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Weyerhaeuser

EverEdge™ Series

PRODUCT DESIGN AND SPECIFIER'S GUIDE

Featuring EverEdge™ Series Products and Weyerhaeuser Rim Board for Floor and Roof Applications

EEI™ Joists

- Wide Flanges for Easy Nailing
- Uniform and Predictable
- Lightweight for Fast Installation
- Resource Efficient

EverEdge™ LVL Beams and Headers

- Minimal Bowing, Twisting and Shrinking
- Strong and Straight
- Economical Solution for Header and Beam Applications

1⅛" Weyerhaeuser Rim Board

- Depths Match EEI™ Joists
- Uniform in Size
- Fast and Easy to Install

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About EverEdge™ Products

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EverEdge™ Series EEI™ joists and LVL beams, along with Weyerhaeuser Rim Board, are engineered to provide both strength and consistency—features that help builders save on installation time and reduce both jobsite waste and customer callbacks.

This guide contains information for designing and specifying these products in your next residential construction project.

SECTION 1:

EEI™ Joists
Available sizes include:
Depths: *9½", 11⅞", 14", 16"*
Flange Widths: *2⁵⁄₁₆", 3½"*

Weyerhaeuser
EverEdge™ Series I-Joist

Weyerhaeuser Rim Board
Available sizes include:
Width: *1⅛"*
Depths: *9½", 11⅞", 14", 16"*

Weyerhaeuser
Rim Board

SECTION 2:

EverEdge™ LVL Beams
Available sizes include:
Width: *1¾"*
Depths: *5½", 7¼", 9¼", 9½", 11¼", 11⅞", 14", 16", 18", 20", 24"*

Weyerhaeuser
EverEdge™ Series LVL

FOR CODE EVALUATIONS, SEE

EEI™ Joists	EverEdge™ LVL	Weyerhaeuser Rim Board
PFS-TECO RR 0106	PFS-TECO RR 0105	ICC ES ESR-1387

For conditions not shown in this guide or for technical or sales support, contact US Lumber at 1-888-613-5078 or at ewpteam@uslumber.com.

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WARNING

Joists are unstable until braced laterally

Bracing Includes:
- **Blocking**
- **Hangers**
- **Rim Board**
- **Sheathing**
- **Rim Joist**
- **Strut Lines**

Lack of proper bracing during construction can result in serious accidents. Observe the following guidelines:

1. All blocking, hangers, rim boards, and rim joists at the end supports of the EEI™ joists must be completely installed and properly nailed.
2. Lateral strength, like a braced end wall or an existing deck, must be established at the ends of the bay. This can also be accomplished by a temporary or permanent deck (sheathing) fastened to the first 4 feet of joists at the end of the bay.
3. Safety bracing of 1x4 (minimum) must be nailed to a braced end wall or sheathed area (as in note 2) and to each joist. Without this bracing, buckling sideways or rollover is highly probable under light construction loads—such as a worker or one layer of unnailed sheathing.
4. Sheathing must be completely attached to each EEI™ joist before additional loads can be placed on the system.
5. Ends of cantilevers require safety bracing on both the top and bottom flanges.
6. The flanges must remain straight within a tolerance of ½" from true alignment.

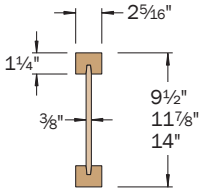
DO NOT walk on joists until braced. INJURY MAY RESULT.

DO NOT stack building materials on unsheathed joists. Stack only over beams or walls.

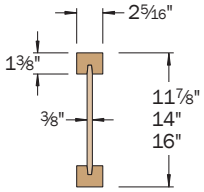
DO NOT walk on joists that are lying flat.

SECTION 1: EverEdge™ EEI™ Joists

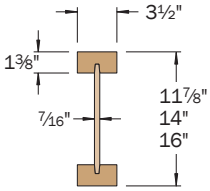
This section contains design and specification information for EEI™ joists used in residential applications.



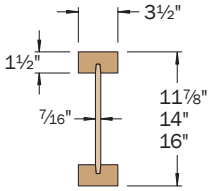
EEI™ 20 joists



EEI™ 30 joists



EEI™ 50 joists



EEI™ 60 joists

EEI™ joists are intended for dry-use applications

Design Properties
(100% Load Duration)

Depth	EEI™	Basic Properties				Reaction Properties					
		Joist Weight (lbs/ft)	Maximum Resistive Moment(1) (ft-lbs)	Joist Only EI x 10^6 ($in.^2$-lbs)	Maximum Vertical Shear (lbs)	1¾" End Reaction (lbs)	3½" End Reaction (lbs)	3½" Intermediate Reaction (lbs)		5¼" Intermediate Reaction (lbs)	
								No Web Stiffeners	With Web Stiffeners(2)	No Web Stiffeners	With Web Stiffeners(2)
9½"	20	2.7	3,185	206	1,265	1,060	1,265	2,410	NA	2,790	NA
11⅞"	20	3.0	4,020	347	1,570	1,060	1,485	2,410	2,765	2,790	3,150
	30	3.0	5,880	419	1,620	1,080	1,505	2,460	2,815	3,000	3,360
	50	4.0	9,035	636	1,945	1,265	1,725	3,000	3,475	3,455	3,930
	60	4.2	9,115	643	2,140	1,400	1,885	3,350	3,825	3,965	4,440
14"	20	3.3	4,750	509	1,850	1,060	1,485	2,410	2,765	2,790	3,150
	30	3.3	6,980	612	1,855	1,080	1,505	2,460	2,815	3,000	3,360
	50	4.2	10,725	926	2,270	1,265	1,725	3,000	3,475	3,455	3,930
	60	4.5	10,845	940	2,410	1,400	1,885	3,350	3,825	3,965	4,440
16"	30	3.5	7,995	830	2,080	1,080	1,505	2,460	2,815	3,000	3,360
	50	4.5	12,295	1,252	2,575	1,265	1,725	3,000	3,475	3,455	3,930
	60	4.7	12,445	1,273	2,665	1,400	1,885	3,350	3,980	3,965	4,600

(1) **Caution: Do not** increase joist moment design properties by a repetitive member use factor.

(2) See detail W on page 6 for web stiffener requirements and nailing information.

General Notes

- The formulas below approximate the uniform load deflection of Δ (inches):

For EEI™ 20 and 30 Joists

$$\Delta = \frac{22.5\ wL^4}{EI} + \frac{2.67\ wL^2}{d \times 10^5}$$

For EEI™ 50 and 60 Joists

$$\Delta = \frac{22.5\ wL^4}{EI} + \frac{2.29\ wL^2}{d \times 10^5}$$

w = uniform load in pounds per linear foot
L = span in feet
d = out-to-out depth of the joist in inches
EI = value from table above

Floor Load Table

Floor—100% (PLF)

Depth	EEI™	Joist Clear Span																			
		6'		8'		10'		12'		14'		16'		18'		20'		22'		24'	
		Live Load L/480	Total Load	Live Load L/480	Total Load	Live Load L/480	Total Load	Live Load L/480	Total Load	Live Load L/480	Total Load	Live Load L/480	Total Load	Live Load L/480	Total Load	Live Load L/480	Total Load	Live Load L/480	Total Load	Live Load L/480	Total Load
9½"	20	*	313	*	236	175	190	108	158	71	127	49	97								
11⅞"	20	*	313	*	236	*	190	*	158	116	136	80	119	58	97	43	79				
	30	*	320	*	241	*	193	*	162	136	139	95	121	69	108	51	97	39	78		
	50	*	390	*	294	*	236	*	197	*	169	138	148	101	132	76	119	58	108	45	91
	60	*	436	*	329	*	264	*	220	*	189	140	165	102	147	76	133	59	118	46	92
14"	20	*	313	*	236	*	190	*	158	*	136	115	119	83	106	62	93	47	77		
	30	*	320	*	241	*	193	*	162	*	139	*	121	98	108	73	97	56	88	44	81
	50	*	390	*	294	*	236	*	197	*	169	*	148	*	132	107	119	83	108	65	99
	60	*	436	*	329	*	264	*	220	*	189	*	165	144	147	109	133	84	121	66	110
16"	30	*	320	*	241	*	193	*	162	*	139	*	121	*	108	97	97	75	88	59	81
	50	*	390	*	294	*	236	*	197	*	169	*	148	*	132	*	119	*	108	86	99
	60	*	436	*	329	*	264	*	220	*	189	*	165	*	147	*	133	111	121	88	110

* Indicates that **Total Load** value controls.

General Notes

- Table is based on:
  - Minimum bearing length of 1¾" end and 3½" intermediate, without web stiffeners
  - Uniform loads.
  - More restrictive of simple or continuous span
  - No composite action provided by sheathing.
- **Total Load** values are limited to deflection of L/240.
- **Live Load** is based on joist deflection of L/480.
- If a live load deflection limit of L/360 is desired, multiply value in **Live Load** column by 1.33. The resulting live load must not exceed the **Total Load** shown.
- Table does not account for concentrated loads.

EEI™ Joist Spans

Depth	EEI™	40 PSF Live Load / 10 PSF Dead Load				40 PSF Live Load / 20 PSF Dead Load			
		12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.
L/480 Live Load Deflection									
9½"	20	18'-3"	16'-8"	15'-9"	14'-8"	18'-3"	16'-8"	15'-9"	14'-5"
11⅞"	20	21'-8"	19'-10"	18'-8"	17'-5"	21'-8"	19'-10"	18'-2"	16'-3"[1]
	30	22'-11"	20'-11"	19'-8"	18'-4"	22'-11"	20'-11"	19'-8"	17'-10"[1]
	50	26'-1"	23'-8"	22'-4"	20'-9"	26'-1"	23'-8"	22'-4"	20'-9"[1]
	60	26'-2"	23'-9"	22'-5"	20'-10"	26'-2"	23'-9"	22'-5"	20'-10"
14"	20	24'-8"	22'-6"	21'-2"	19'-4"[1]	24'-8"	21'-8"	19'-9"	17'-6"[1]
	30	26'-0"	23'-8"	22'-4"	20'-9"[1]	26'-0"	23'-8"	22'-4"[1]	17'-10"[1]
	50	29'-6"	26'-10"	25'-4"	23'-6"	***29'-6"***	***26'-10"***	25'-4"[1]	20'-11"[1]
	60	29'-8"	27'-0"	25'-5"	23'-7"	***29'-8"***	***27'-0"***	25'-5"	23'-2"[1]
16"	30	28'-9"	26'-2"	24'-8"[1]	21'-5"[1]	***28'-9"***	26'-2"[1]	22'-4"[1]	17'-10"[1]
	50	32'-8"	29'-8"	28'-0"	25'-2"[1]	***32'-8"***	***29'-8"***	26'-3"[1]	20'-11"[1]
	60	32'-10"	29'-10"	28'-1"	26'-1"	***32'-10"***	***29'-10"***	***28'-1"[1]***	23'-2"[1]
L/360 Live Load Deflection									
9½"	20	20'-3"	18'-6"	17'-5"	15'-10"	***20'-3"***	17'-8"	16'-2"	14'-5"
11⅞"	20	24'-0"	21'-10"	19'-11"	17'-9"	***23'-0"***	19'-11"	18'-2"	16'-3"[1]
	30	25'-4"	23'-2"	21'-10"	20'-4"[1]	***25'-4"***	***23'-2"***	***21'-10"[1]***	17'-10"[1]
	50	28'-10"	26'-3"	24'-9"	23'-0"	***28'-10"***	***26'-3"***	***24'-9"***	20'-11"[1]
	60	28'-11"	26'-4"	24'-10"	23'-1"	***28'-11"***	***26'-4"***	***24'-10"***	***23'-1"[1]***
14"	20	27'-3"	23'-9"	21'-8"	19'-4"[1]	25'-0"	21'-8"	19'-9"	17'-6"[1]
	30	28'-9"	26'-3"	24'-9"[1]	21'-5"[1]	***28'-9"***	***26'-3"[1]***	22'-4"[1]	17'-10"[1]
	50	32'-8"	29'-9"	28'-0"	25'-2"[1]	***32'-8"***	***29'-9"***	***26'-3"[1]***	20'-11"[1]
	60	32'-10"	29'-11"	28'-2"	26'-2"	***32'-10"***	***29'-11"***	***28'-2"[1]***	23'-2"[1]
16"	30	31'-10"	29'-0"	26'-10"[1]	21'-5"[1]	***31'-10"***	***26'-10"[1]***	22'-4"[1]	17'-10"[1]
	50	36'-1"	32'-11"	31'-0"[1]	25'-2"[1]	***36'-1"***	***31'-6"[1]***	26'-3"[1]	20'-11"[1]
	60	36'-4"	33'-1"	31'-2"	27'-10"[1]	***36'-4"***	***33'-1"***	***29'-0"[1]***	23'-2"[1]

[1] Web stiffeners are required at intermediate supports of continuous-span joists when the intermediate bearing length is **less** than 5¼" and the span on either side of the intermediate bearing is greater than the following spans:

EEI™	40 PSF Live Load / 10 PSF Dead Load				40 PSF Live Load / 20 PSF Dead Load			
	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.
20	Not Req.	Not Req.	Not Req.	19'-2"	Not Req.	Not Req.	19'-11"	15'-11"
30			24'-5"	19'-6"		24'-5"	20'-4"	16'-3"
50			29'-10"	23'-10"		19'-10"	24'-10"	19'-10"
60			Not Req.	26'-8"		Not Req.	27'-9"	22'-2"

- Long-term deflection under dead load, which includes the effect of creep, has not been considered. ***Bold italic*** spans reflect initial dead load deflection exceeding 0.33".

General Notes

- Tables are based on:
  - Uniform loads.
  - More restrictive of simple or continuous span.
  - Clear distance between supports
  - Minimum bearing length of 1¾" end (no web stiffeners) and 3½" intermediate.
- Assumed composite action with a single layer of 24" on-center span-rated, glue-nailed floor panels for deflection only. **When subfloor adhesive is not applied, spans shall be reduced 6" for nails and 12" for proprietary fasteners.**
- For continuous spans, ratio of short span to long span should be 0.4 or greater to prevent uplift.

PSF to PLF Conversion Table

O.C. Spacing	Load in Pounds Per Square Foot (PSF)								
	20	25	30	35	40	45	50	55	60
	Load in Pounds Per Linear Foot (PLF)								
12"	20	25	30	35	40	45	50	55	60
16"	27	34	40	47	54	60	67	74	80
19.2"	32	40	48	56	64	72	80	88	96
24"	40	50	60	70	80	90	100	110	120

Material Weights

(Include EEI™ weights in dead load calculations— see **Design Properties** table on page 3 for joist weights)

Floor Panels

Southern Pine

½" plywood . . . . . 1.7 psf
⅝" plywood . . . . . 2.0 psf
¾" plywood . . . . . 2.5 psf
1⅛" plywood . . . . . 3.8 psf
½" OSB . . . . . 1.8 psf
⅝" OSB . . . . . 2.2 psf
¾" OSB . . . . . 2.7 psf
⅞" OSB . . . . . 3.1 psf
1⅛" OSB. . . . . 4.1 psf

Based on: Southern pine – 40 pcf for plywood, 44 pcf for OSB

Roofing

Asphalt shingles . . . . . 2.5 psf
Wood shingles . . . . . 2.0 psf
Clay tile . . . . . 9.0 to 14.0 psf
Slate (⅜" thick) . . . . . 15.0 psf

Roll or Batt Insulation (1" thick):

Rock wool . . . . . 0.2 psf
Glass wool . . . . . 0.1 psf

Floor Finishes

Hardwood (nominal 1") . . . . . 4.0 psf
Sheet vinyl . . . . . 0.5 psf
Carpet and pad . . . . . 1.0 psf
¾" ceramic or quarry tile. . . . . 10.0 psf

Concrete:

Regular (1"). . . . . 12.0 psf
Lightweight (1") . . . . . 8.0 to 10.0 psf
Gypsum concrete (¾"). . . . . 6.5 psf

Ceilings

Acoustical fiber tile . . . . . 1.0 psf
½" gypsum board . . . . . 2.2 psf
⅝" gypsum board . . . . . 2.8 psf
Plaster (1" thick). . . . . 8.0 psf

Allowable Holes

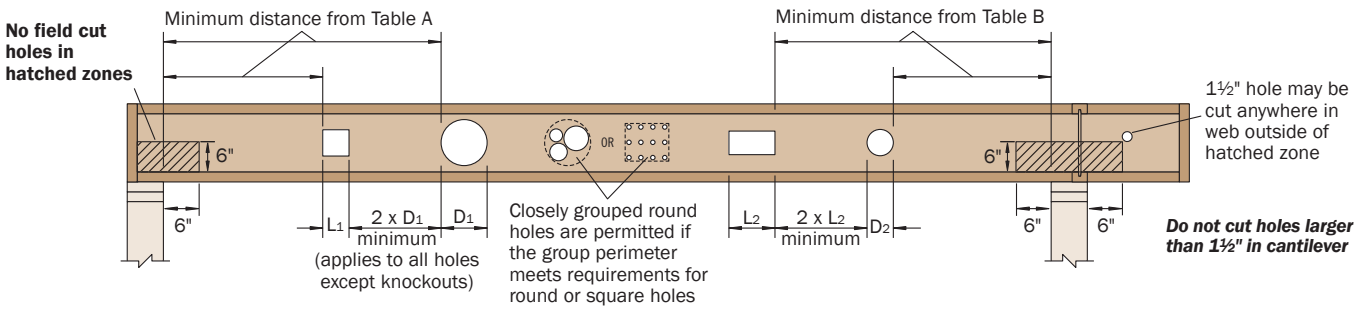


Table A—End Support

Minimum distance from edge of hole to inside face of nearest end support

Depth	EEI™	● Round Hole Size									■ Square or Rectangular Hole Size								
		2"	3"	4"	5"	6½"	7"	8⅞"	11"	13"	2"	3"	4"	5"	6½"	7"	8⅞"	11"	13"
9½"	20	1'-6"	2'-0"	2'-6"	3'-6"	6'-0"					1'-0"	2'-0"	3'-0"	4'-0"	5'-0"				
11⅞"	20	1'-6"	1'-6"	2'-0"	2'-6"	3'-6"	3'-6"	6'-6"			1'-0"	2'-0"	2'-6"	3'-0"	5'-0"	5'-6"	7'-0"		
	30	1'-6"	2'-6"	3'-0"	3'-6"	4'-6"	5'-0"	7'-6"			1'-6"	2'-6"	3'-6"	4'-6"	6'-6"	6'-6"	7'-6"		
	50	2'-0"	3'-0"	3'-6"	4'-6"	5'-6"	6'-0"	8'-6"			2'-6"	3'-6"	4'-6"	5'-6"	7'-0"	7'-6"	8'-0"		
	60	2'-0"	2'-6"	3'-6"	4'-6"	5'-6"	6'-0"				3'-0"	3'-6"	4'-6"	5'-6"	7'-0"	7'-0"			
14"	20	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	2'-6"	4'-0"	7'-0"		1'-0"	1'-0"	2'-0"	2'-6"	4'-0"	4'-6"	6'-6"	9'-0"	
	30	1'-0"	1'-6"	2'-0"	2'-6"	3'-6"	4'-0"	5'-6"	8'-6"		1'-0"	1'-6"	2'-6"	3'-6"	5'-6"	6'-6"	8'-0"	9'-6"	
	50	1'-0"	1'-6"	2'-6"	3'-6"	4'-6"	5'-0"	7'-0"	9'-6"		1'-6"	3'-0"	4'-0"	5'-0"	7'-0"	7'-6"	9'-0"	10'-0"	
	60	1'-0"	1'-6"	2'-6"	3'-0"	4'-6"	5'-0"	7'-0"			2'-0"	3'-0"	4'-0"	5'-0"	6'-6"	7'-6"	8'-6"		
16"	30	1'-0"	1'-0"	1'-0"	1'-6"	2'-6"	3'-0"	4'-6"	6'-6"	9'-6"	1'-0"	1'-0"	1'-6"	3'-0"	4'-6"	5'-6"	8'-6"	10'-0"	11'-6"
	50	1'-0"	1'-0"	1'-0"	1'-6"	3'-0"	3'-6"	5'-6"	7'-6"	10'-6"	1'-0"	2'-0"	3'-0"	4'-6"	6'-6"	7'-0"	10'-0"	11'-0"	12'-0"
	60	1'-0"	1'-0"	2'-0"	2'-6"	3'-6"	4'-0"	5'-6"	8'-0"		1'-6"	2'-6"	3'-6"	4'-6"	6'-0"	7'-0"	9'-6"	10'-6"	

