 9- 1 | 11- 9 | 14- 5 | 15-11 |
| | Hem-Fir | #1 | 5- 8 | 8- 3 | 10- 6 | 12-10 | 14-10 | 5- 3 | 7- 8 | 9- 9 | 11-10 | 13- 9 |
| | Hem-Fir | #2 | 5- 4 | 7-10 | 9-11 | 12- 1 | 14- 1 | 4-11 | 7- 3 | 9- 2 | 11- 3 | 13- 0 |
| | Hem-Fir | #3 | 4- 1 | 6- 0 | 7- 7 | 9- 4 | 10- 9 | 3-10 | 5- 7 | 7- 1 | 8- 7 | 10- 0 |
| | Southern Pine | SS | 6- 0 | 9- 5 | 12- 5 | 15-10 | 19- 3 | 6- 0 | 9- 5 | 12- 5 | 15-10 | 19- 3 |
| | Southern Pine | #1 | 5-10 | 9- 3 | 12- 0 | 14- 4 | 17- 1 | 5-10 | 8-10 | 11- 2 | 13- 3 | 15- 9 |
| | Southern Pine | #2 | 5- 9 | 8- 4 | 10- 9 | 12-10 | 15- 1 | 5- 5 | 7- 9 | 10- 0 | 11-11 | 13-11 |
| | Southern Pine | #3 | 4- 4 | 6- 5 | 8- 3 | 9- 9 | 11- 7 | 4- 1 | 6- 0 | 7- 7 | 9- 0 | 10- 8 |
| | Spruce-Pine-Fir | SS | 5- 8 | 8-10 | 11- 8 | 14- 8 | 17- 1 | 5- 8 | 8-10 | 11- 2 | 13- 7 | 15- 9 |
| | Spruce-Pine-Fir | #1 | 5- 5 | 7-11 | 10- 1 | 12- 4 | 14- 3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 |
| | Spruce-Pine-Fir | #2 | 5- 5 | 7-11 | 10- 1 | 12- 4 | 14- 3 | 5- 0 | 7- 4 | 9- 4 | 11- 5 | 13- 2 |
| | Spruce-Pine-Fir | #3 | 4- 1 | 6- 0 | 7- 7 | 9- 4 | 10- 9 | 3-10 | 5- 7 | 7- 1 | 8- 7 | 10- 0 |

**Section R903.2.1 Locations.**
Revise last sentence "..... of not less than".

**Table R905.7.5 Wood Shingle Weather Exposure and Roof Slope.**
Delete: "Footnote a. For 24-inch by 3/8-inch handsplit shakes, the maximum exposure is 7-1/2 inches for roof pitches of 4:12 and steeper only. (See Section R905.8.1)".

**Section M1801.11 Multiple-appliance venting systems.**
In Item 1, exception: Change referenced section from M1801to "Section G2426".

**Section G2401.1 (101.1) Application.**
Change IFGC referenced section number as follows:
"G2401.1 (101.2)".

**Section G2406.2 (303.3) Prohibited locations.**
Revise Exception 4,: In last line: "and the bedroom is not a confined space".

**Section G2426.6.5 (503.6.6) Gas vent termination.**
Revise in 5th line: "accordance with Figure G2426.6.5 ....".

**Section G2427.2.7 (504.2.7) Linear system sizing.**
Revise title: Change Linear to "Liner".

**Section G2427.2.9 (504.2.9) Chimney and vent locations.**
In first line (first sentence): Revise as follows:
"Tables G2427.2(1), G2427.2(2) shall be used for chimneys".
In 7th line (last sentence): Delete last sentence and Items 1 through 6 and also paragraph after Item 6.
Exception to Remain.

**Section G2427.3 (504.3) Application of multiple appliance vent Tables 504.3(3) through 504.3(6).**
In 3rd line: change table references to " ..... Tables G2427.3(1) through G2427.3(4)".

**Section G2427.3.15 (504.3.18) Chimney and vent locations.**
In 6th line (last sentence): Delete last sentence and Items 1 through 5 and also paragraph after Item 5.
Exception to Remain.

**Section P2603.2 Drilling and notching.**
In 4th line: Revise referenced sections; "R802.7 and R802.7.1 ..".

**Section P2704.1 General.**
Add the following as the first sentence:
"Slip joints shall be made with an approved elastomeric gasket and shall only be installed on the trap outlet, trap inlet and within the trap seal".

**Section P2708.1 General.** Revise as follows:
In 7th line revise referenced Section R702.4 to read "Section R307.2."

**Table P2904.4.1 Water Service, Supply and Distribution Piping.**
In column 1, row 15: Change Polybutylene (PE) plastic tubing to read;
"Polyethylene (PE) plastic tubing".

**Section P2904.5.1 Under concrete slabs.**
In 3rd and 4th line: Delete galvanized steel pipe.

**Table P3005.4.1 Maximum Fixture Units Allowed to be Connected to Branches and Stacks.**

In 1st column, 4th row: change superscript 2, to superscript "b".

**Section P3005.4.2 Building drain and sewer size and slope.**

Delete second sentence and move 3rd and 4th sentences to Section R3007.1 at end of 1st paragraph.

**Section P3103.2 Frost closure.**

In 1st sentence: Revise as follows: " where the 97.5-percent value for outside design temperature is 0°F (18°C) or less, ....."

**Figure P3108.2(1) Typical Methods of Wet Venting.**

At the bottom of Figure B, Revise as follows:

SHOWER / trap and fixture branch minimum; change from 1-1/2 in. to "2 IN." (1 location)

**Figure P3108.2(2) Typical Single-Stack System for a Two-Story Dwelling.**

Revise as follows:

SHOWER / both shower traps and drains minimum; change from 1-1/2 in. to "2 IN." (2 locations)

**Figure P3110.4 Circuit Vent with Additional Noncircuit Vented Fixture.**

Upper right: Clothes Washer Standpipe; should only indicate 2".