Table B—Intermediate or Cantilever Support

Minimum distance from edge of hole to inside face of nearest intermediate or cantilever support

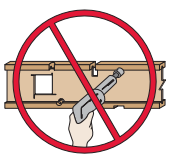
Depth	EEI™	● Round Hole Size									■ Square or Rectangular Hole Size								
		2"	3"	4"	5"	6½"	7"	8⅞"	11"	13"	2"	3"	4"	5"	6½"	7"	8⅞"	11"	13"
9½"	20	2'-6"	3'-6"	4'-0"	5'-6"	8'-6"					2'-0"	3'-0"	4'-0"	6'-6"	7'-6"				
11⅞"	20	1'-6"	2'-0"	3'-0"	3'-6"	5'-0"	5'-6"	10'-0"			1'-0"	2'-6"	3'-6"	5'-0"	8'-0"	8'-6"	10'-6"		
	30	2'-0"	3'-6"	4'-6"	5'-6"	7'-0"	8'-0"	11'-0"			2'-0"	3'-6"	5'-0"	6'-6"	9'-6"	9'-6"	11'-0"		
	50	2'-0"	3'-6"	5'-0"	6'-0"	8'-0"	9'-0"	12'-6"			3'-0"	4'-6"	6'-0"	8'-0"	10'-6"	11'-0"	12'-0"		
	60	2'-6"	4'-0"	5'-0"	6'-6"	8'-0"	9'-0"				4'-0"	5'-0"	6'-6"	8'-0"	10'-0"	10'-6"			
14"	20	1'-0"	1'-0"	1'-6"	2'-0"	3'-6"	4'-0"	6'-0"	10'-6"		1'-0"	1'-0"	2'-6"	4'-0"	6'-0"	7'-0"	10'-6"	13'-0"	
	30	1'-0"	1'-6"	2'-6"	4'-0"	5'-6"	6'-0"	9'-0"	12'-6"		1'-0"	2'-0"	3'-6"	5'-6"	8'-6"	9'-6"	12'-0"	14'-0"	
	50	1'-0"	1'-0"	2'-6"	4'-0"	6'-6"	7'-0"	10'-0"	14'-0"		1'-0"	3'-0"	5'-0"	7'-0"	10'-0"	11'-0"	13'-6"	15'-0"	
	60	1'-0"	2'-0"	3'-6"	5'-0"	7'-0"	7'-6"	10'-0"			2'-6"	4'-6"	6'-0"	7'-6"	10'-0"	11'-0"	12'-6"		
16"	30	1'-0"	1'-0"	1'-0"	2'-0"	4'-0"	4'-6"	7'-0"	10'-0"	14'-0"	1'-0"	1'-0"	1'-6"	4'-0"	7'-0"	8'-0"	13'-0"	14'-6"	17'-0"
	50	1'-0"	1'-0"	1'-0"	1'-0"	3'-6"	4'-6"	7'-6"	11'-6"	15'-6"	1'-0"	1'-0"	3'-6"	5'-6"	9'-0"	10'-0"	14'-6"	16'-0"	18'-0"
	60	1'-0"	1'-0"	1'-6"	3'-0"	5'-0"	6'-0"	8'-6"	12'-0"		1'-0"	3'-0"	5'-0"	6'-6"	9'-6"	10'-6"	14'-0"	15'-6"	

● Rectangular holes based on measurement of longest side.

How to Use These Tables

1. Using **Table A, Table B,** or both if required, determine the hole shape/size and select the EEI™ joist and depth.
2. Scan horizontally until you intersect the correct hole size column.
3. Measurement shown is minimum distance from edge of hole to support.
4. Maintain the required minimum distance from the end **and** the intermediate or cantilever support.

DO NOT cut or notch flange.



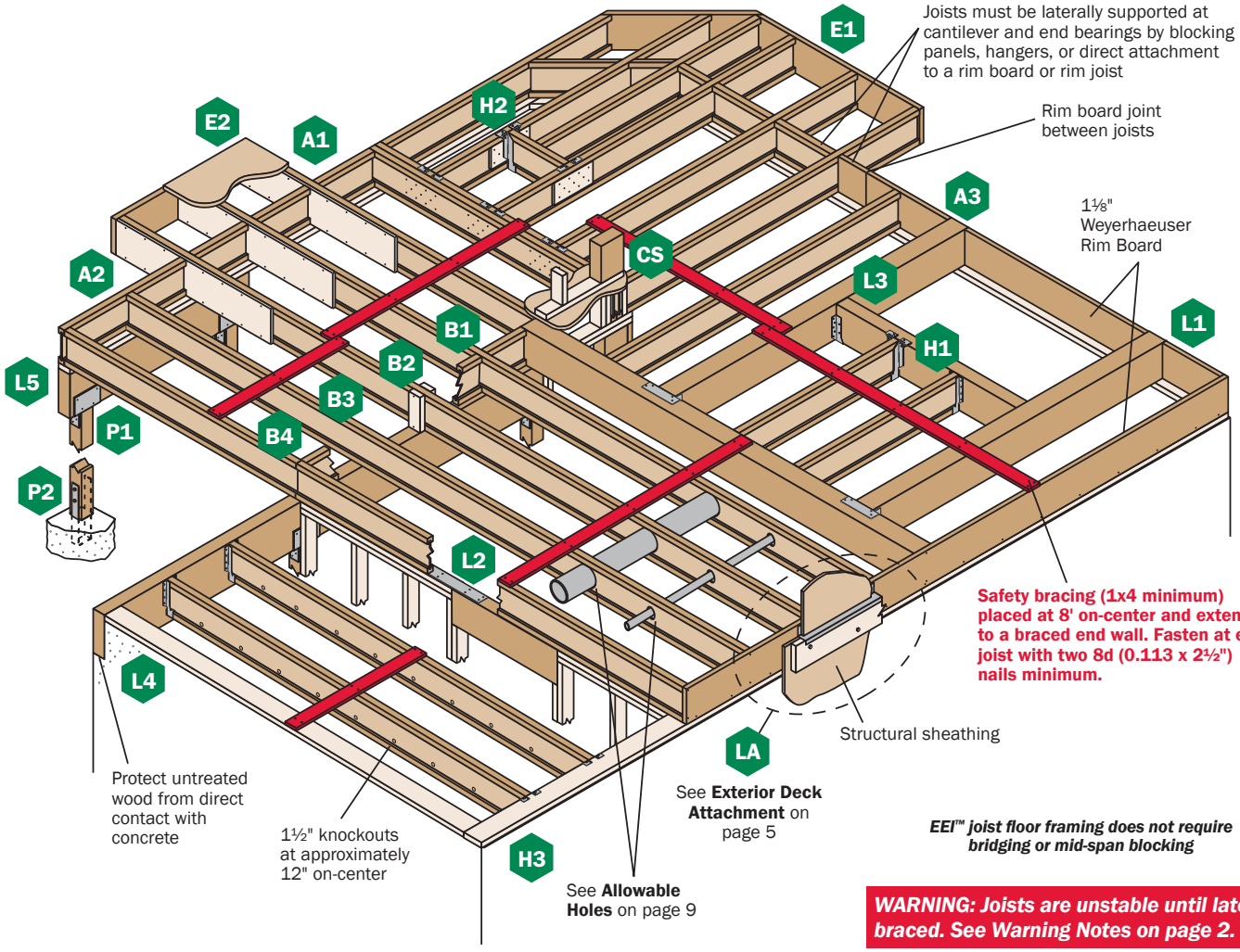
DO NOT cut holes in cantilever reinforcement.

General Notes

- Holes may be located vertically anywhere within the web. Leave ⅛" of web (minimum) at top and bottom of hole.
- Knockouts are located in web at approximately 12" on-center; they do not affect hole placement.
- For simple span (5' minimum) uniformly loaded joists meeting the requirements of this guide, one maximum size round hole may be located at the center of the joist span **provided that no other holes occur in the joist.**
- Distances are based on the maximum uniform loads shown in this guide.

WARNING: Drilling, sawing, sanding or machining wood products generates wood dust. The paint and/or coatings on this product may contain titanium dioxide. Wood dust and titanium dioxide are substances known to the State of California to cause cancer. For more information on Proposition 65, visit wy.com/inform.

EEI™ Joist Floor Framing

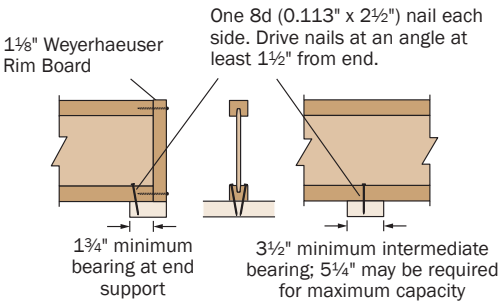


EEI™ joist floor framing does not require bridging or mid-span blocking

WARNING: Joists are unstable until laterally braced. See Warning Notes on page 2.

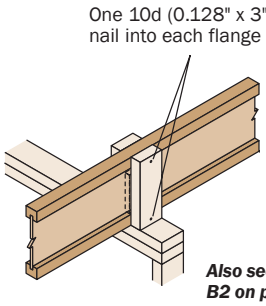
EEI™ Joist Nailing Requirements at Bearing

EEI™ Joist to Bearing Plate



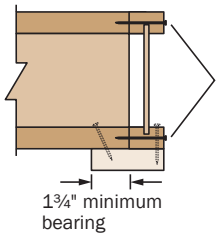
Shear transfer nailing: Use connections equivalent to floor panel nailing schedule

Squash Blocks to EEI™ Joist (Load bearing wall above)



Also see detail B2 on page 7

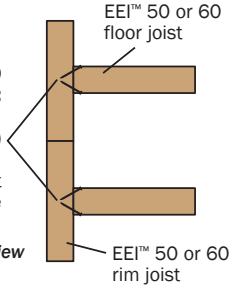
Rim to EEI™ Joist



1⅛" Weyerhaeuser Rim Board: One 10d (0.131" x 3") nail into each flange

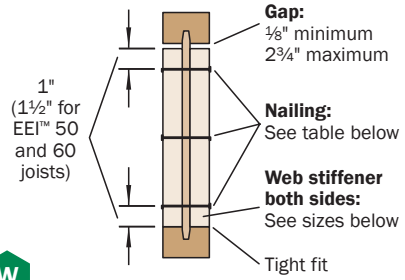
EEI™ 20 and 30 rim joist: One 16d (0.135" x 3½") nail into each flange

EEI™ 50 or 60 rim joist: Toenail with 10d (0.128" x 3") nails, one each side of EEI™ joist flange



Locate rim board joint between joists

Web Stiffener Attachment



W

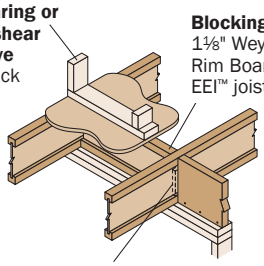
Web Stiffener Requirements

EEI™ Joist	Joist Depth	Nail Size and Quantity		Web Stiffener Sizes
		8d (0.113"x2½")	16d (0.135"x3½")	
20, 30	9½", 11⅞", 14"	3	–	⅞" x 2⅝" minimum(1)
	16"	–	4	
50, 60	11⅞", 14"	–	3	2x4, construction grade or better
	16"	–	4	

(1) PS1 or PS2 sheathing, face grain vertical

Load bearing or braced/shear wall above (must stack over wall below)

Blocking panel: 1⅛" Weyerhaeuser Rim Board or EEI™ joist

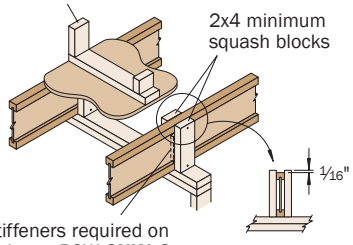


Web stiffeners required on both sides at B1W **ONLY.** See footnote 1 under span tables.

B1 B1W ***IRC 502.7 requires lateral restraint (blocking) at all intermediate supports in Seismic Design Categories D_0, D_1, and D_2 to strengthen the floor diaphragm.***

Load bearing wall above (must stack over wall below)

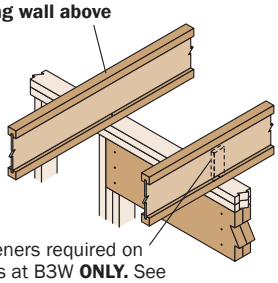
2x4 minimum squash blocks



Web stiffeners required on both sides at B2W **ONLY.** See footnote 1 under span tables.

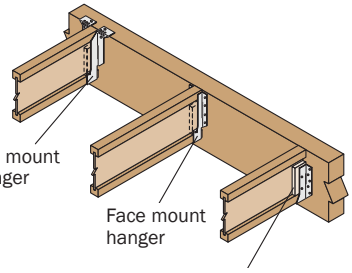
B2 B2W ***Blocking panels may be required with braced/shear walls above or below—see detail B1***

No load bearing wall above



Web stiffeners required on both sides at B3W **ONLY.** See footnote 1 under span tables.

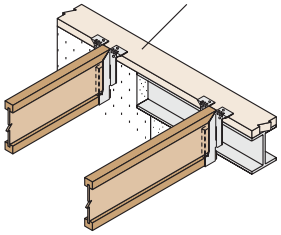
B3 B3W ***Blocking panels may be required with braced/shear walls above or below—see detail B1***



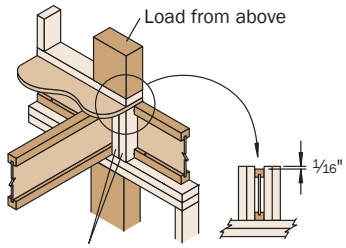
Web stiffeners required if sides of hanger do not laterally support at least ⅜" of EEI™ joist top flange

H1

Flush bearing plate required. Maximum ¼" overhang permitted at beam.



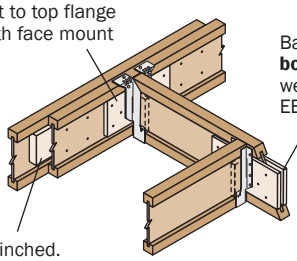
H3



2x4 minimum squash blocks; match bearing area of column above

CS ***Use 2x4 minimum squash blocks to transfer load around EEI™ joist***

Backer block: Install tight to top flange (tight to bottom flange with face mount hangers). Attach with ten 10d (0.128" x 3") nails, clinched when possible. Use 15 nails in multi-family applications.



Backer block **both sides** of web with single EEI™ joist

Filler block: Nail with ten 10d (0.128" x 3") nails, clinched. Use ten 16d (0.135" x 3½") nails from each side with EEI™ 50 and 60 joists. Use 15 nails in multi-family applications.

Filler blocks and fastening between joists may be omitted if tops of double joists are evenly loaded from above (such as a parallel bearing wall centered directly over double joists).

H2 ***With top mount hangers, backer block required only for downward loads exceeding 250 lbs or for uplift conditions***

Filler and Backer Block Sizes

Detail	Joist Series and Depth			
	EEI™ 20 or 30		EEI™ 50 or 60	
	9½" or 11⅞"	14" or 16"	11⅞"	14" or 16"
Filler Block(1) (Detail H2)	2x6 + ½" sheathing	2x8 + ½" sheathing	Two 2x6	Two 2x8
Cantilever Filler (Detail E4)	2x6 + ½" sheathing 4'-0" long	2x10 + ½" sheathing 6'-0" long	Not applicable	
Backer Block(1) (Detail F1 or H2)	⅞" or 1" net		2x6	2x8

(1) If necessary, increase filler and backer block height for face mount hangers and maintain ⅛" gap at top of joist. See detail W. Filler and backer block dimensions should accommodate required nailing without splitting. Suggested minimum length is 24" for filler and 12" for backer blocks; however, when a member supports joists along its entire length, the filler block must extend along the entire length.

Fastener Spacing and Diaphragm Design Information

EEI™	Closest On-Center Spacing per Row(1)(2)			Diaphragm Design Information				
					Maximum Allowable Seismic Design Capacities(4)			
	8d (0.113" x 2½"), 8d (0.131" x 2½"), 10d (0.128" x 3"), 12d (0.128" x 3¼")	10d (0.148" x 3"), 12d (0.148" x 3¼"), 16d (0.135" x 3½")	16d (0.162" x 3½")	Equivalent Nominal Framing Width	Blocked	Unblocked Case 1	Unblocked Case 3	Unblocked Cases 2, 4, 5, 6
20	4"	4"(3)	6"	3"	480	320	240	205(5)
30, 50 and 60	3"	4"(3)	6"	3"	720	320	240	240

(1) Stagger nails when using 4" on-center spacing and maintain ⅜" joist and panel edge distance. One row of fasteners is permitted (two at abutting panel edges) for diaphragms. Fastener spacing **for EEI™ joists** in diaphragm applications cannot be less than shown in table. When fastener spacing **for blocking** is less than above, rectangular blocking must be used in lieu of EEI™ joists.

(2) For non-diaphragm applications, multiple rows of fasteners are permitted if the rows are offset at least ½" and staggered.

(3) Can be reduced to 3" on-center for light gauge steel straps with 10d (0.148" x 1½") nails.

(4) The maximum allowable seismic design capacities may be increased by a factor of 1.4 for wind design applications.

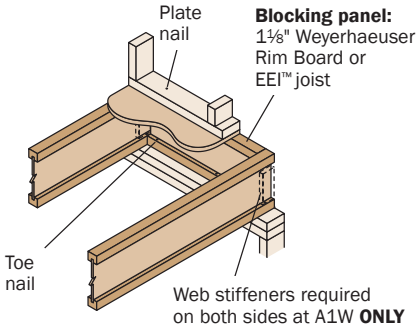
(5) The design capacity of an upblocked diaphragm framed with EEI™ 20 joists may be multiplied by a factor of 1.18 if a solvent-based subfloor adhesive that meets ASTM D3498 (AFG-01) performance standards is used in combination with mechanical fasteners for sheathing attachment. See page 12 for Weyerhaeuser's adhesive recommendations.

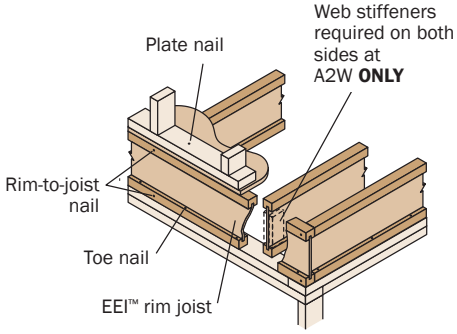
- Maximum spacing of nails is 18" on-center.
- 14 gauge staples may be substituted for 8d (0.113" x 2½") nails if minimum penetration of 1" is achieved.
- Table also applies to the attachment of EEI™ rim joists and blocking panels to the wall plate.

Also see nailing requirements on page 6

Rim Board Installation

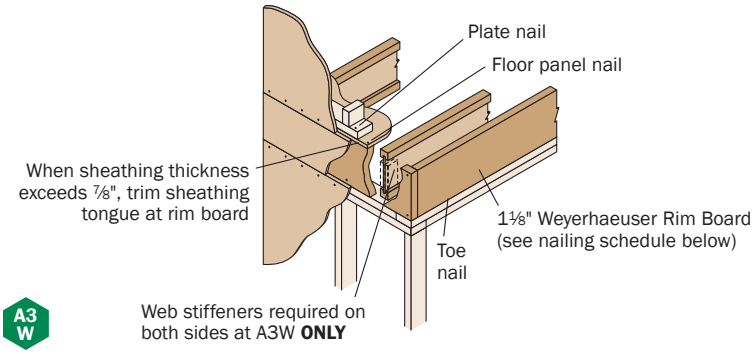
Rim board is often an important structural link in the ability of a home to resist lateral seismic and wind loads. It also transfers vertical load around the EEI™ joists. Rim board detail A3 (shown below) satisfies conventional construction requirements.