**Section E3802.8 Exempt receptacles.**

In 2nd line: Revise cross-references to read as follows:

"..... Sections E3802.2 and E3802.5 shall .....".

In 3rd line: Revise cross-references to read as follows:

"..... Section E3801.9".

**Section E4108.1 Ground-fault circuit-interrupters.**

Delete 3rd paragraph.

**Section E4109.1 Ground-fault circuit-interrupters.**

In last line: Change referenced section number to read; "Section E4108".

**Chapter 43 – Referenced Standards**

**ANSI:** **Z21.5.2**; Change to read:

"**Z21.5.1–95** ..... Gas Clothes Dryers - Volume I - Type I Clothes Dryers ..... G2436.1"

**A112.19.9–91**:

**A112.19.9–91** is a ASME standard; Move to ASME standard section.

**ASME:** **A112.18.1M–96**; Change to read:

"Plumbing Fixture Fitting with 1995 Errata".

**ASSE:** **1002.79–99**; Change to read: 1002–99

**ASTM:** **F492–90(1996)e**: Change to read, and then relocate;

**E492–90(1996)e** and relocate to the proper area.

**F789–95a**: Change referenced Table P3002.2.6 to read: "Table P3002.2"

**CSA:** **A257.3–M92**: Change to read; "CAN/CSA A257.3M–92"

**DOC:** **PS2-93**: Change to read;

"PS2–92"

**ICC:** Add two reference standards to the ICC listings:

"**IFC–2000 International Fire Code®** ..... R102.7"

"**IPMC–2000 International Property Maintenance Code®** ..... R102.7"

**NSF:** Change referenced section to read:

Std. 14–96 ..... P2909.1 ..... "P2907.3"
Std. 42–98 ..... P2701.3 ..... "P2907.3"
Std. 61–99 ..... P2909.2 ..... "P2907.3"

## Appendix E

**AE101.1 General**

In exception, 3rd line: Revise table reference as follows: "established in Table R301.2(1) of....."

## Appendix J

**AJ102.1 General**

In 2nd line delete the following: ".... shall cause no diminution of structural strength;....."

Add this section and renumber remaining sections:

"**AJ102.5 Flood hazard areas.** Work performed in existing buildings located in a flood hazard area as established by Table R301.2(1) shall be subject to the provisions of R105.3.1.1."

**Section R202 "Light Framed Construction"**

Revise the definition of Light Framed Construction as follows:

"A type of ..... light gage steel framing members."

**Table R301.2(1)**

First column, revise header as follows: "Ground Snow Load"

Also, revise Footnote g as follows: "..... determined from Section R301.2.2.1"

**Figure R301.2(4)**

Delete note as follows: ~~"Use Basic Wind Speed of 110 mph ..... and Puerto Rico"~~

**Figure R301.2(4)**

Revise notation title as follows: "Special Wind Region"

**Section R301.2.2 Seismic provisions**

Last paragraph - first line, revise as follows: "The weight limitations of Section R301.2.2.4 ..."

**Section R301.2.2.1.1 Alternate determination of seismic design category**

Ninth and eleventh lines, revise as follows:

"... for a site can be determined according to Section 1615.1 ... The value of $S_{DS}$ determined according to Section 1615.1 ..."

**Section R301.2.2.1.2 Alternative determination of Seismic Design Category E.**

Third line, revise as follows: "..... in accordance with Figure R301.2(2)"

**Section R301.2.2.9 Irregular buildings in Seismic Design Categories $D_1$ and $D_2$**

Item 5, exception 2, revise fourth line as follows: "..... as required by Section R502.6.1."

**Table R308.3**

Revise as follows: Add Table R308.3 as follows:

**TABLE R308.3**
**MINIMUM CATEGORY CLASSIFICATION OF GLAZING**

| Exposed Surface Area of One Side of One Lite | Glazing in Storm or Combination Doors (Category Class) | Glazing in Doors (Category Class) | Glazed Panels Regulated by Item 7 of Section R308.4 (Category Class) | Glazed Panels Regulated by Item 6 of Section R308.4 (Category Class) | Glazing in Doors and Enclosures Regulated by Item 5 of Section R308.4 (Category Class) | Sliding Glass Doors Patio Type (Category Class) |
|---|---|---|---|---|---|---|
| 9 sq. ft. or less | I | I | NR[a] | I | II | II |
| More than 9 sq. ft. | II | II | II | II | II | II |

For SI: 1 square foot = 0.0929 $m^2$

[a] NR means "No Requirement".

**Section R308.4 Hazardous locations**

Revise as follows:

Add new Item 4: "4. Glazing in all unframed swinging doors" and renumber remaining Items

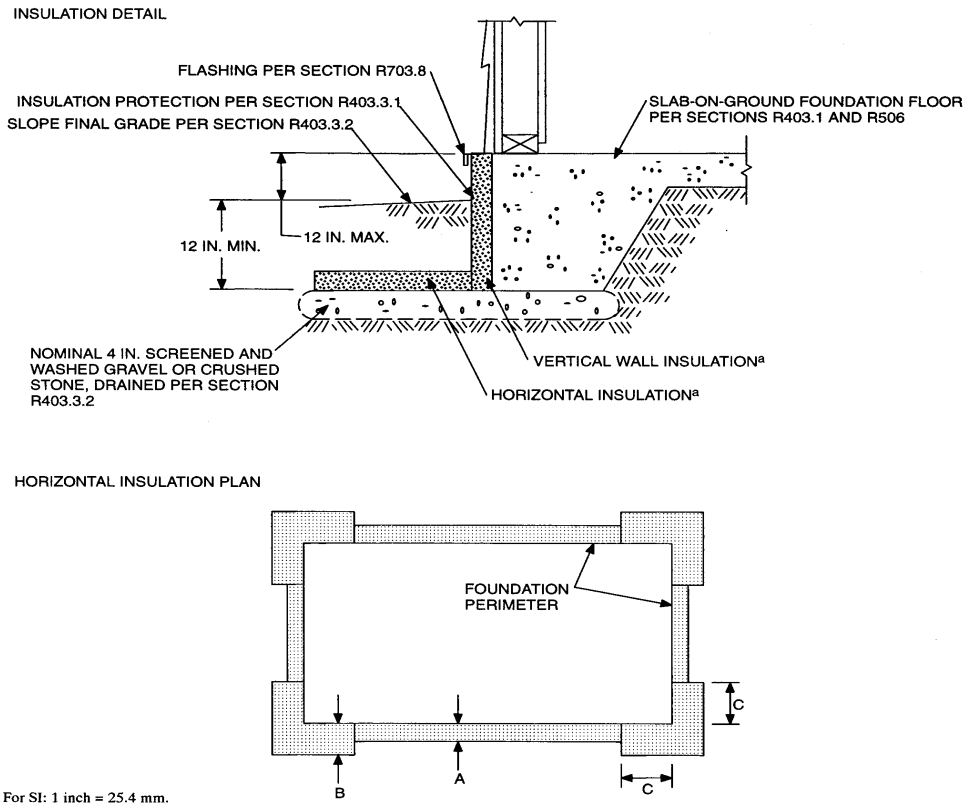
**Exception:**

Item #5 "... of the glazing 36 inches ± 2 inches..."

Item #9 Delete.

**Figure R403.3(1) Insulation Placement for Frost-Protected Footings in Heated Buildings.**

Revise as follows:




For SI: 1 inch = 25.4 mm.

a. See Table R403.3 for required dimensions and *R*-values for vertical and horizontal insulation.

**FIGURE R403.3(1)**
**INSULATION PLACEMENT FOR FROST-PROTECTED FOOTINGS IN HEATED BUILDINGS**

**Section R404.1.1 Masonry foundation walls.**

Third line, revise as follows: " . . . as set forth in Tables R404.1.1(1), R404.1.1(2), R404.1.1(3) and R404.1.1(4) or . . . "

**Section R404.1.2 Concrete foundation walls.**

2nd and 3rd lines, revise as follows: " . . . as set forth in Tables R404.1.1(1), R404.1.1(2), R404.1.1(3) and R404.1.1(4) or . . . "

**Section R404.1.4 Seismic Design Categories, $D_1$ and $D_2$.**

3rd paragraph, 5th line, revise as follows: " . . . in accordance with Tables R404.1.1(2), R404.1.1.(3) or . . . "

**Section R404.1.5.1 Pier and curtain wall foundations.**

Third line, revise as follows: " . . . wall foundations shall . . . "