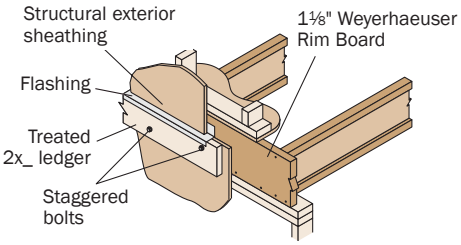
A1 **A1W** ***Attach blocking per A3 in Rim Board Installation table below***

A2 **A2W** ***Must have 1¾" minimum joist bearing at ends. Attach rim joist per A3 in Rim Board Installation table below.***



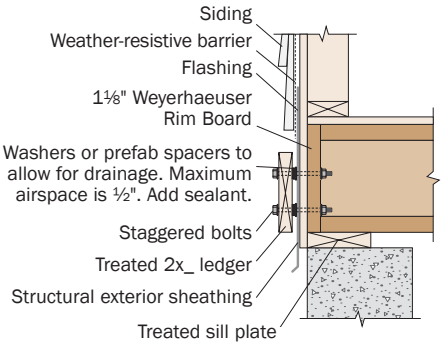
A3 **A3W**

Exterior Deck Attachment



LA

Shimmed Deck Attachment



1⅛" Weyerhaeuser Rim Board Installation

Nail Location	Nail Size	A3: Conventional Construction, Code Minimum
Plate Nail	16d (0.135" x 3½")	16" o.c.
Floor Panel Nail	8d (0.131" x 2½")	6" o.c.
Toe Nail	10d (0.131" x 3")	6" o.c.
Wall Sheathing	—	Per code

Nails Installed on the Narrow Face

Nail Size	Closest On-Center Spacing per Row
8d (0.113" or 0.131" x 2½"), 10d (0.128" or 0.148" x 3"), 12d (0.128" or 0.148" x 3¼")	6"
16d (0.162" x 3½")	16"(1)

(1) Can be reduced to 5" on-center if nail penetration into the narrow edge is no more than 1¼" (to minimize splitting).

- 14 gauge staples may be substituted for 8d (0.113" x 2½") nails if minimum penetration of 1" is achieved.

Vertical Load Transfer at Bearing

Rim Board or Blocking Material	Uniform Load (PLF)				Concentrated Load (lbs)
	9½"	11⅞"	14"	16"	All Depths
EEI™ 20, 30, or 50 Rim Joist or Blocking	2,000				–
EEI™ 60 Rim Joist or Blocking	2,560				–
1⅛" Weyerhaeuser Rim Board or Blocking	4860(1)		4,570	4,000	3,400

(1) Capacity is limited to a maximum of 360 psi per ASTM D7672.

- Loads shall not be increased for duration of load.

1⅛" Weyerhaeuser Rim Board Ledger Fastener(1) Capacities

Fastener Allowable Load(2) (lbs/bolt)		
½" Lag Bolt	½" Through Bolt	½" Through Bolt with Air Space
480	695	615(3)

(1) Corrosion-resistant fasteners required in wet-service applications.

(2) Allowable load determined in accordance with ASTM D7672.

(3) Maximum ½" shimmed air space.

General Notes

- Maintain 2" distance (minimum) from edge of ledger to edge of fastener. Stagger bolts.
- Local building codes may require through bolts with washers.
- Lateral restraining connections may be required. Refer to 2015 IRC R507.2.4 and the WIJMA deck connection details.

Also see nailing requirements on page 6

Design Information for 1⅛" Weyerhaeuser Rim Board

Allowable Design Stresses[1][2]
(100% Load Duration)

Modulus of elasticity	E	=	0.6 x 10^6 psi
Adjusted modulus of elasticity[3]	E_{min}	=	305,000 psi
Flexural stress	F_b	=	700 psi
Compression perpendicular to grain[4]	$F_{c\perp}$	=	660 psi
Horizontal shear parallel to grain	F_v	=	395 psi
Equivalent specific gravity[5]	SG	=	0.38[6]

(1) Unless otherwise noted, adjustment to the design stresses for duration of load are permitted in accordance with the applicable code.

(2) 1⅛" Weyerhaeuser Rim Board is recognized as an acceptable rim board material for use in conventional construction. It has a maximum lateral transfer capacity of 220 plf; maximum span is 8 feet.

(3) Reference modulus of elasticity for beam stability calculations, per NDS®.

(4) $F_{c\perp}$ must not be increased for duration of load.

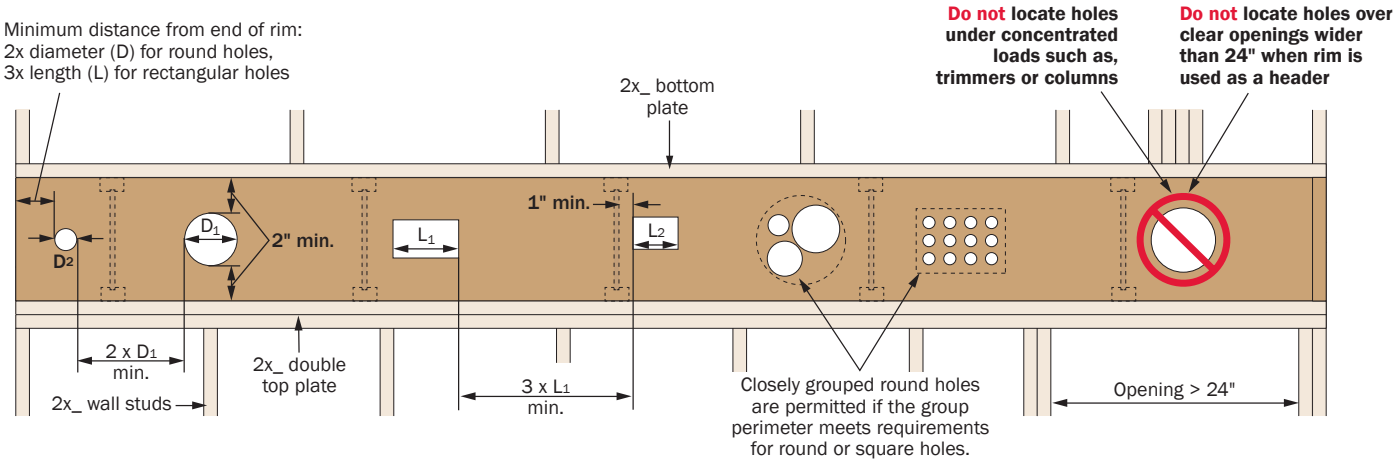
(5) For lateral connection design only.

(6) Specific Gravity of 0.50 may be used for nails, screws and bolts installed perpendicular to face and loaded perpendicular to grain.

Approximate Material Weights

Weyerhaeuser Rim Board Depth	Weight (plf)
9½"	2.9
11⅞"	3.6
14"	4.3
16"	4.9

Allowable Holes for 1⅛" Weyerhaeuser Rim Board

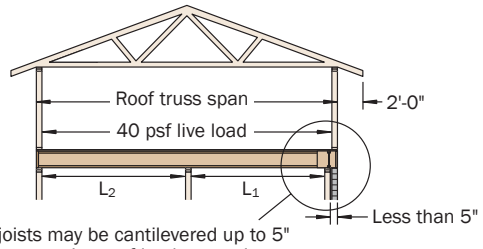


General Notes

- Hole depth must not exceed rim depth minus 4". Rectangular hole length must not exceed ⅔ of the joist spacing.
- The horizontal distance between the edges of adjacent round holes must be at least twice the diameter of the largest adjacent round hole, and three times the length of the largest adjacent rectangular hole.
- The horizontal distance between the end of the rim and the edge of the hole must be at least twice the diameter for a round hole and three times the hole length for a rectangular hole.
- Do not over cut rectangular holes.
- Maintain at least 2" from the top and bottom edge of the rim and at least 1" from the edge of a floor joist.
- Do not locate holes under concentrated loads or where rim is used as a header that clear spans more than 24".

Cantilevers Less than 5" (Brick Ledge)

See Section A of cantilever table on page 11

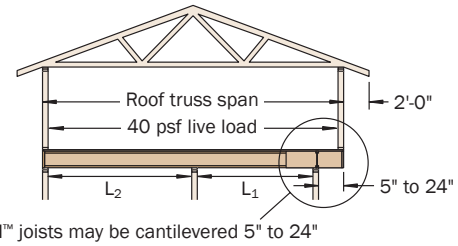


EEI™ joists may be cantilevered up to 5" when supporting roof load, assuming:

- simple or continuous span
- $L_1 \leq L_2$
- minimum backspan = 2x cantilever length

Cantilevers 5" to 24"

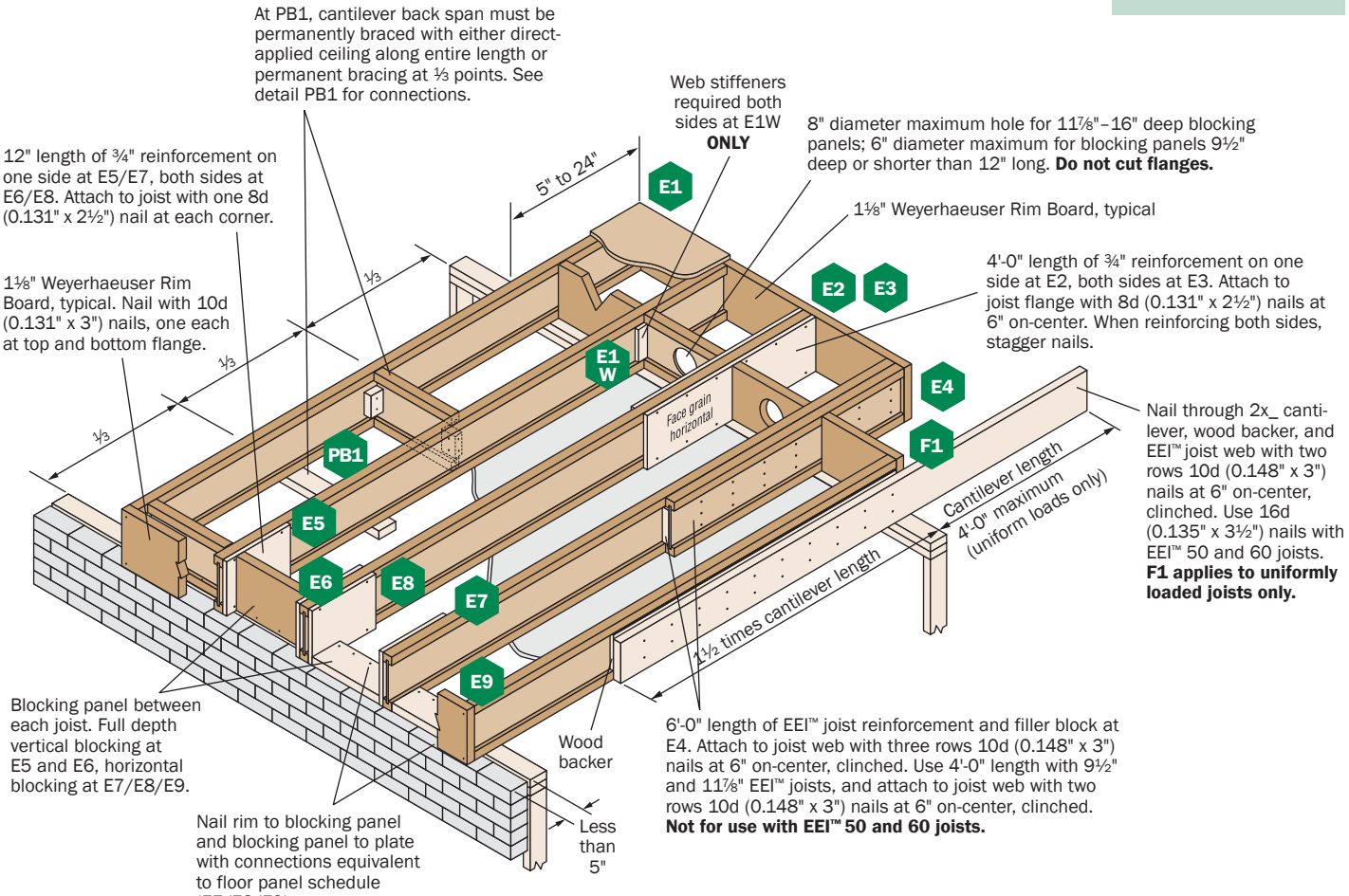
See Section B of cantilever table on page 11

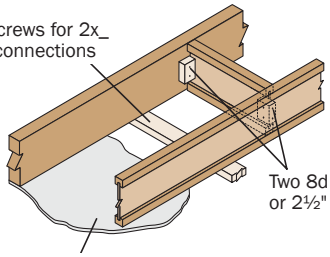


EEI™ joists may be cantilevered 5" to 24" when supporting roof load, assuming:

- simple or continuous span
- $L_1 \leq L_2$
- minimum backspan = 2x cantilever length

EEI™ joists are intended for dry-use applications





PB1 ***When specified on the layout, one of the above bracing options is required***

Cantilever Reinforcement

Depth	EEI™	Roof Truss Span	Section A: Cantilevers less than 5" (Brick Ledge)									Section B: Cantilevers 5" to 24"								
			Roof Total Load									Roof Total Load								
			35 PSF			45 PSF			55 PSF			35 PSF			45 PSF			55 PSF		
			On-Center Joist Spacing									On-Center Joist Spacing								
			16"	19.2"	24"	16"	19.2"	24"	16"	19.2"	24"	16"	19.2"	24"	16"	19.2"	24"	16"	19.2"	24"
9½" 11⅞" 14"	20	24'			E5			E5		E5	E5						E2		E2	X
		26'			E5		E5	E5		E5	E5						E3	E2	E3	X
		28'			E5		E5	E5	E5	E5	E5			E2		E2	X	E2	X	X
		30'		E5	E5		E5	E5	E5	E5	E6			E2	E2	E3	X	E3	X	X
		32'		E5	E5	E5	E5	E5	E5	E5	E6		E2	E3	E2	X	X	X	X	X
		34'		E5	X	E5	E5	X	E5	E5	X		E2	X	E3	X	X	X	X	X
11⅞" 14" 16"	30	28'			E5			E5		E5	E5									E2
		30'			E5			E5		E5	E5									E2
		32'			E5		E5	E5		E5	E6									E2
		34'			E5		E5	E5	E5	E5	E6						E2			E3
		36'			E5		E5	E5	E5	E5	E6						E2		E2	X
		38'		E5	E5		E5	E5	E5	E5	E6						E3		E3	X
		40'		E5	E5	E5	E5	E6	E5	E5	E6					E2	E3	E2	E3	X
11⅞" 14" 16"	50 and 60	30'						E5			E5									
		32'						E5		E5	E5									
		34'			E5			E5		E5	E6									E2
		36'			E5			E5		E5	E6									E2
		38'			E5		E5	E5		E5	E6									E2
		40'			E5		E5	E5	E5	E5	E6									E2

How to Use This Table

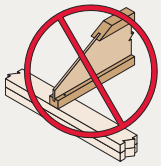
1. Identify EEI™ joist and depth.
2. Locate the **Roof Truss Span** (horizontal) that meets or exceeds your condition.
3. Identify the cantilever condition (less than 5" or 5" to 24") and locate the **Roof Total Load** and **On-Center Joist Spacing** for your application.
4. Scan down to find the appropriate cantilever detail and refer to drawing on page 10:
   - Blank cells indicate that no reinforcement is required.
   - E4 may be used in place of E2 or E3 except when using EEI™ 50 or 60 joists.
   - X indicates that cantilever will not work. Reduce spacing of joists and recheck table.

General Notes

- Table is based on:
  - 15 psf roof dead load on a horizontal projection.
  - 80 plf exterior wall load with 3'-0" maximum width window or door openings. For larger openings, or multiple 3'-0" width openings spaced less than 6'-0" on-center, additional joists beneath the opening's trimmers may be required.
  - Floor load of 40 psf live load and 10 psf dead load.
  - More restrictive of simple or continuous span.
  - Roof truss with 24" soffits.
- ¾" reinforcement refers to ¾" Exposure 1 plywood or other ¾" Exposure 1, 48/24-rated sheathing that is cut to match the full depth of the EEI™ joist. Install with face grain horizontal. Reinforcing member must bear fully on the wall plate.
- Designed for 2x4 and 2x6 plate widths.

These Conditions are NOT Permitted:

DO NOT use sawn lumber for rim board or blocking as it may shrink after installation. Use only engineered lumber



DO NOT bevel cut joist beyond inside face of wall.

DO NOT install hanger overhanging face of plate or beam. Flush bearing plate with inside face of wall or beam.

Fire-Safe Construction

EverEdge™ EEI™ joists may be used in fire-resistance-rated assemblies listed in IBC Table 721.1 (3) provided the maximum joist spacing and minimum dimension requirements are satisfied as detailed in American Wood Council (AWC) publication DCA-3, **Fire Rated Wood Frame Wall and Floor Ceiling Assemblies.**

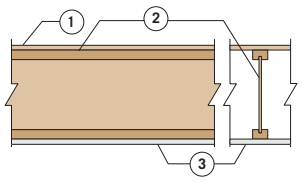
Design professionals are encouraged to review the geometric properties of EverEdge™ EEI™ joists (see table at right) to ensure compatiblity with the listed assembly.

Design professionals may also use the Component Additive Method (CAM) to calculate the fire-resistance-rating for an assembly as dictated within IBC 722.6 and AWC DCA 4.

Product	Flange Depth	Flange Width	Flange Area	Web Thickness
EEI™ 20	1¼"	2⁵⁄₁₆"	2.875"	⅜"
EEI™ 30	1⅜"	2⁵⁄₁₆"	3.163"	⅜"
EEI™ 50	1⅜"	3½"	4.813"	7⁄₁₆"
EEI™ 60	1½"	3½"	5.25"	7⁄₁₆"

Floor Assembly Compliant with 2012 IRC R501.3 and 2015 IRC R302.13

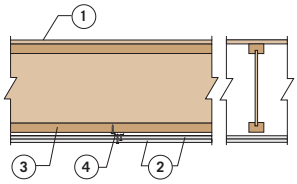
Single Layer



1. Appropriate span-rated sheathing (Exposure 1)
2. EEI™ joist
3. Single-layer of ½" gypsum wall board

One-Hour Assembly for Rated Construction

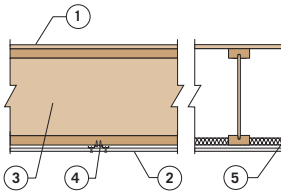
Double Layer



1. 48/24 tongue-and-groove, span-rated sheathing (Exposure 1), glued with a subfloor adhesive and nailed
2. Two layers of ⅝" Type X gypsum board
3. EEI™ joist
4. Resilient channels (optional)

IBC 722.6 (for EEI 20 joists);
AWC WIJ-1.6 (for EEI 30, 50 and 60 joists)

Single Layer



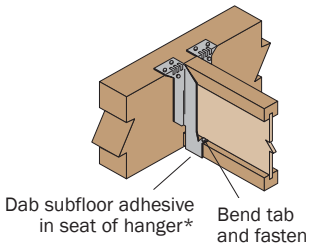
1. 48/24 tongue-and-groove, span-rated sheathing (Exposure 1), glued with a subfloor adhesive and nailed
2. ⅝" Type C gypsum board
3. EEI™ 60 joist
4. Resilient channel at 16" on-center
5. Minimum 1½"-thick (2.5 pcf minimum) mineral wool batts

AWC WIJ-1.2

Tips for Preventing Floor Noise

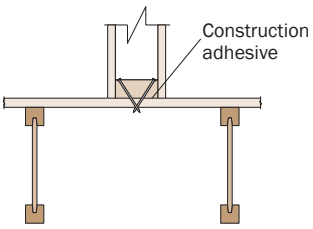
EverEdge™ EEI™ joists are structurally uniform and dimensionally stable, and they resist shrinking and twisting. This helps prevent gaps from forming around the nails between the joist and the floor panels—gaps that can potentially cause squeaks or other floor noise. Using EEI™ joists can help you build a quieter floor, but only if the entire floor system is installed properly. This is because other components of the floor system, such as hangers, connectors, and nails can be a source of floor noise.