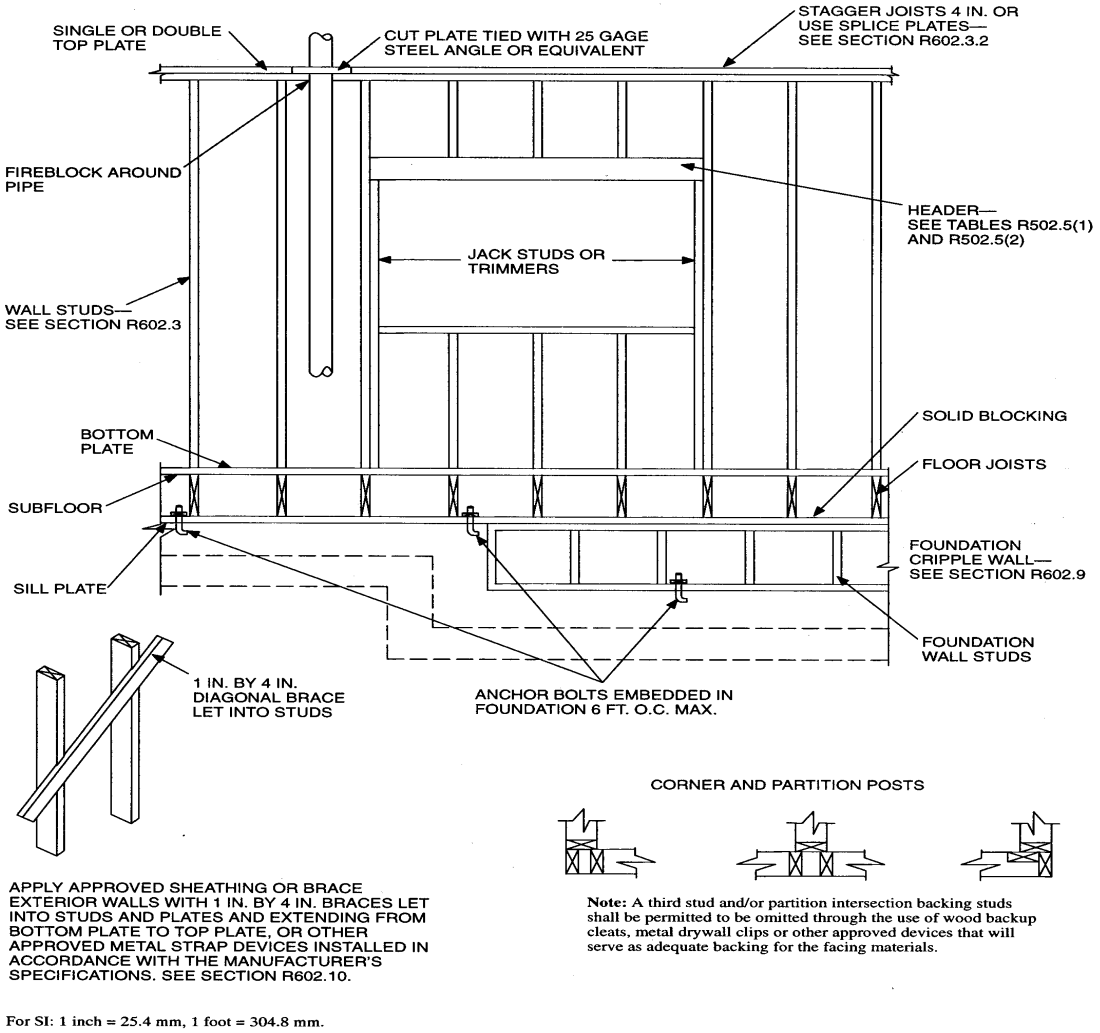
**Footnote a to Table R502.3.1(2)**

Revise "Footnote a" to "Note" and relocate above "For SI".

Re-designate Footnote b to Footnote a.

**Figure R602.3(2)** Revise as follows:

Corner and Partition Posts – far right figure. Delete Note.




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

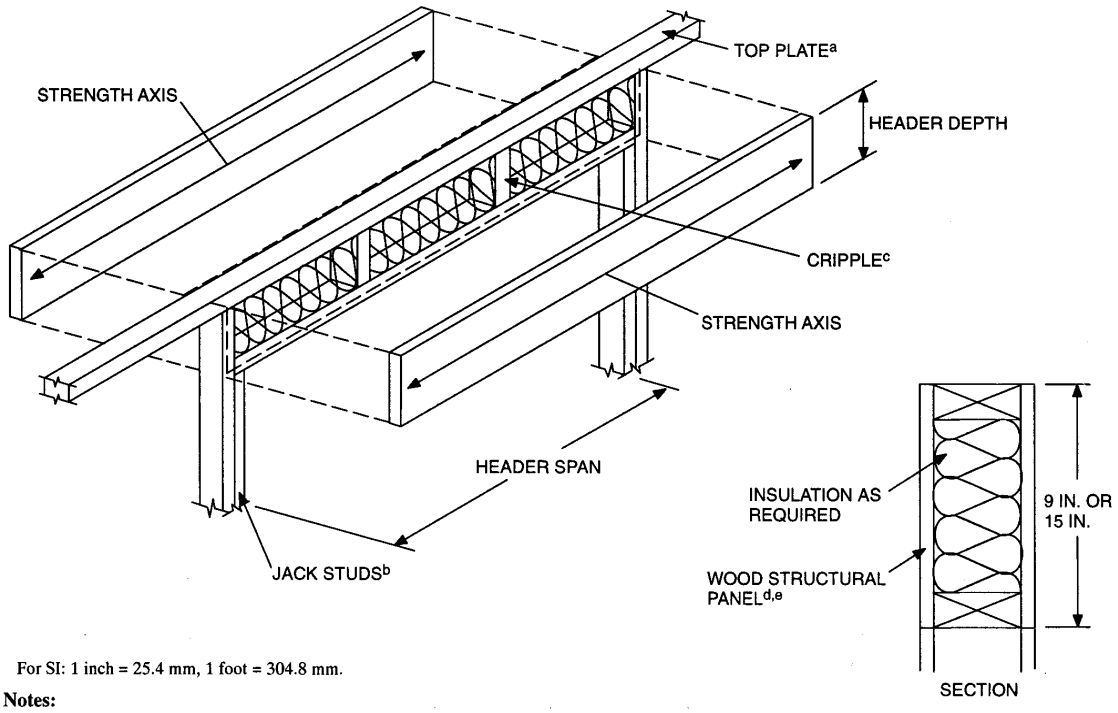
**FIGURE R602.3(2)**
**FRAMING DETAILS**

**Table R602.3.1 Maximum Allowable Length of Wood Wall Studs Exposed To Wind Speeds of 100 MPH or Less in Seismic Design Categories A, B, C and D.**

Revise as follows:

| | | | | |
|---|---|---|---|---|
| Supporting one floor and a roof | | | | |
| >10 | 2x6 | 2x4 | 2x4 | 2x4 |
| Supporting two floors and a roof | | | | |
| >10 | 2x6 | 2x6 | 2x4 | 2x4 |

**Figure R602.7.2 Typical Wood Structural Panel Box Header Construction**




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

**Notes:**

a. The top plate shall be continuous over header.
b. Jack studs shall be used for spans over 4 feet.
c. Cripple spacing shall be the same as for studs.
d. Wood structural panel faces shall be single pieces of $^{15}/_{32}$-inch-thick Exposure 1 (exterior glue) or thicker, installed on the interior or exterior or both sides of the header.
e. Wood structural panel faces shall be nailed to framing and cripples with 8d common or galvanized box nails spaced 3 inches on center, staggering alternate nails $^{1}/_{2}$ inch.
f. Galvanized nails shall be hot-dipped or tumbled.

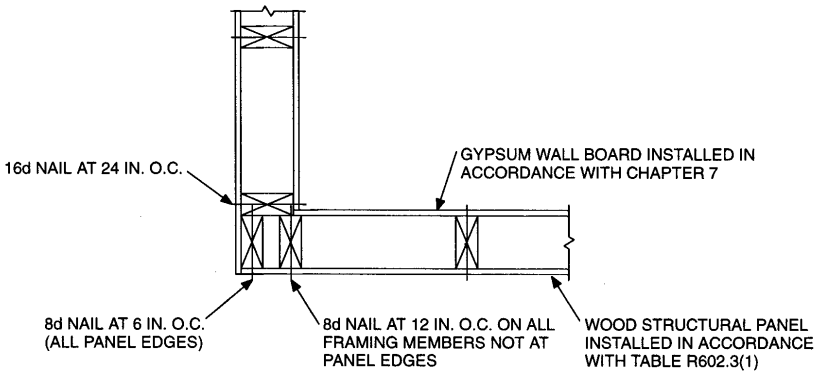
**FIGURE R602.7.2**
**TYPICAL WOOD STRUCTURAL PANEL BOX HEADER CONSTRUCTION**

**Section R602.10 Wall Bracing.**

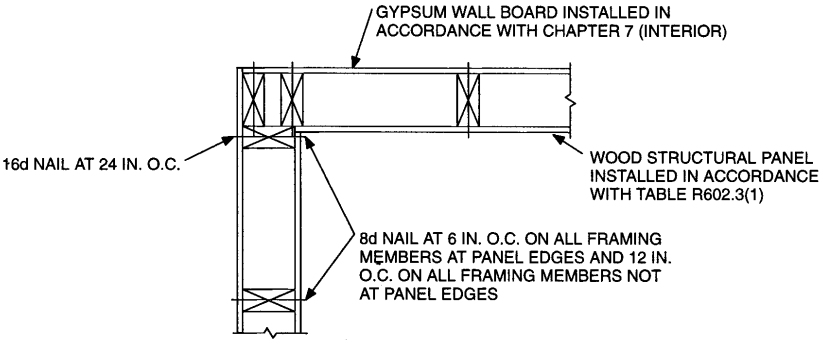
Fourth line, revise as follows: "... additional requirements of Sections R602.10.9, R602.10.11 and R602.11."

**Figure R602.10.5 Exterior Corner Framing**

Revise both interior corner nailing details as follows:




(a) OUTSIDE CORNER DETAIL




(b) INSIDE CORNER DETAIL

For SI: 1 inch = 25.4 mm.

**FIGURE R602.10.5**
**EXTERIOR CORNER FRAMING**

**Table R602.10.11 Adjustment of Bracing Amounts ..... Wall Line Spacing.**

Revise the Heading, in the 2nd column as follows: "Multiply Bracing Amount in Table R602.10.3"

**Table R603.6(5) Header to King Stud Connection Requirements.**

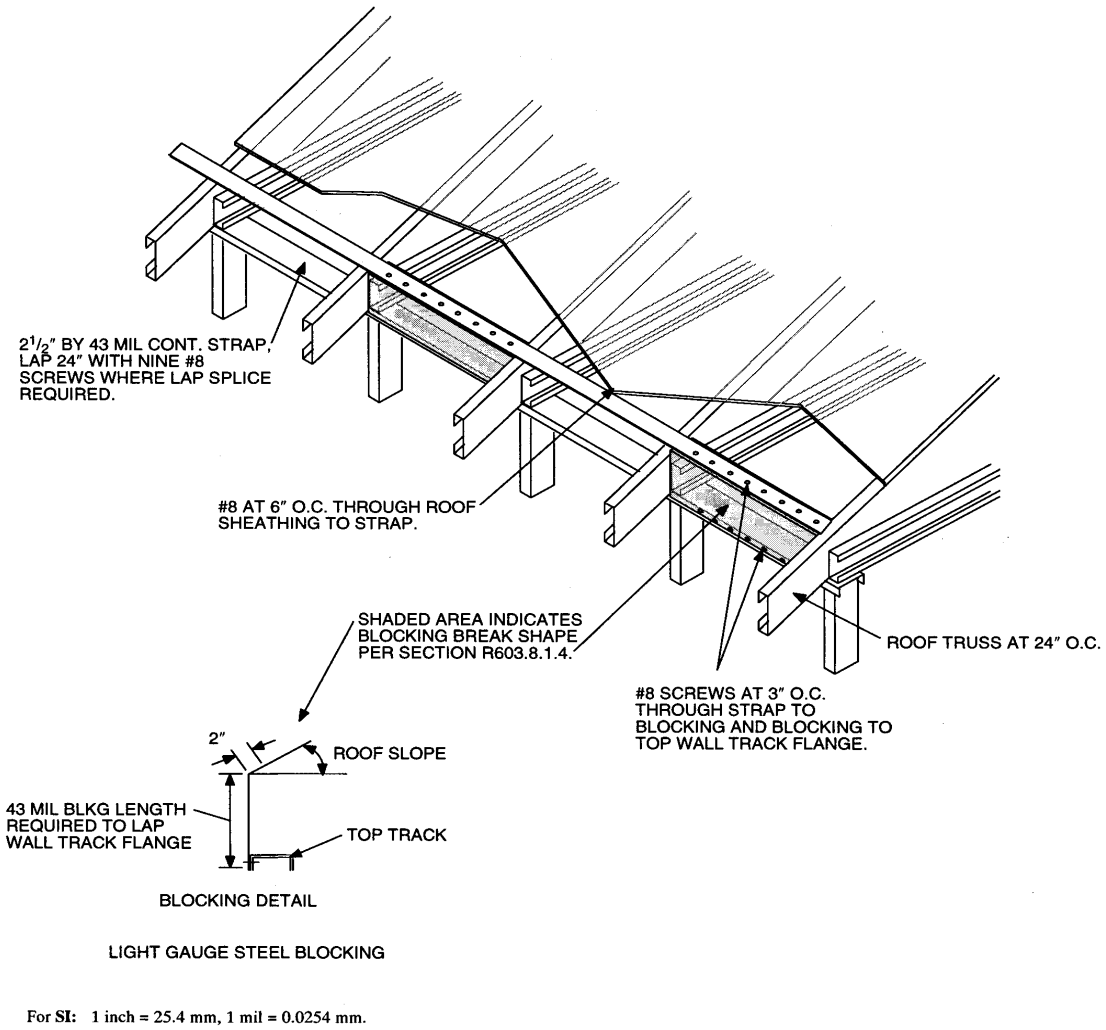
Footnote, revise as follows: "d. Screws can be replaced..... (e.g., 12-No. 8 screws can be replaced by an....."