Properly Seat Each Joist in Hanger



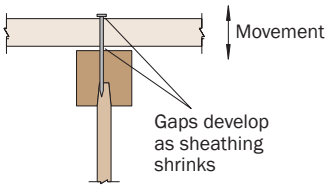
Seat the joist tight to the bottom of the hanger. When using hangers with tabs, bend the flange tabs over and nail to the EEI™ joist bottom flange. Placing a dab of subfloor adhesive* in the seat of the hanger prior to installing the joist can reduce squeaks.

Use Adhesive and Special Nailing When Needed



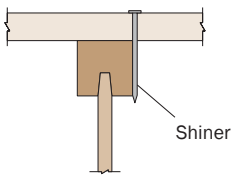
Nail interior partitions to the joists when possible. If the wall can be nailed only to the floor panel, run a bead of adhesive* under the wall and either cross nail, nail through and clinch tight, or screw tightly into the wall from below.

Prevent Shrinkage



Keep building materials dry, and properly glue floor panels to the joists. Panels that become excessively wet during construction shrink as they dry. This shrinkage may leave gaps that allow the panel to move when stepped on.

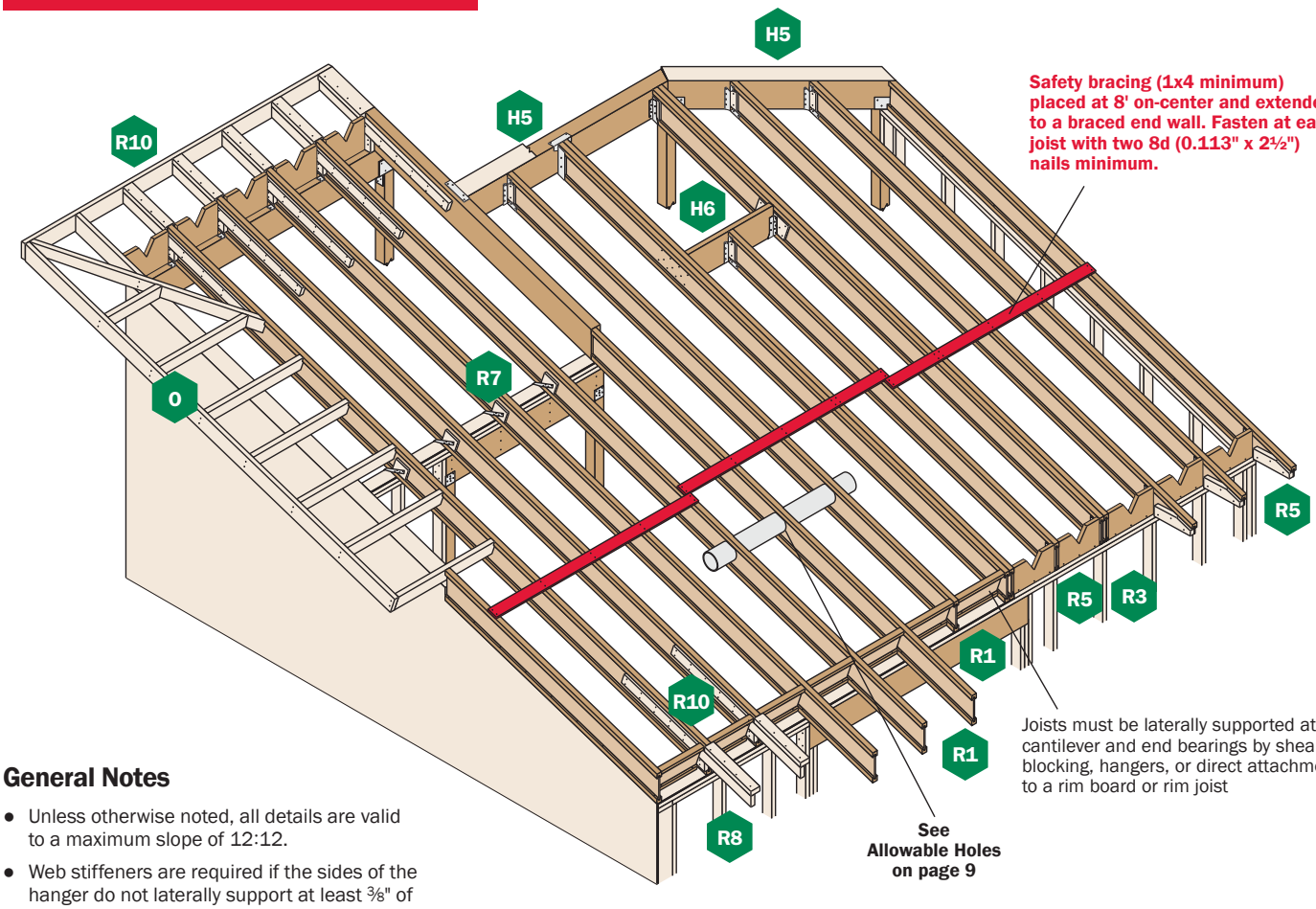
Avoid "Shiners"



Exercise care when nailing. Nails that barely hit the joists (shiners) do not hold the panel tight to the joist and should be removed. If left in, the nails will rub against the side of the joist when the panel deflects.

* Weyerhaeuser recommends using solvent-based subfloor adhesives that meet ASTM D3498 (AFG-01) performance standards. When latex subfloor adhesive is required, careful selection is necessary due to a wide range of performance between brands.

WARNING
Joists are unstable until laterally braced.
See Warning Notes on page 2.



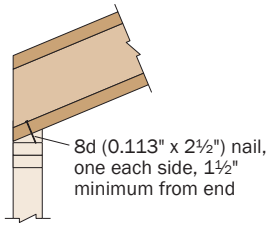
General Notes

- Unless otherwise noted, all details are valid to a maximum slope of 12:12.
- Web stiffeners are required if the sides of the hanger do not laterally support at least ⅜" of the EEI™ joist top flange.

EEI™ Joist Nailing Requirements at Bearing

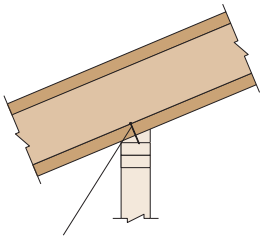
EEI™ Joist to Bearing Plate

End Bearing
(1¾" minimum bearing required)



When slope exceeds ¼:12, a beveled bearing plate, variable slope seat connector, or birdsmouth cut (at low end of joist only) is required

Intermediate Bearing
(3½" minimum bearing required)

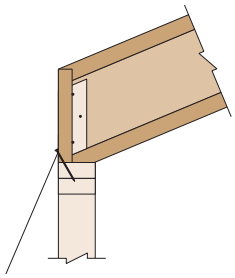


Slopes 3:12 or less:
One 8d (0.113" x 2½") nail each side. See detail R7.

Slopes greater than 3:12:
Two 8d (0.113" x 2½") nails each side, plus a twist strap and backer block. See detail R7S.

When slope exceeds ¼:12 for a 2x4 wall or ⅛:12 for a 2x6 wall, a beveled bearing plate or variable slope seat connector is required.

Blocking to Bearing Plate

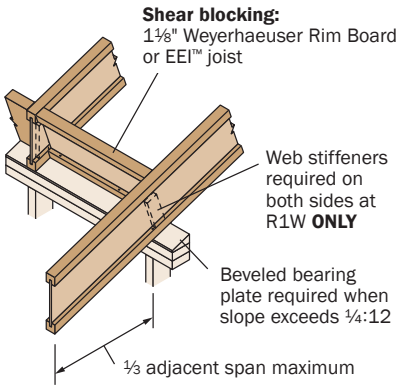


1⅛" Weyerhaeuer Rim Board:
Toenail with 10d (0.131" x 3") nails at 6" on-center or 16d (0.135" x 3½") nails at 12" on-center

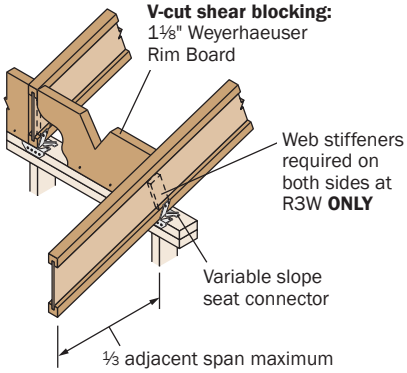
EEI™ joist blocking:
10d (0.128" x 3") nails at 6" on-center

Shear transfer nailing:
Minimum, use connections equivalent to sheathing nail schedule

Roof Details



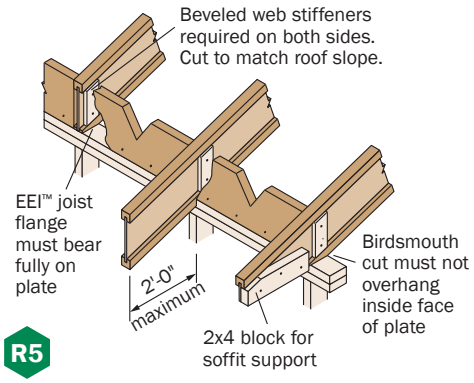
R1 R1W



R3 R3W

Birdsmouth Cut

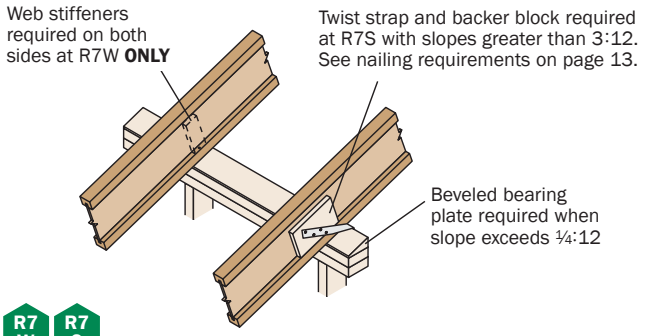
Allowed at low end of joist only



R5

Intermediate Bearing

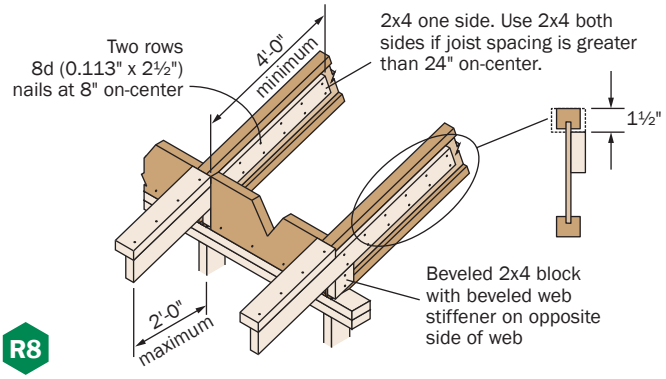
Blocking panels or shear blocking may be specified for joist stability at intermediate supports



R7 R7W R7S

Birdsmouth Cut

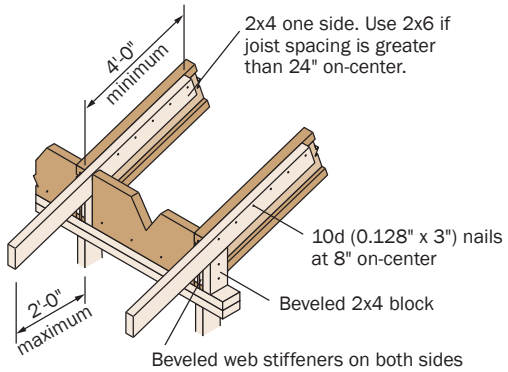
Allowed at low end of joist only



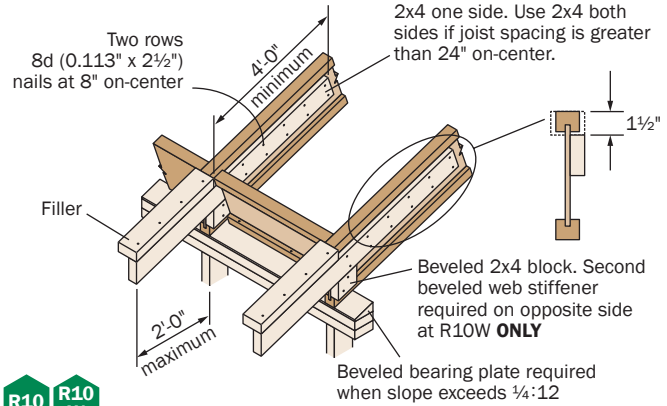
R8

Birdsmouth Cut

Allowed at low end of joist only



R9



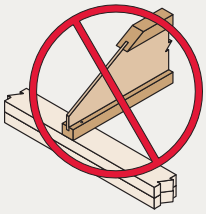
R10 R10W

These Conditions are NOT Permitted

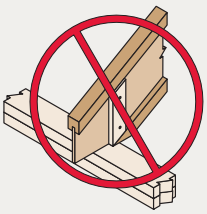
DO NOT cut holes too close to support.

Refer to Allowable Holes on page 5 for minimum distance from support.

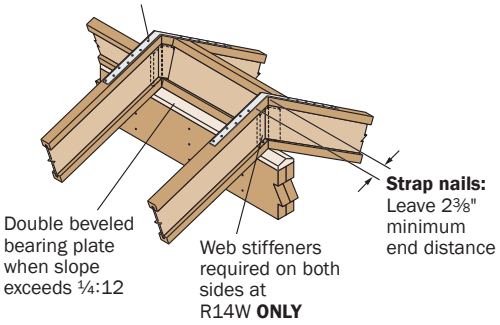
DO NOT bevel cut joist beyond inside face of wall.



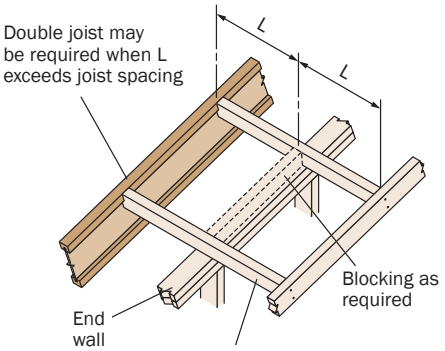
DO NOT overhang birdsmouth cut from inside face of plate.



EEI™ joist flange must bear fully on the plate. See detail BC on page 15.



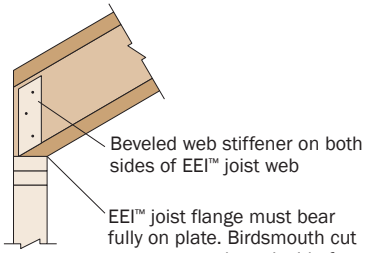
R14 R14W *Additional blocking may be required for shear transfer*



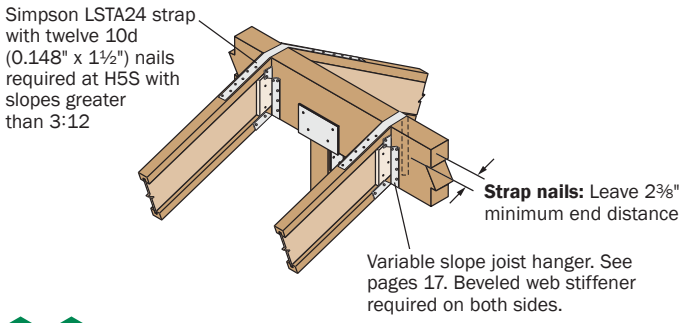
0

Birdsmouth Cut

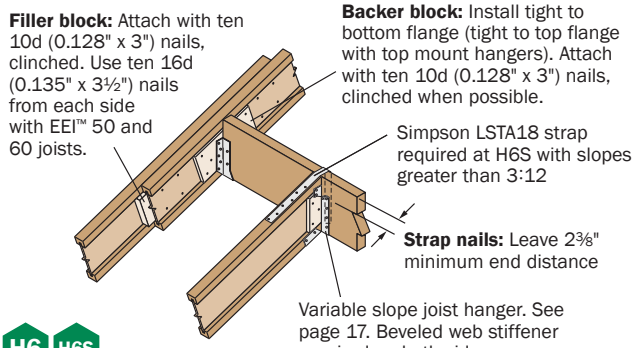
Allowed at low end of joist only



BC

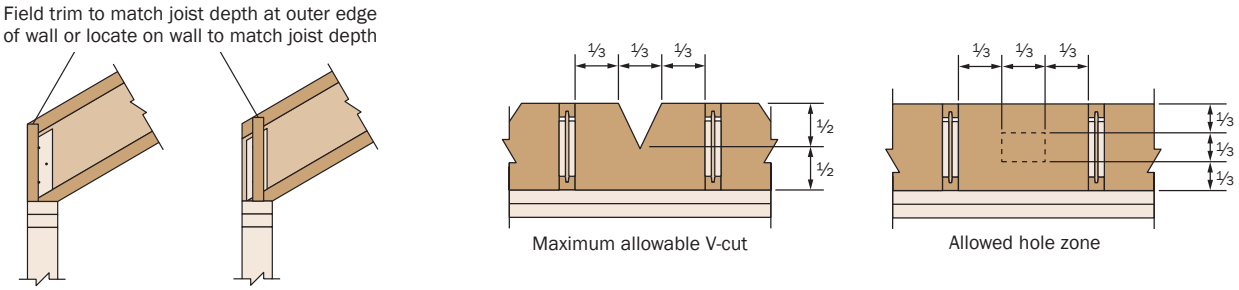


H5 H5S *Additional blocking may be required for shear transfer*



H6 H6S

Shear Blocking and Ventilation Holes (Roof Only)



SB ***For EEI™ joists with slopes of 10:12 to 12:12, the vertical depth of the shear blocking at bearing will require 1⅛" Weyerhaeuser Rim Board that is one size deeper than the EEI™ joist.***

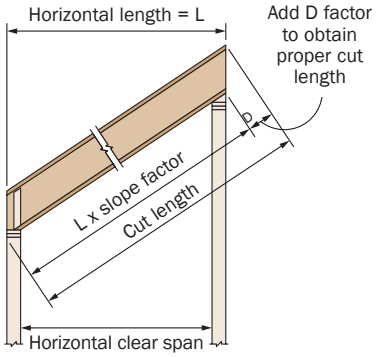
Filler and Backer Block Sizes

EEI™	20 or 30		50 or 60	
Depth	**9½" or 11⅞"**	**14" or 16"**	**11⅞"**	**14" or 16"**
Filler Block (Detail H6)	2x6 + ½" sheathing	2x8 + ½" sheathing	Two 2x6	Two 2x8
Backer Block (Detail H6)	⅞" or 1" net		2x6	2x8

- If necessary, increase filler and backer block height for face mount hangers and maintain ⅛" gap at top of joist; see detail W on page 6. Filler and backer block dimensions should accommodate required nailing without splitting. The suggested minimum length is 24" for filler and 12" for backer blocks.