**Section R603.7.1 Structural sheathing fastening.**

Fourth line, revise as follows: "..... in accordance with Table R603.3.2(1)".

**Figure R603.8.1.4(2) Strap and Blocking Diaphragm Load Transfer at Roof Eave.**

Revise as follows:




For SI: 1 inch = 25.4 mm, 1 mil = 0.0254 mm.

**FIGURE R603.8.1.4(2)**
**STRAP AND BLOCKING DIAPHRAGM LOAD TRANSFER AT ROOF EAVE**

**Table R606.8 Spacing of Lateral Support for Masonry Walls**

Second column heading, revise as follows: "Maximum Wall Length to Thickness or wall height to Thickness"

**Figure R606.10(2) Requirements for Reinforced Grouted ....."**

Revise figure notes as follows:

| | |
|---|---|
| Top diagram: | #4 Bars within 8 in. of Ends of Walls and at Corners |
| Lower left diagram: | Lintel Steel–see Section R606.9 |
| Reinforcement: | see Sections R606.11.2.1.3 and R606.11.2.2.3 |
| Lower center diagram: | Metal–see Section R608.1.2 |

**Figure R606.10(3) Requirements for Reinforced Masonry Construction ....."**

Revise figure notes as follows:

| | |
|---|---|
| Upper diagram: | #4 Bars within 8 in. of Ends of Walls and at Corners |
| Lower left diagram: | Reinforcements–see Section R606.11.2.1.3 , R606.11.3.2 and R606.11.4 |
| Center diagram: | Lintel Bar or Bars–see Section R606.9 |
| Lower center diagram: | revise footing thickness from 5 inches to 6 inches |

**Section R606.11.3.1 Design requirements**

Fourth line, revise as follows: "..... Chapter 2 of ACI ....."

**Section R609.2.2 Grout spaces.**

Fourth line, revise as follows: "..... in thickness shall use coarse ....."

**Table R611.4(1) Minimum Vertical Wall Reinforcement ....."**

Footnote e, revise as follows: "See Section R611.7.1.4"

**Table R611.5 Minimum Vertical Wall Reinforcement ....."**

Footnote e, revise as follows: "See Section R611.7.1.4"

**Table R702.1(1) Thickness of Plaster**

Footnote f, revise as follows: "..... accordance with Table R702.3.5".

**Table R703.4 Weather-Resistant Siding Attachment and Minimum Thickness**

**TABLE R703.4**
**WEATHER–RESISTANT SIDING ATTACHMENT AND MINIMUM THICKNESS[a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r]**

| SIDING MATERIAL | | NOMINAL THICKNESS[a] (inches) | JOINT TREATMENT | SHEATHING PAPER REQUIRED | TYPE OF SUPPORTS FOR THE SIDING MATERIAL AND FASTENERS[b,c,d] | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Wood or wood structural panel sheathing | Fiberboard sheathing into stud | Gypsum sheathing into stud | Direct to studs | Number or spacing of fasteners |
| Horizontal aluminum[e] | Without insulation | 0.019[f] | Lap | No | 0.120 nail $1^1/_2$" long | 0.120 nail 2" long | 0.120 nail 2" long | Not allowed | Same as stud spacing |
| | | 0.024 | Lap | No | 0.120 nail $1^1/_2$" long | 0.120 nail 2" long | 0.120 nail 2" long | Not allowed | |
| | With insulation | 0.019 | Lap | No | 0.120 nail $1^1/_2$" long | 0.120 nail $2^1/_2$" long | 0.120 nail $2^1/_2$" long | 0.120 nail $1^1/_2$" long | |
| Brick veneer<br>Concrete masonry veneer | | 2<br>2 | Section R703 | Yes<br>(m) | See Section R703 and Figure R703.7[h] | | | | |
| Hardboard[l] Panel siding–vertical | | $^7/_{16}$ | Note r | Note r | Note o | Note o | Note o | Note o | 6" panel edges 12" inter. sup. (p) |
| Sliding vertical Hardboard[l] Lap–siding–horizontal | | $^7/_{16}$ | Note r | Note r | Note q | Note q | Note q | Note q | Same as stud spacing 2 per bearing |
| Steel[i] | | 29 ga. | Lap | No | 0.113 nail $1^3/_4$" Staple–$1^3/_4$" | 0.113 nail $2^3/_4$" Staple–$2^1/_2$" | 0.113 nail $2^1/_2$" Staple–$2^1/_4$" | Not allowed | Same as stud spacing |
| Stone veneer | | 2 | Section R703 | Yes | See Section R703 and Figure R703.7 | | | | |
| Particleboard panels | | $^3/_8 - ^1/_2$ | Note g | Note g | 6d box nail | 6d box nail | 6d box nail | 6d box nail, $^3/_8$ not allowed | 6″ panel edges 12″ inter. sup. |
| | | $^5/_8$ | Note g | Note g | 6d box nail | 8d box nail | 8d box nail | 6d box nail | |
| Plywood panel[j] (exterior grade) | | $^3/_8$ | Note g | Note g | 0.099 nail–2" | 0.113 nail–$2^1/_2$″ | 0.099 nail–2″ | 0.099 nail–2″ | 6" on edges |
| Vinyl Siding[n] | | 0.035 | Lap | No | 0.120 nail $1^1/_2$" Staple–$1^3/_4$" | 0.120 nail 2" Staple–$2^1/_2$" | 0.120 nail 2" Staple–$2^1/_2$" | Not allowed | Same as stud spacing |
| Wood[k]Rustic, drop | | $^3/_8$ Min | Lap | No | Fastener penetration into stud–1" | | | 0.113 nail–$2^1/_2$" Staple–2" | Face nailing up to 6" widths, 1 nail per bearing: 8" widths and over, 2 nails per bearing |
| Shiplap | | $^{19}/_{32}$ Average | | | | | | | |
| Bevel | | $^7/_{16}$ | | | | | | | |
| Butt tip | | $^3/_{16}$ | | | | | | | |