D Factors (Cut Length Calculations)

Depth	Slope												
	2½:12	**3:12**	**3½:12**	**4:12**	**4½:12**	**5:12**	**6:12**	**7:12**	**8:12**	**9:12**	**10:12**	**11:12**	**12:12**
9½"	2"	2⅜"	2⅞"	3¼"	3⅝"	4"	4¾"	5⅝"	6⅜"	7⅛"	8"	8¾"	9½"
11⅞"	2½"	3"	3½"	4"	4½"	5"	6"	7"	8"	9"	10"	11"	11⅞"
14"	3"	3½"	4⅛"	4¾"	5¼"	5⅞"	7"	8¼"	9⅜"	10½"	11¾"	12⅞"	14"
16"	3⅜"	4"	4¾"	5⅜"	6"	6¾"	8"	9⅜"	10¾"	12"	13⅜"	14¾"	16"



Actual cut length can be approximated by multiplying the horizontal length by the slope factor (see table on page 16) and adding the D factor.

See General Notes and nailing requirements on page 12

Maximum Horizontal Clear Spans—Roof

O.C. Spacing	Depth	EEI™	Design Live Load (LL) and Dead Load (DL) in PSF											
			Non-Snow (125%)				Snow Load Area (115%)							
			20LL + 15DL		20LL + 20DL		25LL + 15DL		30LL + 15DL		40LL + 15DL		50LL + 15DL	
			Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
16"	9½"	20	21'-11"	19'-6"	20'-10"	18'-6"	20'-11"	18'-9"	20'-2"	18'-1"	18'-10"	17'-0"	17'-9"	16'-2"
	11⅞"	20	26'-1"	23'-3"	24'-10"	22'-0"	24'-11"	22'-4"	24'-0"	21'-7"	22'-0"	20'-4"	20'-3"	19'-3"
		30	27'-9"	24'-9"	26'-5"	23'-5"	26'-7"	23'-10"	25'-6"	23'-0"	23'-11"	21'-7"	22'-7"	20'-6"
		50	31'-11"	28'-6"	30'-5"	27'-0"	30'-7"	27'-5"	29'-5"	26'-5"	27'-6"	24'-10"	26'-0"	23'-7"
		60	32'-0"	28'-7"	30'-6"	27'-1"	30'-8"	27'-6"	29'-6"	26'-6"	27'-7"	24'-11"	26'-1"	23'-8"
	14"	20	29'-8"	26'-6"	28'-3"	25'-1"	27'-10"	25'-5"	26'-4"	24'-7"	23'-11"	23'-0"	22'-0"	21'-4"
		30	31'-6"	28'-2"	30'-0"	26'-8"	30'-2"	27'-1"	29'-0"	26'-1"	27'-2"	24'-7"	25'-8"	23'-4"
		50	36'-3"	32'-4"	34'-6"	30'-7"	34'-8"	31'-1"	33'-4"	30'-0"	31'-2"	28'-3"	29'-6"	26'-9"
		60	36'-5"	32'-6"	34'-8"	30'-9"	34'-10"	31'-3"	33'-6"	30'-2"	31'-4"	28'-4"	29'-7"	26'-11"
	16"	30	34'-11"	31'-2"	33'-3"	29'-6"	33'-5"	30'-0"	32'-2"	28'-11"	30'-1"	27'-2"	26'-0"	25'-10"
		50	40'-1"	35'-9"	38'-2"	33'-11"	38'-4"	34'-5"	36'-11"	33'-2"	34'-6"	31'-3"	31'-8"	29'-8"
		60	40'-4"	36'-0"	38'-5"	34'-1"	38'-7"	34'-7"	37'-1"	33'-5"	34'-8"	31'-5"	32'-10"	29'-10"
19.2"	9½"	20	20'-7"	18'-4"	19'-7"	17'-4"	19'-8"	17'-7"	18'-11"	17'-0"	17'-8"	16'-0"	16'-5"	15'-2"
	11⅞"	20	24'-6"	21'-10"	23'-4"	20'-8"	23'-5"	21'-0"	22'-1"	20'-3"	20'-0"	19'-1"	18'-6"	17'-10"
		30	26'-1"	23'-3"	24'-10"	22'-0"	24'-11"	22'-4"	24'-0"	21'-7"	22'-5"	20'-3"	21'-2"	19'-3"
		50	30'-0"	26'-9"	28'-7"	25'-4"	28'-8"	25'-9"	27'-7"	24'-10"	25'-9"	23'-4"	24'-4"	22'-2"
		60	30'-1"	26'-10"	28'-8"	25'-5"	28'-9"	25'-10"	27'-8"	24'-11"	25'-10"	23'-5"	24'-5"	22'-3"
	14"	20	27'-10"	24'-10"	26'-4"	23'-7"	25'-5"	23'-11"	24'-0"	22'-11"	21'-9"	21'-0"	20'-1"	19'-5"
		30	29'-7"	26'-5"	28'-2"	25'-0"	28'-4"	25'-5"	27'-3"	24'-6"	25'-6"	23'-1"	21'-7"	21'-8"
		50	34'-0"	30'-4"	32'-5"	28'-9"	32'-7"	29'-2"	31'-4"	28'-2"	29'-3"	26'-6"	26'-5"	25'-2"
		60	34'-2"	30'-6"	32'-7"	28'-11"	32'-9"	29'-4"	31'-5"	28'-4"	29'-5"	26'-8"	27'-9"	25'-3"
	16"	30	32'-10"	29'-3"	31'-3"	27'-9"	31'-5"	28'-2"	30'-2"	27'-2"	25'-7"	25'-3"	21'-7"	21'-8"
		50	37'-8"	33'-7"	35'-10"	31'-10"	36'-0"	32'-4"	34'-8"	31'-2"	31'-3"	29'-4"	26'-5"	25'-5"
		60	37'-10"	33'-9"	36'-1"	32'-0"	36'-3"	32'-6"	34'-10"	31'-4"	32'-7"	29'-6"	29'-6"	28'-0"
24"	9½"	20	19'-0"	17'-0"	18'-1"	16'-1"	18'-2"	16'-4"	17'-6"	15'-9"	15'-11"	14'-10"	14'-8"	14'-0"
	11⅞"	20	22'-8"	20'-3"	21'-7"	19'-2"	20'-11"	19'-5"	19'-9"	18'-9"	17'-11"	17'-3"	16'-6"	16'-0"
		30	24'-1"	21'-6"	23'-0"	20'-5"	23'-1"	20'-8"	22'-2"	20'-0"	20'-5"	18'-9"	17'-3"	17'-4"
		50	27'-9"	24'-9"	26'-5"	23'-6"	26'-7"	23'-10"	25'-6"	23'-0"	23'-10"	21'-7"	21'-1"	20'-3"
		60	27'-10"	24'-10"	26'-6"	23'-7"	26'-8"	23'-11"	25'-7"	23'-1"	23'-11"	21'-8"	22'-7"	20'-7"
	14"	20	25'-3"	23'-0"	23'-6"	21'-10"	22'-9"	21'-7"	21'-6"	20'-6"	19'-6"	18'-9"	16'-11"	17'-0"
		30	27'-5"	24'-6"	26'-1"	23'-2"	26'-3"	23'-6"	25'-0"	22'-8"	20'-5"	20'-2"	17'-3"	17'-4"
		50	31'-6"	28'-1"	30'-0"	26'-8"	30'-2"	27'-0"	29'-0"	26'-1"	24'-11"	23'-7"	21'-1"	20'-3"
		60	31'-8"	28'-3"	30'-2"	26'-9"	30'-3"	27'-2"	29'-1"	26'-3"	27'-2"	24'-8"	23'-7"	22'-6"
	16"	30	30'-4"	27'-1"	28'-11"	25'-8"	28'-2"	26'-1"	25'-0"	24'-1"	20'-5"	20'-2"	17'-3"	17'-4"
		50	34'-10"	31'-2"	33'-2"	29'-6"	33'-4"	29'-11"	30'-6"	28'-3"	24'-11"	23'-7"	21'-1"	20'-3"
		60	35'-1"	31'-4"	33'-4"	29'-8"	33'-6"	30'-1"	32'-3"	29'-0"	27'-11"	26'-2"	23'-7"	22'-6"

How to Use This Table

1. Determine appropriate live and dead load, and the load duration factor.
2. If your slope is 6:12 or less, use the **Low** slope column. If it is between 6:12 and 12:12, use the **High** column.
3. Scan down the column until you find a span that meets or exceeds the span of your application.
4. Select EEI™ joist and on-center spacing.

General Notes

- Table is based on:
  - Minimum bearing length of 1¾" end and 3½" intermediate, without web stiffeners.
  - Uniform loads.
  - More restrictive of simple or continuous span.
  - Minimum roof slope of ¼:12.
- Total load values are limited to deflection of L/180 and live load is based on joist deflection of L/240.
- For continuous spans, ratio of short span to long span should be 0.4 or greater to prevent uplift.
- A support beam or wall at the high end is required. Ridge board applications do not provide adequate support.

Roof—115% and 125% Load Duration (PLF) for 6'–16' Spans

Depth	EEI™	Total Load		Defl.	Total Load		Defl.	Total Load		Defl.	Total Load		Defl.	Total Load		Defl.	Total Load		Defl.
		Snow 115%	Non-Snow 125%	Live Load L/240	Snow 115%	Non-Snow 125%	Live Load L/240	Snow 115%	Non-Snow 125%	Live Load L/240	Snow 115%	Non-Snow 125%	Live Load L/240	Snow 115%	Non-Snow 125%	Live Load L/240	Snow 115%	Non-Snow 125%	Live Load L/240
		Roof Joist Horizontal Clear Span																	
		6'			8'			10'			12'			14'			16'		
9½"	20	360	392	*	272	295	*	218	237	*	182	198	*	146	159	143	112	122	99
11⅞"	20	360	392	*	272	295	*	218	237	*	182	198	*	156	170	*	137	149	*
	30	368	400	*	277	301	*	223	242	*	186	202	*	159	173	*	140	152	*
	50	449	488	*	338	368	*	272	295	*	227	246	*	195	212	*	170	185	*
	60	501	545	*	378	411	*	303	330	*	253	275	*	217	236	*	190	207	*
14"	20	360	392	*	272	295	*	218	237	*	182	198	*	156	170	*	137	149	*
	30	368	400	*	277	301	*	223	242	*	186	202	*	159	173	*	140	152	*
	50	449	488	*	338	368	*	272	295	*	227	246	*	195	212	*	170	185	*
	60	501	545	*	378	411	*	303	330	*	253	275	*	217	236	*	190	207	*
16"	30	368	400	*	277	301	*	223	242	*	186	202	*	159	173	*	140	152	*
	50	449	488	*	338	368	*	272	295	*	227	246	*	195	212	*	170	185	*
	60	501	545	*	378	411	*	303	330	*	253	275	*	217	236	*	190	207	*
		18'			20'			22'			24'			26'			28'		
9½"	20	88	94	71															
11⅞"	20	112	122	116	91	99	86	75	81	66									
	30	124	135	*	112	122	103	102	105	78	82	82	61						
	50	152	165	*	137	148	*	124	135	117	114	122	91	97	97	73	79	79	59
	60	169	184	*	152	166	153	139	151	118	123	123	92	98	98	73	79	79	59
14"	20	122	132	*	107	117	*	89	96	95		81	74						
	30	124	135	*	112	122	*	102	111	*	93	101	88	86	94	70	76	76	57
	50	152	165	*	137	148	*	124	135	*	114	124	*	105	114	104	98	106	85
	60	169	184	*	152	166	*	139	151	*	127	138	132	117	128	106	109	115	86
16"	30	124	135	*	112	122	*	102	111	*	93	101	*	86	94	94	80	87	76
	50	152	165	*	137	148	*	124	135	*	114	124	*	105	114	*	98	106	*
	60	169	184	*	152	166	*	139	151	*	127	138	*	117	128	*	109	119	115

* Indicates that **Total Load** value controls.

Slope Factors

Slope	2½:12	3:12	3½:12	4:12	4½:12	5:12	6:12	7:12	8:12	9:12	10:12	11:12	12:12
Factor	1.021	1.031	1.042	1.054	1.068	1.083	1.118	1.158	1.202	1.250	1.302	1.357	1.414

How to Use These Tables

1. Calculate actual total load in pounds per linear foot (plf).
2. Select appropriate **Roof Joist Horizontal Clear Span**. For slopes greater than 2:12, approximate the increased dead load by multiplying the joist horizontal clear span by the **Slope Factor** above.
3. Scan down the column to find a EEI™ joist that meets or exceeds actual total load.

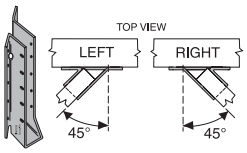
General Notes

- Tables are based on:
  - Minimum bearing length of 1¾" end and 3½" intermediate, without web stiffeners.
  - Uniform loads.
  - More restrictive of simple or continuous span.
  - Minimum roof slope of ¼:12.
- **Total Load** values are limited to deflection of L/180. For stiffer deflection criteria, use the **Live Load** L/240 values.

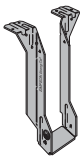
Framing Connectors (Simpson Strong-Tie®)

Single Joist, Top Mount

Single Joist, Face Mount

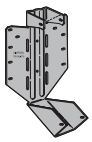


Face Mount Skewed 45° Joist Hanger

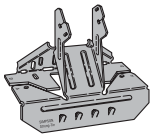


Double Joist, Top Mount

Double Joist, Face Mount



Variable Slope Seat Joist Hanger



Variable Slope Seat Connector

Joist		Single Joist—Top Mount				Single Joist—Face Mount				Face Mount Skewed 45° Joist Hanger[1]			
Depth	EEI™	Hanger	Capacity (lbs)	Nailing		Hanger	Capacity (lbs)	Nailing		Hanger	Capacity (lbs)	Nailing	
				Header	Joist			Header	Joist			Header	Joist
9½"	20	ITS2.37/9.5	1,120	10d	–	IUS2.37/9.5	950	10d	–	***SUR/L2.37/9***	1,265	16d	10d x 1½"
11⅞"	20	ITS2.37/11.88	1,120	10d	–	IUS2.37/11.88[1]	1,120	10d	–	***SUR/L2.37/11***	1,410	16d	10d x 1½"
	30	ITS2.37/11.88	1,140	10d	–	IUS2.37/11.88[1]	1,140	10d	–	***SUR/L2.37/11***	1,430	16d	10d x 1½"
	50	ITS3.56/11.88[2]	1,150	10d	–	IUS3.56/11.88[1][2]	1,150	10d	–	***SUR/L410***	1,495	16d	16d
	60	ITS3.56/11.88[2]	1,150	10d	–	IUS3.56/11.88[1][2]	1,150	10d	–	***SUR/L411***	1,920	16d	16d
14"	20	ITS2.37/14	1,120	10d	–	IUS2.37/14[1]	1,120	10d	–	***SUR/L2.37/14***	1,410	16d	10d x 1½"
	30	ITS2.37/14	1,140	10d	–	IUS2.37/14[1]	1,140	10d	–	***SUR/L2.37/14***	1,430	16d	10d x 1½"
	50	ITS3.56/14[2]	1,150	10d	–	IUS3.56/14[1][2]	1,150	10d	–	***SUR/L414***	1,460	16d	16d
	60	ITS3.56/14[2]	1,150	10d	–	IUS3.56/14[1][2]	1,150	10d	–	***SUR/L414***	1,610	16d	16d
16"	30	ITS2.37/16	1,140	10d	–	IUS2.37/16[1]	1,140	10d	–	***SUR/L2.37/14***	1,430	16d	10d x 1½"
	50	ITS3.56/16[2]	1,150	10d	–	IUS3.56/16[1][2]	1,150	10d	–	***SUR/L414***	1,460	16d	16d
	60	ITS3.56/16[2]	1,150	10d	–	IUS3.56/16[1][2]	1,150	10d	–	***SUR/L414***	1,610	16d	16d

Joist		Double Joist—Top Mount				Double Joist—Face Mount			
Depth	EEI™	Hanger	Capacity (lbs)	Nailing		Hanger	Capacity (lbs)	Nailing	
				Header	Joist			Header	Joist
9½"	20	***MIT359.5-2***	2,115	16d	10d x 1½"	***MIU4.75/9***	2,305	16d	10d x 1½"
11⅞"	20	***MIT3511.88-2***	2,115	16d	10d x 1½"	***MIU4.75/11[1]***	2,485	16d	10d x 1½"
	30	***MIT3511.88-2***	2,115	16d	10d x 1½"	***MIU4.75/11***	2,525	16d	10d x 1½"
	50	***B7.12/11.88***	2,925	16d	16d	***HU412-2***	2,380	16d	16d
	60	***B7.12/11.88***	3,215	16d	16d	***HU412-2***	2,380	16d	16d
14"	20	***MIT3514-2***	2,115	16d	10d x 1½"	***MIU4.75/14[1]***	2,485	16d	10d x 1½"
	30	***MIT3514-2***	2,115	16d	10d x 1½"	***MIU4.75/14[1]***	2,525	16d	10d x 1½"
	50	***B7.12/14***	2,925	16d	16d	***HU414-2***	2,925	16d	16d
	60	***B7.12/14***	3,215	16d	16d	***HU414-2***	2,975	16d	16d
16"	30	***MIT4.75/16***	2,115	16d	10d x 1½"	***MIU4.75/16[1]***	2,525	16d	10d x 1½"
	50	***B7.12/16***	2,925	16d	16d	***HU414-2***	2,925	16d	16d
	60	***B7.12/16***	3,215	16d	16d	***HU414-2***	2,975	16d	16d

Joist	Variable Slope Seat Joist Hanger[3]				
EEI™	Hanger	Capacity (lbs)		Nailing	
		Sloped Only[1]	Sloped and Skewed	Header	Joist
20	***LSSUI35***	1,110	995	10d	10d x 1½"
30	***LSSUI35***	1,110	995	10d	10d x 1½"
50	***LSSU410***	1,725	1,625	16d	10d x 1½"
60	***LSSU410***	1,885	1,625	16d	10d x 1½"

Joist	Variable Slope Seat Connector[4]			
EEI™	Hanger	Capacity (lbs)	Nailing	
			Header	Joist
20	VPA35	1,120	10d	10d x 1½"
30	VPA35	1,140	10d	10d x 1½"
50	VPA4	1,230	10d	10d x 1½"
60	VPA4	1,230	10d	10d x 1½"

Hanger information on these two pages was provided by Simpson Strong-Tie®. For additional information, please refer to their literature.

General Notes

- ***Bold italic*** hangers require web stiffeners.
- Capacities will vary with different nailing criteria or other support conditions.
- Hanger capacities shown are either joist bearing capacity or hanger capacity—whichever is less. Joist end reaction must be checked to ensure it does not exceed the capacity shown in the tables.
- All capacities are for downward loads at 100% duration of load.
- Fill all round, dimple, and positive-angle nail holes.
- Use sloped seat hangers and beveled web stiffeners when EEI™ joist slope exceeds ¼:12.
- Leave 1⁄16" clearance (⅛" maximum) between the end of the supported joist and the header or hanger.
- Nails: 16d = 0.162" x 3½", 10d = 0.148" x 3", and 10d x 1½" = 0.148" x 1½".

Support Requirements

- Support material assumed to be EverEdge™ LVL engineered lumber or sawn lumber (Douglas fir or southern pine species).
- Minimum support width for single- and double-joist top mount hangers is 3" (1½" for ITS hangers).
- Minimum support width for face mount hangers with 10d and 16d nails (clinched) is 1½" and 1¾", respectively.

Table Footnotes:

(1) Face mount hanger capacities may be increased up to 15% for snow roofs or 25% for non-snow roofs. Maximum increase for LSSU and LSSUI hangers is 15%.

(2) Capacity may be increased to 1,330 lbs if web stiffeners are used.

(3) LSSU and LSSUI hangers can be field adjusted for slopes and skews of up to 45 degrees. Additional lateral restraints are required for 16" deep EEI™ joists.

(4) VPA connectors are allowed on slopes of 3:12 through 12:12 only.

This section contains design and specification information for EverEdge™ LVL used in residential applications.

Allowable Design Properties(1)

(100% Load Duration)

LVL Grade	Width	Design Property	Depth										
			5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	16"	18"	20"	24"
2.0E	1¾"	Moment (ft-lbs)	2,370	3,970	6,250	6,565	9,000	9,955	13,530	17,350	21,610	26,300	36,950
		Shear (lbs)	1,830	2,410	3,075	3,160	3,740	3,950	4,655	5,320	5,985	6,650	7,980
		Moment of Inertia (in.⁴)	24	56	115	125	208	244	400	597	851	1,167	2,016
		Weight (plf)	2.8	3.7	4.7	4.8	5.7	6.1	7.1	8.2	9.2	10.2	12.3

(1) For product in beam orientation, unless otherwise noted.

Design Stresses(1)

(100% Load Duration, Beam Orientation)

Shear modulus of elasticity	G	=	125,000 psi
Modulus of elasticity	E	=	2.0 x 10^6 psi
Adjusted modulus of elasticity(2)	E_{min}	=	1,016,535 psi
Flexural stress(3)	F_b	=	2,900 psi
Tension stress(4)	F_t	=	1,555 psi
Compression perpendicular to grain(5)	$F_{c\perp}$	=	800 psi
Compression parallel to grain	$F_{c\|\|}$	=	2,510 psi
Horizontal shear parallel to grain	F_v	=	285 psi
Equivalent specific gravity(6)	SG	=	0.50(6)

(1) Unless otherwise noted, adjustment to the design stresses for duration of load are permitted in accordance with the applicable code.

(2) Reference modulus of elasticity for beam and column stability calculations, per NDS®.

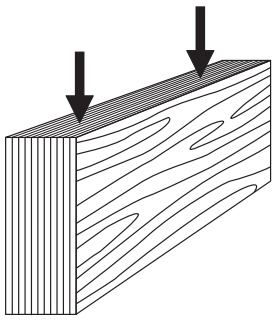
(3) For 12" depth. For other depths, multiply F_b by $\left[\frac{12}{d}\right]^{0.136}$

(4) F_t has been adjusted to reflect the volume effects for most standard applications.

(5) $F_{c\perp}$ may not be increased for duration of load.

(6) For lateral connection design only.

Beam Orientation



General Assumptions for EverEdge™ LVL Beams

- Lateral support is required at bearing and along the span at 24" on-center, maximum.
- Bearing lengths are based on each product's bearing stress for applicable grade and orientation.
- All members 7¼" and less in depth are restricted to a maximum deflection of 5⁄16".
- Beams that are 1¾" x 16" and deeper require multiple plies.
- No camber.
- Beams and columns must remain straight to within $5L^2/4608$ (in.) of true alignment. *L* is the unrestrained length of the member in feet.

See page 28 for multiple-member beam connections.

EverEdge™ LVL is intended for dry-use applications

EverEdge™ LVL: Floor—100% (PLF)

Span	Condition	1¾" Width							3½" Width (2-ply)							
		5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	16"
6'	Total Load	455	762	1,027	1,062	1,324	1,424	1,794	910	1,525	2,055	2,125	2,648	2,848	3,589	4,175
	Live Load L/360	305	659	*	*	*	*	*	610	1,319	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	1.6/4.1	2.2/5.5	2.3/5.7	2.9/7.1	3.1/7.7	3.9/9.7	1.5/3.5	1.6/4.1	2.2/5.5	2.3/5.7	2.9/7.1	3.1/7.7	3.9/9.7	4.5/11.3
8'	Total Load	153	342	722	745	915	978	1,207	307	685	1,445	1,491	1,830	1,956	2,414	2,885
	Live Load L/360	133	295	584	628	*	*	*	267	591	1,169	1,257	*	*	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	2.1/5.2	2.1/5.4	2.6/6.6	2.8/7	3.5/8.7	1.5/3.5	1.5/3.5	2.1/5.2	2.1/5.4	2.6/6.6	2.8/7	3.5/8.7	4.1/10.4
9'-6"	Total Load	77	174	538	577	742	791	968	154	349	1,077	1,154	1,484	1,583	1,937	2,294
	Live Load L/360	*	*	362	390	624	723	*	*	*	724	780	1,248	1,446	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.8/4.6	2/4.9	2.5/6.3	2.7/6.8	3.3/8.3	1.5/3.5	1.5/3.5	1.8/4.6	2/4.9	2.5/6.3	2.7/6.8	3.3/8.3	3.9/9.8
10'	Total Load	62	142	465	502	698	744	908	124	284	930	1,004	1,396	1,489	1,817	2,147
	Live Load L/360	*	*	313	337	542	628	*	*	*	626	675	1,084	1,257	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.7/4.2	1.8/4.5	2.5/6.3	2.7/6.7	3.3/8.2	1.5/3.5	1.5/3.5	1.7/4.2	1.8/4.5	2.5/6.3	2.7/6.7	3.3/8.2	3.9/9.7
12'	Total Load		67	274	296	482	546	727	57	135	548	593	965	1,093	1,455	1,709
	Live Load L/360		*	186	200	325	379	599	*	*	372	401	651	758	1,198	*
	Min. End/Int. Bearing (in.)		1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	2.4/5.9	3.2/7.9	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	2.4/5.9	3.2/7.9	3.7/9.2
14'	Total Load			173	188	308	361	545		70	347	376	617	722	1,090	1,400
	Live Load L/360			119	128	209	244	390		*	238	257	419	489	780	1,132
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.6/3.9	1.8/4.6	2.8/6.9		1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9	1.8/4.6	2.8/6.9	3.5/8.9
16'-6"	Total Load			105	114	189	222	360			211	229	379	445	721	1,003
	Live Load L/360			73	79	130	152	245			147	159	260	305	490	716
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2.2/5.4			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2.2/5.4	3/7.5
18'-6"	Total Load			74	80	134	158	257			148	161	268	316	515	760
	Live Load L/360			52	56	93	109	176			105	113	186	218	352	517
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.4			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.4	2.6/6.4
20'	Total Load			57	62	105	124	204			115	125	211	249	408	604
	Live Load L/360			41	45	74	87	140			83	90	148	174	281	414
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.8			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.8	2.2/5.5
22'	Total Load					78	92	152			85	92	157	185	305	455
	Live Load L/360					56	65	106			63	68	112	131	213	314
	Min. End/Int. Bearing (in.)					1.5/3.5	1.5/3.5	1.5/3.5			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.9/4.6
24'	Total Load					59	70	117			63	69	118	140	234	350
	Live Load L/360					43	51	82			48	52	86	102	165	244
	Min. End/Int. Bearing (in.)					1.5/3.5	1.5/3.5	1.5/3.5			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9
26'	Total Load						54	91				52	91	108	182	274
	Live Load L/360						40	65				41	68	80	130	193
	Min. End/Int. Bearing (in.)						1.5/3.5	1.5/3.5				1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5
28'	Total Load							71					71	84	143	217
	Live Load L/360							52					55	64	105	155
	Min. End/Int. Bearing (in.)							1.5/3.5					1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5
30'	Total Load							57					55	66	114	174
	Live Load L/360							42					44	52	85	127
	Min. End/Int. Bearing (in.)							1.5/3.5					1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5

* Indicates **Total Load** value controls.

How to Use This Table

1. Calculate total and live load (neglect beam weight) on the beam or header in pounds per linear foot (plf).
2. Select appropriate **Span** (center-to-center of bearing).
3. Scan horizontally to find the proper width, and a depth with a capacity that exceeds actual total and live loads.
4. Review bearing length requirements to ensure adequacy.

Also see General Notes on page 21.

EverEdge™ LVL: Floor—100% (PLF) *continued*

Span	Condition	3½" Width (2-ply)			5¼" Width (3-ply)										
		18"	20"	24"	5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	16"	18"	20"	24"
6'	Total Load	4,175	4,175	4,175	1,366	2,287	3,082	3,188	3,972	4,272	5,384	6,263	6,263	6,263	6,263
	Live Load L/360	*	*	*	916	1,978	*	*	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.6/4.1	2.2/5.5	2.3/5.7	2.9/7.1	3.1/7.7	3.9/9.7	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3
8'	Total Load	3,125	3,125	3,125	461	1,028	2,167	2,237	2,745	2,935	3,621	4,328	4,688	4,688	4,688
	Live Load L/360	*	*	*	401	887	1,753	1,886	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	2.1/5.2	2.1/5.4	2.6/6.6	2.8/7	3.5/8.7	4.1/10.4	4.5/11.3	4.5/11.3	4.5/11.3
9'-6"	Total Load	2,628	2,628	2,628	231	524	1,615	1,731	2,227	2,375	2,905	3,441	3,942	3,942	3,942
	Live Load L/360	*	*	*	*	*	1,086	1,171	1,872	2,170	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	1.8/4.6	2/4.9	2.5/6.3	2.7/6.8	3.3/8.3	3.9/9.8	4.5/11.3	4.5/11.3	4.5/11.3
10'	Total Load	2,495	2,495	2,495	187	427	1,396	1,506	2,095	2,233	2,725	3,221	3,743	3,743	3,743
	Live Load L/360	*	*	*	*	*	940	1,013	1,626	1,886	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	1.7/4.2	1.8/4.5	2.5/6.3	2.7/6.7	3.3/8.2	3.9/9.7	4.5/11.3	4.5/11.3	4.5/11.3
12'	Total Load	1,976	2,075	2,075	86	203	823	889	1,447	1,640	2,183	2,563	2,964	3,113	3,113
	Live Load L/360	*	*	*	*	*	558	602	976	1,137	1,797	*	*	*	*
	Min. End/Int. Bearing (in.)	4.3/10.7	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	2.4/5.9	3.2/7.9	3.7/9.2	4.3/10.7	4.5/11.3	4.5/11.3
14'	Total Load	1,632	1,775	1,775		106	521	564	926	1,083	1,635	2,100	2,448	2,663	2,663
	Live Load L/360	1,561	*	*		*	357	386	629	734	1,171	1,698	2,342	*	*
	Min. End/Int. Bearing (in.)	4.1/10.3	4.5/11.3	4.5/11.3		1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9	1.8/4.6	2.8/6.9	3.5/8.9	4.1/10.3	4.5/11.3	4.5/11.3
16'-6"	Total Load	1,251	1,502	1,502			317	343	569	668	1,081	1,505	1,877	2,254	2,254
	Live Load L/360	995	1,330	*			220	238	391	457	735	1,074	1,493	1,995	*
	Min. End/Int. Bearing (in.)	3.7/9.4	4.5/11.3	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2.2/5.4	3/7.5	3.7/9.4	4.5/11.3	4.5/11.3
18'-6"	Total Load	991	1,209	1,337			222	241	403	474	772	1,140	1,487	1,813	2,006
	Live Load L/360	722	970	*			157	170	280	328	529	776	1,084	1,456	*
	Min. End/Int. Bearing (in.)	3.3/8.3	4.1/10.2	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.4	2.6/6.4	3.3/8.3	4.1/10.2	4.5/11.3
20'	Total Load	846	1,031	1,235			173	188	317	374	612	907	1,269	1,547	1,853
	Live Load L/360	579	780	*			125	135	223	261	422	621	869	1,171	*
	Min. End/Int. Bearing (in.)	3.1/7.7	3.8/9.4	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.8	2.2/5.5	3.1/7.7	3.8/9.4	4.5/11.3
22'	Total Load	644	849	1,120			127	138	235	278	458	683	966	1,273	1,681
	Live Load L/360	441	596	995			94	102	168	197	320	472	662	895	1,493
	Min. End/Int. Bearing (in.)	2.6/6.5	3.4/8.5	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.9/4.6	2.6/6.5	3.4/8.5	4.5/11.3
24'	Total Load	497	678	1,001			95	104	178	211	351	525	746	1,017	1,502
	Live Load L/360	343	465	780			73	79	130	153	248	366	515	698	1,171
	Min. End/Int. Bearing (in.)	2.2/5.5	3/7.5	4.4/11			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9	2.2/5.5	3/7.5	4.4/11
26'	Total Load	390	534	849			72	78	137	163	273	411	586	801	1,274
	Live Load L/360	272	370	623			57	62	102	120	196	290	409	555	934
	Min. End/Int. Bearing (in.)	1.9/4.7	2.6/6.4	4.1/10.2			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.9/4.7	2.6/6.4	4.1/10.2
28'	Total Load	311	427	729			55	60	106	127	215	326	467	641	1,094
	Live Load L/360	219	298	504			46	50	82	97	157	233	329	448	757
	Min. End/Int. Bearing (in.)	1.6/4.1	2.2/5.6	3.8/9.4			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.6/4.1	2.2/5.6	3.8/9.4
30'	Total Load	251	346	596					83	100	171	261	376	519	895
	Live Load L/360	179	244	414					67	79	128	190	269	366	621
	Min. End/Int. Bearing (in.)	1.5/3.6	2/4.9	3.3/8.3					1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.6	2/4.9	3.3/8.3

* Indicates **Total Load** value controls.

General Notes

- Table is based on:
  - Uniform loads (beam weight considered).
  - More restrictive of simple or continuous span.
  - Deflection criteria of L/240 total load (TL) and L/360 live load (LL).
- For live load deflection limits of L/240 or L/480, multiply **Live Load L/360** values by 1.5 or 0.75, respectively. The resulting live load must not exceed the total load shown.
- For continuous spans, ratio of short span to long span should be 0.4 or greater to prevent uplift.
- For 7" width (4-ply), double the loads for 3½" width.

*Also see **How to Use This Table** on page 20 and **General Assumptions** on page 19.*

EverEdge™ LVL: Roof—Snow Load Area 115% (PLF)

Span	Condition	1¾" Width							3½" Width (2-ply)							
		5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	16"
6'	Total Load	474	877	1,182	1,223	1,523	1,638	2,065	948	1,755	2,365	2,446	3,047	3,277	4,130	4,175
	Live Load L/360	458	*	*	*	*	*	*	916	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	1.9/4.7	2.5/6.4	2.6/6.6	3.3/8.2	3.5/8.8	4.4/11.1	1.5/3.5	1.9/4.7	2.5/6.4	2.6/6.6	3.3/8.2	3.5/8.8	4.4/11.1	4.5/11.3
8'	Total Load	153	342	831	858	1,053	1,126	1,389	307	685	1,663	1,716	2,106	2,252	2,778	3,125
	Live Load L/360	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	2.4/6	2.5/6.2	3/7.6	3.2/8.1	4/10	1.5/3.5	1.5/3.5	2.4/6	2.5/6.2	3/7.6	3.2/8.1	4/10	4.5/11.3
9'-6"	Total Load	77	174	632	664	854	911	1,114	154	349	1,264	1,329	1,709	1,823	2,229	2,628
	Live Load L/360	*	*	543	585	*	*	*	*	*	1,086	1,171	*	*	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	2.2/5.4	2.3/5.7	2.9/7.3	3.1/7.8	3.8/9.5	1.5/3.5	1.5/3.5	2.2/5.4	2.3/5.7	2.9/7.3	3.1/7.8	3.8/9.5	4.5/11.3
10'	Total Load	62	142	570	599	803	857	1,045	124	284	1,140	1,198	1,607	1,714	2,091	2,472
	Live Load L/360	*	*	470	506	*	*	*	*	*	940	1,013	*	*	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	2.1/5.1	2.2/5.4	2.9/7.2	3.1/7.7	3.8/9.4	1.5/3.5	1.5/3.5	2.1/5.1	2.2/5.4	2.9/7.2	3.1/7.7	3.8/9.4	4.4/11.1
12'	Total Load		67	367	397	569	629	838	57	135	735	794	1,138	1,259	1,676	1,967
	Live Load L/360		*	279	301	488	568	*	*	*	558	602	976	1,137	*	*
	Min. End/Int. Bearing (in.)		1.5/3.5	1.6/4	1.7/4.3	2.5/6.2	2.7/6.8	3.6/9.1	1.5/3.5	1.5/3.5	1.6/4	1.7/4.3	2.5/6.2	2.7/6.8	3.6/9.1	4.3/10.6
14'	Total Load			233	252	413	461	627		70	466	505	827	922	1,255	1,612
	Live Load L/360			178	193	314	367	585		*	357	386	629	734	1,171	*
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	2.1/5.2	2.3/5.8	3.2/7.9		1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	2.3/5.8	3.2/7.9	4.1/10.2
16'-6"	Total Load			142	154	255	299	450			285	308	510	598	900	1,156
	Live Load L/360			110	119	195	228	367			220	238	391	457	735	1,074
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.5/3.8	1.8/4.5	2.7/6.7			1.5/3.5	1.5/3.5	1.5/3.8	1.8/4.5	2.7/6.7	3.5/8.6
18'-6"	Total Load			100	108	181	212	345			200	217	362	425	691	916
	Live Load L/360			78	85	140	164	264			157	170	280	328	529	776
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.1/7.7
20'	Total Load			78	85	143	168	274			157	171	286	336	549	781
	Live Load L/360			62	67	111	130	211			125	135	223	261	422	621
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2/5			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2/5	2.9/7.1
22'	Total Load			58	63	106	125	206			116	126	213	251	412	613
	Live Load L/360			47	51	84	98	160			94	102	168	197	320	472
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.2			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.2	2.5/6.2
24'	Total Load					81	95	158			87	95	162	191	316	472
	Live Load L/360					65	76	124			73	79	130	153	248	366
	Min. End/Int. Bearing (in.)					1.5/3.5	1.5/3.5	1.5/3.5			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2
26'	Total Load					62	74	123			67	73	125	148	247	370
	Live Load L/360					51	60	98			57	62	102	120	196	290
	Min. End/Int. Bearing (in.)					1.5/3.5	1.5/3.5	1.5/3.5			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.8/4.5
28'	Total Load						58	98			52	56	98	117	196	295
	Live Load L/360						48	78			46	50	82	97	157	233
	Min. End/Int. Bearing (in.)						1.5/3.5	1.5/3.5			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9
30'	Total Load							78					78	93	157	238
	Live Load L/360							64					67	79	128	190
	Min. End/Int. Bearing (in.)							1.5/3.5					1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5

* Indicates **Total Load** value controls.

How to Use This Table

1. Calculate total and live load (neglect beam weight) on the beam or header in pounds per linear foot (plf).
2. Select appropriate **Span** (center-to-center of bearing).
3. Scan horizontally to find the proper width, and a depth with a capacity that exceeds actual total load.
4. Review bearing length requirements to ensure adequacy.

Also see General Notes on page 23.