**Table R802.4(2) Ceiling Joist Spans for Common Lumber Species**

Revise title text (in parenthesis) as follows: "Uninhabitable ..... live load = 20 ..."

**Table R905.8.6 Wood Shake Weather Exposure and Roof Slope**

Revise as follows:

First column, 3rd row – "Preservative-treated taper sawn shakes of Southern Yellow Pine"

4th row – "Taper-sawn shakes of naturally durable wood"

**Figure R1001.15 Clearance from Combustibles**

Relocate as Figure R1003.12.

**Figure R1003.15 Combustible Trim Clearance**

Relocate as Figure R1001.5 and retitle **"Clearance from Combustibles"**

**Table N1101.2 Climate Zones by States and Countries**

Add "York County Zone 11" to Pennsylvania portion of table

**Section N1102.1 Thermal performance criteria**

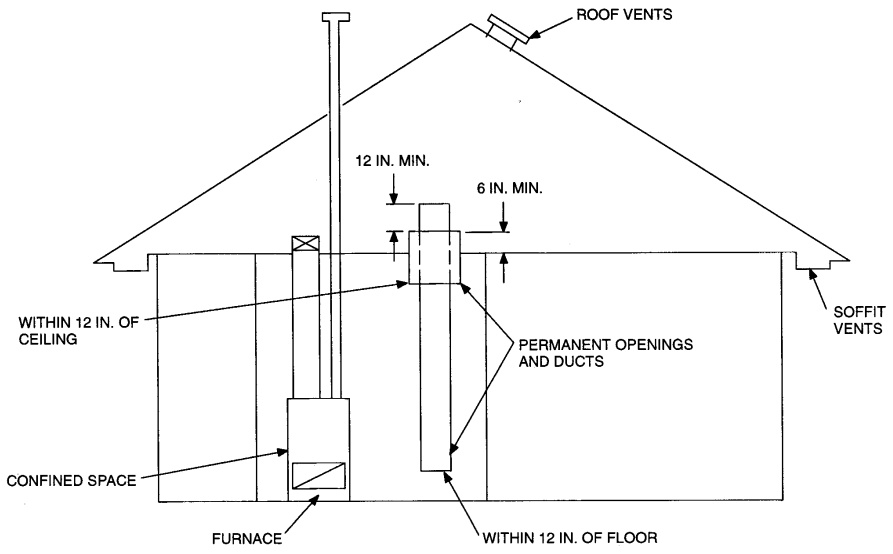
First paragraph, 6th line, revise as follows: "..... accordance with .....Table N1102.1".

**Figure M1703.2(1) Appliances Located in Confined Spaces—All Air Taken From Outdoors Through Ventilated Attic**

Revise as follows: "Note: Each ..... inch per 4,000 Btu/h ...."

**Figure M1703.3(4) Appliances Located in confined Spaces—All Air Taken From Outdoors Through Ventilated Attic, Inlet Duct Within Outlet Duct**

Add a figure as follows:




For SI: 1 inch = 25.4 mm, 1 British thermal unit per hour = 0.2931 W, 1 square inch = 645.16 $mm^2$.

**Note:** Each opening shall have a free area of at least 1 square inch per 4,000 Btu/h of the total input of all appliances in the space. The attic must be sufficiently vented for combustion air to be taken from the attic.

**FIGURE M1703.3(4)**
**APPLIANCES LOCATED IN CONFINED SPACES—ALL AIR TAKEN FROM OUTDOORS THROUGH VENTILATED ATTIC, INLET DUCT WITHIN OUTLET DUCT**

**Section M1703.5 Under-floor combustion air.**
Third line, revise as follows: ".... illustrated in Figure M1703.2.4....."

**Section M1803.3.4 Clearance**
Fourth line, revise as follows: ".... accordance with Table M1306.2"

**Table M1803.3.4 Chimney and Vent Connector Clearances to Combustible Materials**
Footnote a, revise as follows: "..... permitted as in Table M1306.2".

**Section G2404.2 (301.1.1) Other fuels**
Fifth line, revise as follows: "..... shall be regulated by Chapter 17"

**Section G2407.12.2 (304.12.2) Ratio of direct openings**
Third line, revise as follows: "..... with Section G2407.11.1, the ratio ....."

**Figure G2407.11(4) [304.11(4)] Appliances Located in Confined Spaces; Single Combustion Air Opening** March 31, 2003

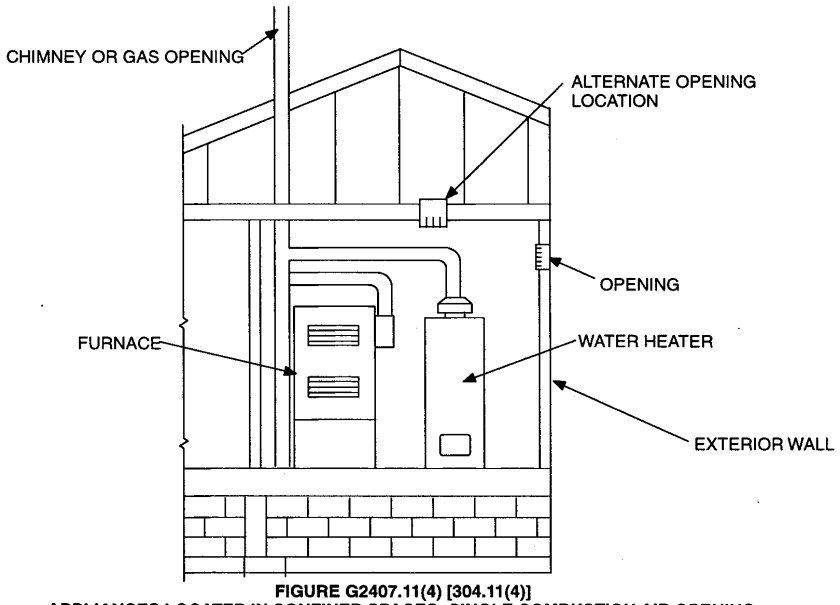



**FIGURE G2407.11(4) [304.11(4)]**
**APPLIANCES LOCATED IN CONFINED SPACES; SINGLE COMBUSTION AIR OPENING. SEE SECTION G2407.11.2.**

**Section G2409.2 (308.1) Reduction table**
Last line, revise as follows: "See Figures G2409.2(1) and G2409.2."

**Table G2409.2 (308.2) reduction of Clearances with specified forms of Protection**
Footnote d, revise as follows:
"d. Where clearance reduction systems use ... [See Figure G2409.2(2)]"

**Figure G2409.2(1) [308.2(1)] Extent of Protection Necessary to Reduce Clearances from Gas Equipment or Vent Connectors**
Revise Notes as follows: "B" equals the reduced clearance permitted in accordance with Table G2409.2. The protection ....."

**Section G2409.4.2 (308.4.2) Equipment installed in rooms that are not large in comparison with the size of the equipment**
8th line, revise as follows: ".... and illustrated in Figures G2409.2(1) and G2409.2(2), ....."

**Section G2414.3 (404.3) Piping in concealed locations**

4th line, revise as follows: "..... compression couplings, and ...."

**Table G2423.1 (415.1) Support of Piping**

Columns 2 and 3, revise headings to read as follows:

Column 2: " Spacing of Supports"

Column 3: "Nominal Size of Tubing"

**Table G2426.4 (503.4) Type of Venting system to be Used**

Revise as follows: Column 2, second to last row — "See G2426.2.1"

Column 2, last row — "See G2426.2.2"

**Section G2426.11 (503.11) Vent connectors for Category II, Category III and Category IV gas utilization equipment**

Last line, revise as follows: "..... specified for the venting system in accordance with Section G2426.4".

**Section G2427.3.3 (504.3.3) Connectors with longer lengths**

Item 2, revise as follows:

5th line (2rd sentence): "For Type B double-wall connectors, Table G2427.2(1)....."

6th line (3rd sentence): "For single-wall connectors, Table G2427.2(2)....."

**Section G2427.3.14 (504.3.17) Liner system sizing**

Revise as follows: Line 3: "......sized by using Table G2427.3(1) or G2427.3(2)..."

Line 6: "..... as shown in Table G2427.3(1) or G2427.3(2)..."

**Section G2421.3 (602.3) Prohibited installations**

Last line, revise as follows: "..... where prohibited by Section G2406.2".

**Table P3005.4.1 Maximum Fixture Units allowed to be Connected to Branches and Stacks**

1st column, 3rd row, revise footnote reference as follows: "2[b] (to reference footnote b)"

**Section P3005.4.2 Building drain and sewer size and slope**

Revise as follows: Delete 2nd and 3rd sentences:

"Pipe sizes and slope shall be determined from Table P3005.4.2 on the basis of drainage load in fixture units (d.f.u.) Computed from Table P3004.1. ~~A check valve and a gate valve located on the discharge side of the check valve shall be installed in the pump or ejector discharge piping between the pump or ejector and the drainage system. Access shall be provided to such valves. Such valves shall be located above the sump cover or, when the discharge pipe from the ejector is below grade, the valves shall be accessibly located outside the sump below grade in an access pit with a removable access cover.~~"

**Section P3111.2.1 Slope**

Last sentence, revise as follows: "..... slope shall be in accordance with Section P3005.3".

**Table P3201.7 Size of Traps and Trap Arms for Plumbing Fixtures**

Revise as follows: Column 2, last row —" ~~1~~ [a]"

~~Note:~~ [a] "....."

**Section E3306.6 Conductors in parallel**

3rd line, revise as follows: "..... be limited to sizes No. 1/0 and larger."

**Chapter 43 Referenced Standards**

Revise the Standard Reference numbers as follows: "**CISPI** — 301– 97"

**Appendix AJ501.1 Newly constructed elements**

Exception 2, revise as follows: "..... with the requirements of Section AJ501.5".

**Index**

Revise as follows: Alternate Materials "..... R104.11"