EverEdge™ LVL: Roof—Snow Load Area 115% (PLF) *continued*

Span	Condition	3½" Width (2-ply)			5¼" Width (3-ply)										
		18"	20"	24"	5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	16"	18"	20"	24"
6'	Total Load	4,175	4,175	4,175	1,423	2,632	3,547	3,669	4,571	4,916	6,195	6,263	6,263	6,263	6,263
	Live Load L/360	*	*	*	1,374	*	*	*	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.9/4.7	2.5/6.4	2.6/6.6	3.3/8.2	3.5/8.8	4.4/11.1	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3
8'	Total Load	3,125	3,125	3,125	461	1,028	2,494	2,575	3,159	3,378	4,168	4,688	4,688	4,688	4,688
	Live Load L/360	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	2.4/6	2.5/6.2	3/7.6	3.2/8.1	4/10	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3
9'-6"	Total Load	2,628	2,628	2,628	231	524	1,896	1,993	2,563	2,734	3,344	3,942	3,942	3,942	3,942
	Live Load L/360	*	*	*	*	*	1,630	1,757	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	2.2/5.4	2.3/5.7	2.9/7.3	3.1/7.8	3.8/9.5	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3
10'	Total Load	2,495	2,495	2,495	187	427	1,710	1,797	2,411	2,571	3,137	3,708	3,743	3,743	3,743
	Live Load L/360	*	*	*	*	*	1,410	1,520	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	2.1/5.1	2.2/5.4	2.9/7.2	3.1/7.7	3.8/9.4	4.4/11.1	4.5/11.3	4.5/11.3	4.5/11.3
12'	Total Load	2,075	2,075	2,075	86	203	1,102	1,191	1,707	1,889	2,514	2,951	3,113	3,113	3,113
	Live Load L/360	*	*	*	*	*	837	904	1,464	1,706	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	1.6/4	1.7/4.3	2.5/6.2	2.7/6.8	3.6/9.1	4.3/10.6	4.5/11.3	4.5/11.3	4.5/11.3
14'	Total Load	1,775	1,775	1,775		106	700	757	1,241	1,383	1,883	2,418	2,663	2,663	2,663
	Live Load L/360	*	*	*		*	535	579	943	1,102	1,757	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3		1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	2.3/5.8	3.2/7.9	4.1/10.2	4.5/11.3	4.5/11.3	4.5/11.3
16'-6"	Total Load	1,442	1,502	1,502			427	463	765	897	1,350	1,734	2,163	2,254	2,254
	Live Load L/360	*	*	*			331	358	587	686	1,103	1,611	*	*	*
	Min. End/Int. Bearing (in.)	4.3/10.8	4.5/11.3	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.8	1.8/4.5	2.7/6.7	3.5/8.6	4.3/10.8	4.5/11.3	4.5/11.3
18'-6"	Total Load	1,143	1,337	1,337			301	326	543	638	1,037	1,374	1,715	2,006	2,006
	Live Load L/360	1,084	*	*			236	256	420	492	794	1,164	1,626	*	*
	Min. End/Int. Bearing (in.)	3.8/9.6	4.5/11.3	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.1/7.7	3.8/9.6	4.5/11.3	4.5/11.3
20'	Total Load	975	1,189	1,235			236	256	429	504	823	1,172	1,463	1,784	1,853
	Live Load L/360	869	1,171	*			188	203	334	392	633	931	1,304	1,757	*
	Min. End/Int. Bearing (in.)	3.6/8.9	4.3/10.8	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2/5	2.9/7.1	3.6/8.9	4.3/10.8	4.5/11.3
22'	Total Load	803	979	1,120			174	190	320	377	619	919	1,204	1,469	1,681
	Live Load L/360	662	895	*			141	153	252	296	480	708	994	1,342	*
	Min. End/Int. Bearing (in.)	3.2/8.1	3.9/9.8	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.2	2.5/6.2	3.2/8.1	3.9/9.8	4.5/11.3
24'	Total Load	669	819	1,025			131	143	243	287	475	708	1,004	1,229	1,538
	Live Load L/360	515	698	*			109	118	195	229	372	550	773	1,047	*
	Min. End/Int. Bearing (in.)	2.9/7.4	3.6/9	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	2.9/7.4	3.6/9	4.5/11.3
26'	Total Load	527	695	944			101	110	188	223	371	556	790	1,043	1,417
	Live Load L/360	409	555	934			86	93	154	181	294	435	613	832	1,401
	Min. End/Int. Bearing (in.)	2.5/6.3	3.3/8.3	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.8/4.5	2.5/6.3	3.3/8.3	4.5/11.3
28'	Total Load	421	576	842			78	85	148	175	294	442	632	865	1,263
	Live Load L/360	329	448	757			69	75	123	145	236	350	494	672	1,135
	Min. End/Int. Bearing (in.)	2.2/5.5	3/7.5	4.3/10.8			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9	2.2/5.5	3/7.5	4.3/10.8
30'	Total Load	341	468	730			61	66	117	139	236	357	511	702	1,096
	Live Load L/360	269	366	621			56	61	101	118	193	286	404	550	931
	Min. End/Int. Bearing (in.)	1.9/4.8	2.6/6.5	4/10.1			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.9/4.8	2.6/6.5	4/10.1

* Indicates **Total Load** value controls.

General Notes

- Table is based on:
  - Uniform loads (beam weight considered).
  - More restrictive of simple or continuous span.
  - Deflection criteria of L/180 total load. For stiffer deflection criteria, use L/240 values for total load deflection.
- For continuous spans, ratio of short span to long span should be 0.4 or greater to prevent uplift.
- For 7" width (4-ply), double the loads for 3½" width.

*Also see **How to Use This Table** on page 22 and **General Assumptions** on page 19.*

EverEdge™ LVL: Roof—Non-Snow Load Area 125% (PLF)

Span	Condition	1¾" Width							3½" Width (2-ply)							
		5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	16"
6'	Total Load	474	954	1,285	1,329	1,656	1,781	2,092	948	1,908	2,571	2,659	3,313	3,563	4,175	4,175
	Live Load L/360	458	*	*	*	*	*	*	916	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	2.1/5.1	2.8/6.9	2.9/7.2	3.6/8.9	3.8/9.6	4.5/11.3	1.5/3.5	2.1/5.1	2.8/6.9	2.9/7.2	3.6/8.9	3.8/9.6	4.5/11.3	4.5/11.3
8'	Total Load	153	342	904	933	1,145	1,224	1,510	307	685	1,808	1,866	2,290	2,449	3,021	3,125
	Live Load L/360	*	*	876	*	*	*	*	*	*	1,753	*	*	*	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	2.6/6.5	2.7/6.7	3.3/8.2	3.5/8.8	4.3/10.8	1.5/3.5	1.5/3.5	2.6/6.5	2.7/6.7	3.3/8.2	3.5/8.8	4.3/10.8	4.5/11.3
9'-6"	Total Load	77	174	687	722	929	991	1,212	154	349	1,375	1,445	1,858	1,982	2,425	2,628
	Live Load L/360	*	*	543	585	*	*	*	*	*	1,086	1,171	*	*	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	2.3/5.9	2.5/6.2	3.2/7.9	3.4/8.5	4.1/10.3	1.5/3.5	1.5/3.5	2.3/5.9	2.5/6.2	3.2/7.9	3.4/8.5	4.1/10.3	4.5/11.3
10'	Total Load	62	142	620	651	874	932	1,137	124	284	1,240	1,303	1,748	1,864	2,275	2,495
	Live Load L/360	*	*	470	506	813	*	*	*	*	940	1,013	1,626	*	*	*
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	2.2/5.6	2.3/5.9	3.1/7.9	3.4/8.4	4.1/10.2	1.5/3.5	1.5/3.5	2.2/5.6	2.3/5.9	3.1/7.9	3.4/8.4	4.1/10.2	4.5/11.3
12'	Total Load		67	367	397	619	685	911	57	135	735	794	1,238	1,370	1,823	2,075
	Live Load L/360		*	279	301	488	568	898	*	*	558	602	976	1,137	1,797	*
	Min. End/Int. Bearing (in.)		1.5/3.5	1.6/4	1.7/4.3	2.7/6.7	3/7.4	3.9/9.8	1.5/3.5	1.5/3.5	1.6/4	1.7/4.3	2.7/6.7	3/7.4	3.9/9.8	4.5/11.3
14'	Total Load			233	252	413	483	683		70	466	505	827	967	1,366	1,754
	Live Load L/360			178	193	314	367	585		*	357	386	629	734	1,171	1,698
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	2.1/5.2	2.4/6.1	3.5/8.6		1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	2.4/6.1	3.5/8.6	4.4/11.1
16'-6"	Total Load			142	154	255	299	483			285	308	510	598	966	1,258
	Live Load L/360			110	119	195	228	367			220	238	391	457	735	1,074
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.5/3.8	1.8/4.5	2.9/7.2			1.5/3.5	1.5/3.5	1.5/3.8	1.8/4.5	2.9/7.2	3.8/9.4
18'-6"	Total Load			100	108	181	212	345			200	217	362	425	691	997
	Live Load L/360			78	85	140	164	264			157	170	280	328	529	776
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.3/8.4
20'	Total Load			78	85	143	168	274			157	171	286	336	549	812
	Live Load L/360			62	67	111	130	211			125	135	223	261	422	621
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2/5			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2/5	3/7.4
22'	Total Load			58	63	106	125	206			116	126	213	251	412	613
	Live Load L/360			47	51	84	98	160			94	102	168	197	320	472
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.2			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.2	2.5/6.2
24'	Total Load					81	95	158			87	95	162	191	316	472
	Live Load L/360					65	76	124			73	79	130	153	248	366
	Min. End/Int. Bearing (in.)					1.5/3.5	1.5/3.5	1.5/3.5			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2
26'	Total Load					62	74	123			67	73	125	148	247	370
	Live Load L/360					51	60	98			57	62	102	120	196	290
	Min. End/Int. Bearing (in.)					1.5/3.5	1.5/3.5	1.5/3.5			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.8/4.5
28'	Total Load						58	98			52	56	98	117	196	295
	Live Load L/360						48	78			46	50	82	97	157	233
	Min. End/Int. Bearing (in.)						1.5/3.5	1.5/3.5			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9
30'	Total Load							78					78	93	157	238
	Live Load L/360							64					67	79	128	190
	Min. End/Int. Bearing (in.)							1.5/3.5					1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5

* Indicates **Total Load** value controls.

How to Use This Table

1. Calculate total and live load (neglect beam weight) on the beam or header in pounds per linear foot (plf).
2. Select appropriate **Span** (center-to-center of bearing).
3. Scan horizontally to find the proper width, and a depth with a capacity that exceeds actual total load.
4. Review bearing length requirements to ensure adequacy.

Also see General Notes on page 25.

EverEdge™ LVL: Roof—Non-Snow Load Area 125% (PLF) *continued*

Span	Condition	3½" Width (2-ply)			5¼" Width (3-ply)										
		18"	20"	24"	5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	16"	18"	20"	24"
6'	Total Load	4,175	4,175	4,175	1,423	2,862	3,857	3,989	4,970	5,345	6,263	6,263	6,263	6,263	6,263
	Live Load L/360	*	*	*	1,374	*	*	*	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	2.1/5.1	2.8/6.9	2.9/7.2	3.6/8.9	3.8/9.6	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3
8'	Total Load	3,125	3,125	3,125	461	1,028	2,712	2,800	3,435	3,673	4,532	4,688	4,688	4,688	4,688
	Live Load L/360	*	*	*	*	*	2,630	*	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	2.6/6.5	2.7/6.7	3.3/8.2	3.5/8.8	4.3/10.8	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3
9'-6"	Total Load	2,628	2,628	2,628	231	524	2,062	2,168	2,788	2,974	3,637	3,942	3,942	3,942	3,942
	Live Load L/360	*	*	*	*	*	1,630	1,757	*	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	2.3/5.9	2.5/6.2	3.2/7.9	3.4/8.5	4.1/10.3	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3
10'	Total Load	2,495	2,495	2,495	187	427	1,860	1,955	2,623	2,796	3,412	3,743	3,743	3,743	3,743
	Live Load L/360	*	*	*	*	*	1,410	1,520	2,439	*	*	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	2.2/5.6	2.3/5.9	3.1/7.9	3.4/8.4	4.1/10.2	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3
12'	Total Load	2,075	2,075	2,075	86	203	1,102	1,191	1,857	2,055	2,734	3,113	3,113	3,113	3,113
	Live Load L/360	*	*	*	*	*	837	904	1,464	1,706	2,696	*	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.5	1.6/4	1.7/4.3	2.7/6.7	3/7.4	3.9/9.8	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3
14'	Total Load	1,775	1,775	1,775		106	700	757	1,241	1,451	2,049	2,631	2,663	2,663	2,663
	Live Load L/360	*	*	*		*	535	579	943	1,102	1,757	2,547	*	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3		1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	2.4/6.1	3.5/8.6	4.4/11.1	4.5/11.3	4.5/11.3	4.5/11.3
16'-6"	Total Load	1,502	1,502	1,502			427	463	765	897	1,449	1,887	2,254	2,254	2,254
	Live Load L/360	1,493	*	*			331	358	587	686	1,103	1,611	2,240	*	*
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.8	1.8/4.5	2.9/7.2	3.8/9.4	4.5/11.3	4.5/11.3	4.5/11.3
18'-6"	Total Load	1,244	1,337	1,337			301	326	543	638	1,037	1,496	1,866	2,006	2,006
	Live Load L/360	1,084	*	*			236	256	420	492	794	1,164	1,626	*	*
	Min. End/Int. Bearing (in.)	4.2/10.4	4.5/11.3	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.6	2.3/5.8	3.3/8.4	4.2/10.4	4.5/11.3	4.5/11.3
20'	Total Load	1,062	1,235	1,235			236	256	429	504	823	1,218	1,593	1,853	1,853
	Live Load L/360	869	1,171	*			188	203	334	392	633	931	1,304	1,757	*
	Min. End/Int. Bearing (in.)	3.9/9.6	4.5/11.3	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2/5	3/7.4	3.9/9.6	4.5/11.3	4.5/11.3
22'	Total Load	865	1,066	1,120			174	190	320	377	619	919	1,297	1,599	1,681
	Live Load L/360	662	895	*			141	153	252	296	480	708	994	1,342	*
	Min. End/Int. Bearing (in.)	3.5/8.7	4.3/10.7	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.2	2.5/6.2	3.5/8.7	4.3/10.7	4.5/11.3
24'	Total Load	669	892	1,025			131	143	243	287	475	708	1,004	1,339	1,538
	Live Load L/360	515	698	*			109	118	195	229	372	550	773	1,047	*
	Min. End/Int. Bearing (in.)	2.9/7.4	3.9/9.8	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	2.1/5.2	2.9/7.4	3.9/9.8	4.5/11.3
26'	Total Load	527	719	944			101	110	188	223	371	556	790	1,079	1,417
	Live Load L/360	409	555	934			86	93	154	181	294	435	613	832	1,401
	Min. End/Int. Bearing (in.)	2.5/6.3	3.4/8.6	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.8/4.5	2.5/6.3	3.4/8.6	4.5/11.3
28'	Total Load	421	576	875			78	85	148	175	294	442	632	865	1,313
	Live Load L/360	329	448	757			69	75	123	145	236	350	494	672	1,135
	Min. End/Int. Bearing (in.)	2.2/5.5	3/7.5	4.5/11.3			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9	2.2/5.5	3/7.5	4.5/11.3
30'	Total Load	341	468	796			61	66	117	139	236	357	511	702	1,194
	Live Load L/360	269	366	621			56	61	101	118	193	286	404	550	931
	Min. End/Int. Bearing (in.)	1.9/4.8	2.6/6.5	4.4/11			1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.9/4.8	2.6/6.5	4.4/11

* Indicates **Total Load** value controls.

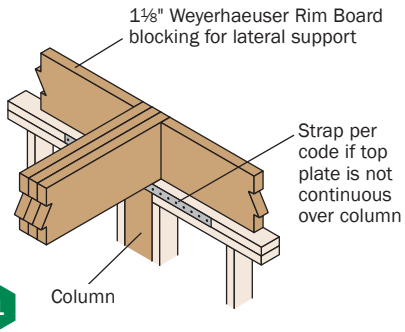
General Notes

- Table is based on:
  - Uniform loads (beam weight considered).
  - More restrictive of simple or continuous span.
  - Deflection criteria of L/180 total load. For stiffer deflection criteria, use L/240 values for total load deflection.
- For continuous spans, ratio of short span to long span should be 0.4 or greater to prevent uplift.
- For 7" width (4-ply), double the loads for 3½" width.

*Also see **How to Use This Table** on page 24 and **General Assumptions** on page 19.*

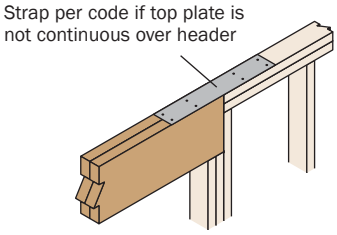
Beam Details

Bearing at Wall



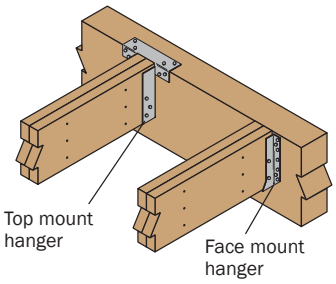
L1

Bearing for Door or Window Header



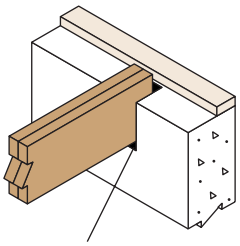
L2

Beam to Beam Connection



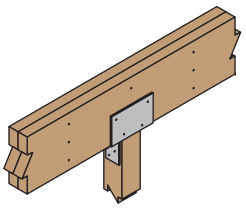
L3

Bearing at Concrete Wall



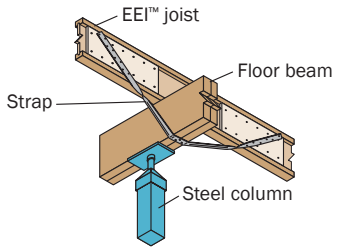
L4

Bearing at Column



L5 ***Verify beam bearing length on page 30.***

Beam to Column Lateral Brace

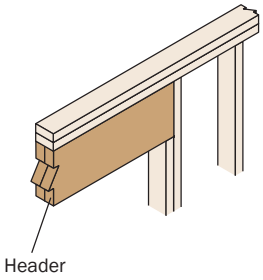


L14 ***Suggested lateral bracing detail for beams when required. Verify beam bearing length on page 30.***

Window and Door Header Details

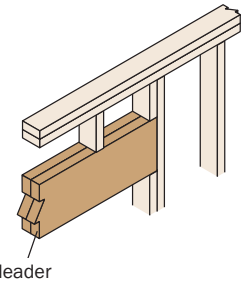
2x4 Wall Framing

Full Depth Header



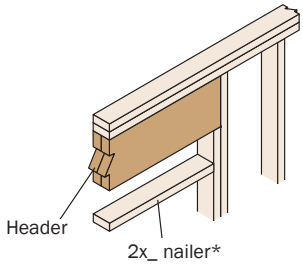
L7

Low Header



L8

High Header

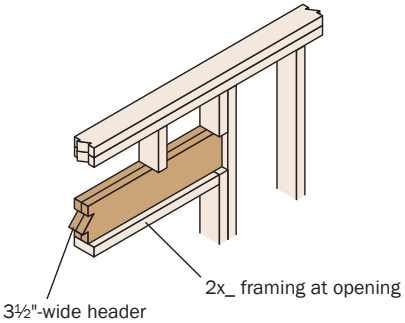


L9 ****Double nailer may be required depending upon the opening size and window type***

2x6 Wall Framing

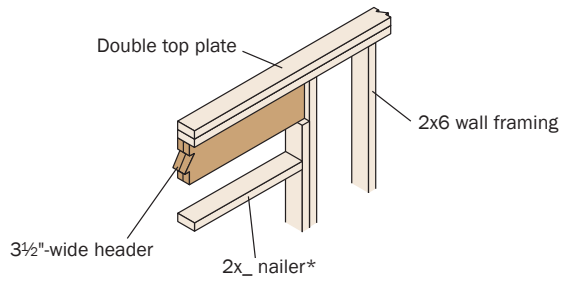
Headers not matching wall thickness may be installed flush to the inside or outside of the wall, depending upon sheathing and trim attachment requirements

Low Header



L11

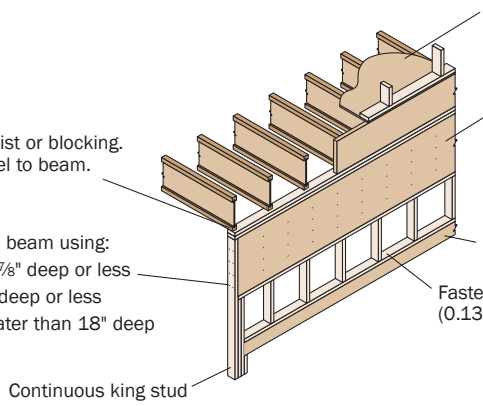
High Header



L12 ****Double nailer may be required depending upon the opening size and window type***

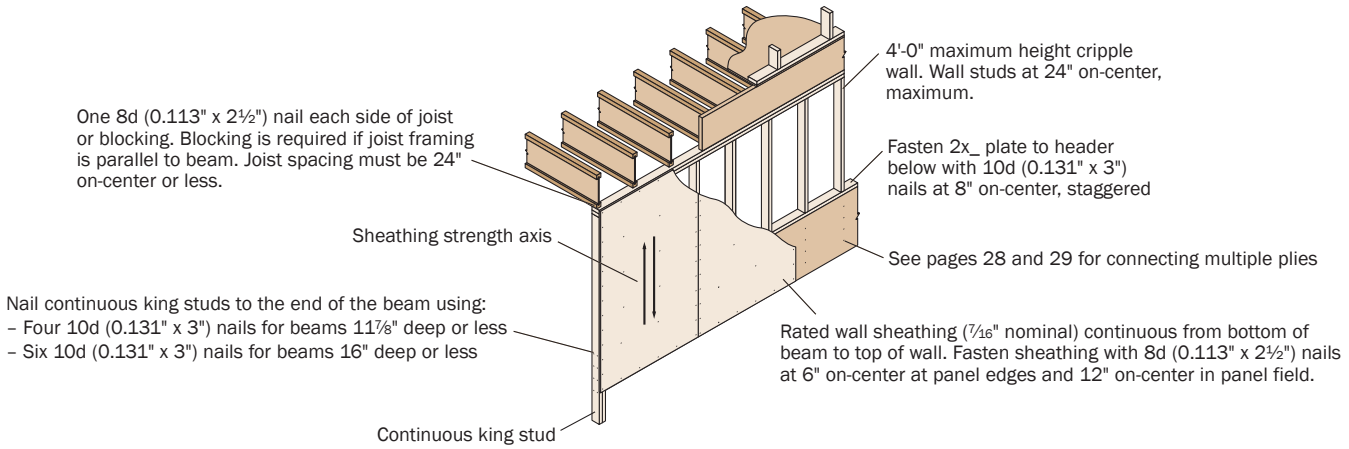
Window and Door Header Details

Dropped Header with Full Lateral Bracing



L15

Dropped Header with Acceptable Lateral Bracing



L16

When framed as shown above, the following dropped headers are considered fully braced under uniform-load, simple-span conditions:

Single-ply:

– 1¾" wide headers, 11⅞" deep or less

Multiple-ply:

– Headers up to four 1¾" plies, 11⅞" deep or less
– Headers up to four 1¾" x 14" plies, with a maximum span of 8'-6"

Nailing on Narrow Face

Nails Installed on the Narrow Face

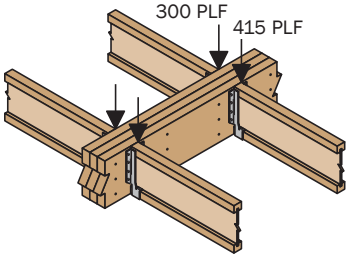
Nail Size	Closest On-Center Spacing Per Row
8d (0.131" x 2½") or 10d (0.128" x 3")	4"
10d (0.148" x 3") or 12d (0.148" x 3¼")	5"
16d (0.162" x 3½")	8"

- To minimize splitting, member edge distance and spacing between rows shall be 2.5 x nail diameter or ⅜", whichever is greater. Where multiple rows are used, fasteners in adjacent rows must be staggered and the rows must be equally spaced from the centerline of the narrow face axis.

L17 Uniform Load—Maximum Uniform Load Applied to Either Outside Member (PLF)

Fastener Type	Location	Number of Rows	Fastener On-Center Spacing	Fastener Pattern: Assembly A (3½" wide, 2-ply)	Assembly B (5¼" wide, 3-ply)	Assembly C (7" wide, 4-ply)
10d (0.128" x 3") Nail[1]	As shown	2[5]	12"	370	280	
		3	12"	555	415	
½" A307 Through Bolt[2][3]	–	2	24"	505	380	340
			19.2"	635	475	425
			16"	760	570	505
Screw Length ▶				3½"	3½"	6"
SDS[3]	As shown	2	24"	680	510	555
			19.2"	850	640	695
			16"	1,020	765	835
Screw Length ▶				3⅜"	5"	6¾"
SDW22[3][4]	One side only	2	24"	800	450	400
			19.2"	1,000	565	500
			16"	1,200	675	600

(1) Nailed connection values may be doubled for 6" on-center or tripled for 4" on-center nail spacing.
(2) Washers required. Bolt holes to be 9⁄16" maximum.
(3) 24" on-center bolted or screwed connection values may be doubled for 12" on-center spacing.
(4) When loading the head side of a SDW22 screw, assembly B can be increased by 30%.
(5) For beams up to 14" deep, maximum.



Uniform Load Design Example

First, check allowable load tables on pages 20–25 to verify that three pieces can carry the total load of 715 plf with proper live load deflection criteria. Maximum load applied to either outside member is 415 plf. For an assembly of three 1¾" plies (Assembly B), two rows of 10d (0.128" x 3") nails at 12" o.c. center is good for only 280 plf. Therefore, use three rows of 10d (0.128" x 3") nails at 12" o.c (good for 415 plf).

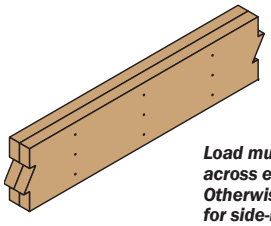
Alternative: Two rows of ½" A307 bolts.

Fastener Installation Requirements

Piece Width	Number of Plies	Fastener: Type[1]	Min. Length	# Rows	O.C. Spacing	Location
1¾"	2	10d nails	3"	3[2]	12"	One side
		12d–16d nails	3¼"	2[2]		
		Screws	3⅜" or 3½"	2	24"	
	3	10d nails	3"	3[2]	12"	Both sides
		12d–16d nails	3¼"	2[2]		
		Screws	3⅜" or 3½"	2	24"	Both sides
			5"			One side
	4	10d nails[3]	3"	3[2]	12"	One side (per ply)
		12d–16d nails[3]	3¼"	2[2]		
		Screws	5" or 6"	2	24"	Both sides
			6¾"			One side
		½" Bolts	8"	2	24"	–

(1) 10d nails are 0.128" diameter; 12d–16d nails are 0.148"–0.162" diameter; screws are SDS or SDW.
(2) An additional row of nails is required with depths of 14" or greater.
(3) When connecting 4-ply members, nail each ply to the other and offset nail rows by 2" from rows in the ply below.

When fasteners are required on both sides, stagger fasteners on the second side so they fall halfway between fasteners on the first side.



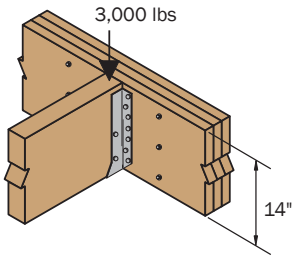
Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams

L6 ***Multiple pieces can be nailed or bolted together to form a header or beam of the required size, up to a maximum width of 7"***

L18 Point Load—Maximum Point Load Applied to Either Outside Member (lbs)

Fastener Type	Location	Number of Fasteners per Side	Fastener Pattern: Assembly A 3½" wide, 2-ply	Assembly B 5¼" wide, 3-ply	Assembly C 7" wide, 4-ply
10d (0.128" x 3") Nail	As shown	6	1,110	835	
		12	2,225	1,670	
		18	3,335	2,505	
		24	4,450	3,335	
		Screw Length ▶	3½"	3½"	6"
SDS	As shown	4	2,720	2,040	2,225
		6	4,080	3,060	3,335
		8	5,440	4,080	4,450
		Screw Length ▶	3⅜"	5"	6¾"
SDW22(1)	One side only	4	3,200	1,800	1,600
		6	4,800	2,700	2,400
		8	6,400	3,600	3,200

(1) When loading the head side of a SDW22 screw, Assembly B can be increased by 30%.

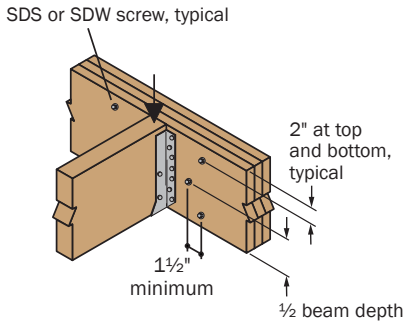


Point Load Design Example

First, verify that a 3-ply, 1¾" x 14" beam can support a 3,000 lb point load and all other loads applied. The 3,000 lb point load is being transferred to the beam with a face mount hanger. For an assembly of three 1¾" plies (Assembly B), six 3½" SDS screws are good for 3,060 lbs with a face mount hanger.

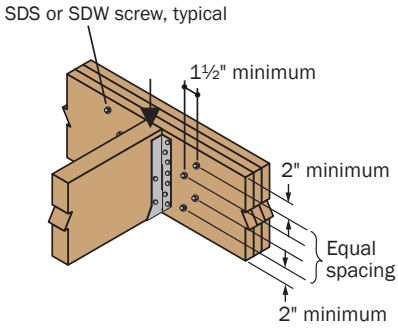
Point Load Connector Spacing

4- or 6-Screw Connection



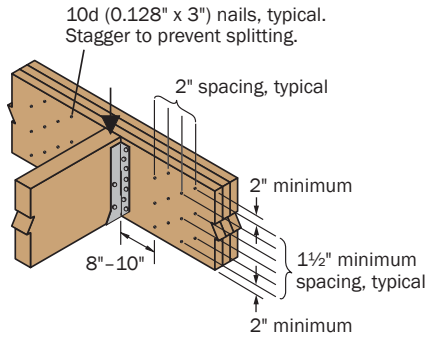
L19

8-Screw Connection



L20

Nail Connection



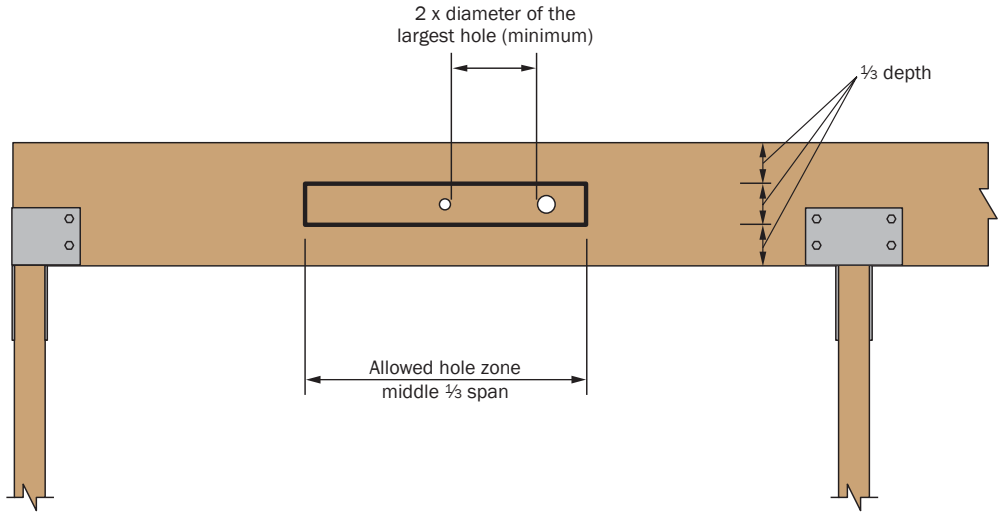
L21 ***There must be an equal number of nails on each side of the connection***

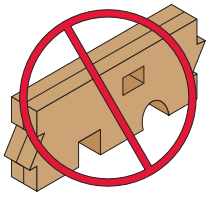
General Notes for Side-Loaded Beam Tables

- Connections are based on NDS® or manufacturer's test or code reports.
- Use specific gravity of 0.5 when designing lateral connections.
- Values listed are for 100% stress level. Increase 15% for snow-loaded roof conditions or 25% for non-snow roof conditions, where code allows.
- When fasteners are required on both sides, stagger fasteners on the second side so they fall halfway between fasteners on the first side.
- Verify adequacy of beam in allowable load tables on pages 20–25.
- 7" wide beams should be side-loaded only when loads are applied to both sides of the members (to minimize rotation).
- Minimum end distance for bolts and screws is 6".
- Beams wider than 7" require special consideration by the design professional of record.

Allowable Holes

EverEdge™ LVL Beams





DO NOT cut, notch, or drill holes in headers or beams except as indicated in the illustrations and tables

General Notes

- Allowed hole zone suitable for headers and beams with **uniform loads only**.
- Round holes only.
- No holes in cantilevers.
- No holes in headers or beams in plank orientation.

Beam Depth	Maximum Round Hole Size
5½"	1¾"
7¼"–24"	2"

- See illustration for allowed hole zone.

WARNING: Drilling, sawing, sanding or machining wood products generates wood dust. The paint and/or coatings on this product may contain titanium dioxide. Wood dust and titanium dioxide are substances known to the State of California to cause cancer. For more information on Proposition 65, visit wy.com/inform.

Bearing Length Requirements

EverEdge™ LVL

Reaction (lbs)	Width			
	1¾"	**3½"**	**5¼"**	**7"**
2,000	1½"	1½"	1½"	1½"
4,000	3"	1½"	1½"	1½"
6,000	4½"	2¼"	1½"	1½"
8,000	5¾"	3"	2"	1½"
10,000	7¼"	3¾"	2½"	2"
12,000		4½"	3"	2¼"
14,000		5"	3½"	2½"
16,000		5¾"	4"	3"
18,000		6½"	4½"	3¼"
20,000		7¼"	5"	3¾"
22,000			5¼"	4"
24,000			5¾"	4½"
26,000			6¼"	4¾"
28,000			6¾"	5"
30,000			7¼"	5½"

- Values above apply to beam orientation only.

General Notes

- **Minimum bearing length:** 1½" at ends, 3½" at intermediate supports.
- Bearing across full beam width is required.
- Interpolation between reaction loads is permitted for determining bearing lengths.
- Bearing lengths are based on a bearing stress of 800 psi.

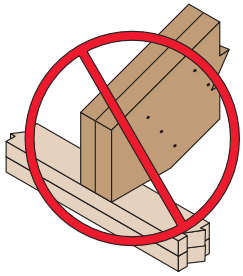
Allowable Reactions for 3½"(1) EverEdge™ LVL Beams (lbs)

Bearing	Beam Depth	Outside Heel Height D_1								
		4½"	5"	5½"	6"	6½"	7"	7½"	8"	10"
3½" Wood Plate(2)	7¼"	4,470	4,820	4,820	4,820					
	9¼"	4,470	4,885	5,205	5,205	5,205	5,205	5,205	5,205	
	9½"	4,470	4,885	5,205	5,205	5,205	5,205	5,205	5,205	
	11¼"	4,470	4,885	5,205	5,205	5,205	5,205	5,205	5,205	5,205
	11⅞"	4,470	4,885	5,205	5,205	5,205	5,205	5,205	5,205	5,205
	14"		4,885	5,205	5,205	5,205	5,205	5,205	5,205	5,205
	16"				5,205	5,205	5,205	5,205	5,205	5,205
	18"					5,205	5,205	5,205	5,205	5,205
	20"							5,205	5,205	5,205
	24"									5,205
5¼" Wood Plate(2)	7¼"	4,820	4,820	4,820						
	9¼"	4,830	5,245	5,665	6,080	6,150	6,150	6,150		
	9½"	4,830	5,245	5,665	6,080	6,320	6,320	6,320	6,320	
	11¼"	4,830	5,245	5,665	6,080	6,495	6,910	7,325	7,480	
	11⅞"	4,830	5,245	5,665	6,080	6,495	6,910	7,325	7,740	7,810
	14"	4,830	5,245	5,665	6,080	6,495	6,910	7,325	7,740	7,810
	16"			5,665	6,080	6,495	6,910	7,325	7,740	7,810
	18"				6,080	6,495	6,910	7,325	7,740	7,810
	20"						6,910	7,325	7,740	7,810
	24"									7,810
3½" Column(3)	7¼"	4,470	4,820	4,820	4,820					
	9¼"	4,470	4,885	5,300	5,715	6,130	6,150	6,150	6,150	
	9½"	4,470	4,885	5,300	5,715	6,130	6,320	6,320	6,320	
	11¼"	4,470	4,885	5,300	5,715	6,130	6,545	6,960	7,375	7,480
	11⅞"	4,470	4,885	5,300	5,715	6,130	6,545	6,960	7,375	7,895
	14"		4,885	5,300	5,715	6,130	6,545	6,960	7,375	9,040
	16"				5,715	6,130	6,545	6,960	7,375	9,040
	18"					6,130	6,545	6,960	7,375	9,040
	20"							6,960	7,375	9,040
	24"									9,040

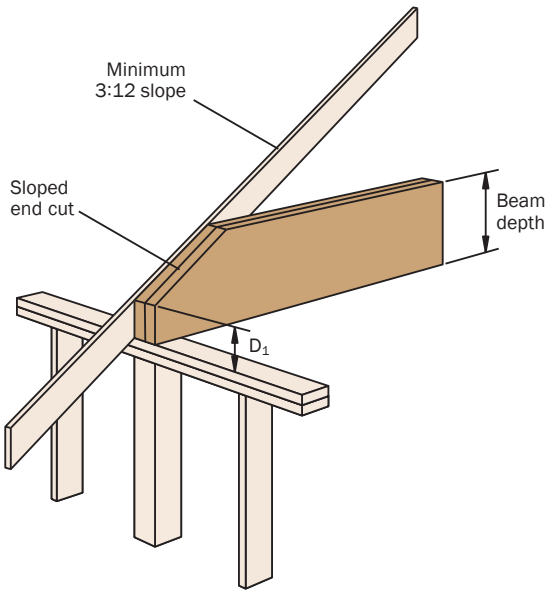
(1) For 1¾", 5¼", and 7" beams, multiply by 0.5, 1.5, and 2.0, respectively.
(2) Bearing lengths based on $F_{c\perp}$ of 425 psi.
(3) Bearing lengths based on $F_{c\perp}$ of 800 psi.

General Notes

- No increase for duration of load is permitted.
- No holes or concentrated load within tapered cut.
- Table considers only downward loading.

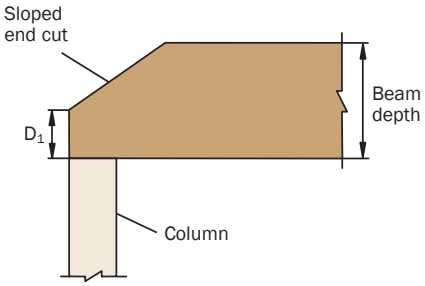


DO NOT overhang seat cuts on beams beyond inside face of support member

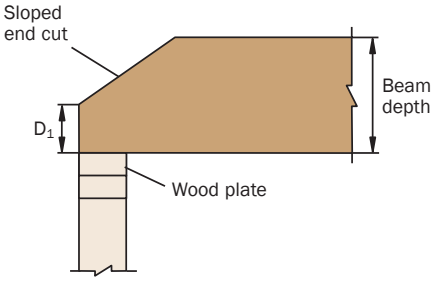


Tapered end cut detailed above is not allowed with EEI™ joists

Column Connection



Wood Plate Connection



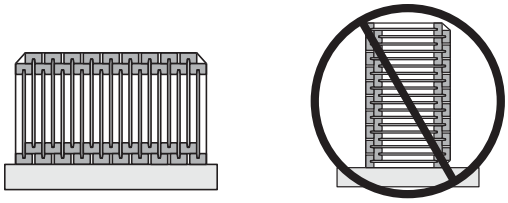
EverEdge™ Product Warranty

Weyerhaeuser Rim Board Warranty

For copies of these warranties, visit
weyerhaeuser.com/everedge

Product Storage and Handling

Always store and handle EEI™ joists in vertical orientation.



Keep products clean and dry with wrap during transportation and storage.

- Allow airflow around units
- Open units can be tented
- Regularly check for tears and worn wrap; use wrap repair tape for small tears
- CAUTION: Wrap is slippery when wet or icy

- Align stickers (2x3 or larger) directly over support blocks.
- Use support blocks (6 x 6 or larger) at 10' on-centre to keep products out of mud and water.

Product Sales and Technical Support

Weyerhaeuser rim board and EverEdge™ Series joists and LVL beams are distributed by U.S. Lumber. For sales and technical support, contact U.S. Lumber at:

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