iLevel® by Weyerhaeuser

TRUS JOIST® 18" and 20" TJI® 360 • TJI® 560 JOISTS

Featuring Silent Floor® Joists for Residential Applications

- Uniform and Predictable
- Lightweight for Fast Installation
- Resource Efficient
- Resists Bowing, Twisting, and Shrinking
- Significantly Reduces Callbacks
- Available in Long Lengths
- Limited Product Warranty

This literature is for legacy Trus Joist® products only and is not intended for use in current specification. Visit www.woodbywy.com for the most current Trus Joist® product offering and specification information.

#TJ-4005 SPECIFIER'S GUIDE

WELCOME TO iLEVEL

iLevel is an exciting new brand and business within Weyerhaeuser. iLevel brings the most innovative and trusted products for residential construction together under one roof. Within iLevel, you'll still find all the reliable, brand-name building products that you've been using—Trus Joist® engineered wood products and design software, Structurwood® engineered panels, Framer's Series™ lumber, and more. But with iLevel, you'll work with only one service-oriented supplier to get all of these products and the support you need to build smarter.

iLevel. A family of brand-name building products...
a source for innovative ideas and solutions...
a supplier that's simpler to do business with.

Here's Why so Many Specifiers and Builders Choose Silent Floor® Joists:

Design flexibility—longer lengths mean versatile design options. Silent Floor® joists continue to set the standard for residential floor and roof joists. Their strength and long lengths give you the freedom to design the open, spacious floor plans that your customers want. Engineered for dimensional stability and predictable performance, Silent Floor® joists resist warping, twisting, and shrinking.

Easy installation—fewer surprises on the job. The precision engineering that makes Silent Floor® joists strong also makes them easier to install. Silent Floor® joists are designed for easy handling and fast installation. They are lightweight, easy to cut, and can be installed using standard construction tools. Silent Floor® joists come with precut knockout holes, and additional holes for ductwork can be cut at the job site. These same features also make them a popular choice for roof joists.

ABOUT THIS GUIDE

The products in this guide are readily available through our nationwide network of distributors and dealers. The applications provided in this guide are primarily intended for use in single-family dwellings. For information on using these products in multi-family dwellings, contact your iLevel representative.

For commercial applications such as retail stores, office buildings, schools, restaurants, hotels, and nursing homes, please refer to the *iLevel Trus Joist® Commercial TJI® L65, L90, H90, HS90 Joists Specifier's Guide* (Reorder #COM-2000). Commercial products are typically designed, manufactured, and sold for each specific job.

For more information on any iLevel® product, please call **1-888-453-8358**.

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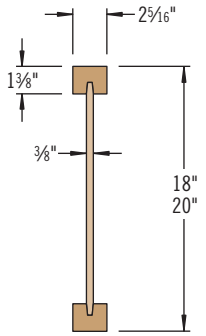
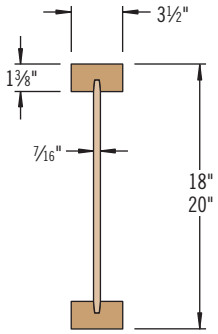
Not all products are available in all markets. Contact your iLevel representative for information.



TJI® 360 Joists



TJI® 560 Joists

L/480 Live Load Deflection

Depth	TJI®	40 PSF Live Load / 10 PSF Dead Load			40 PSF Live Load / 25 PSF Dead Load		
		16" o.c.	19.2" o.c.	24" o.c.	16" o.c.	19.2" o.c.	24" o.c.
18"	360	28'-8"	26'-10"(1)	21'-5"(1)	24'-9"(1)	20'-7"(1)	16'-6"(1)
	560	32'-5"	30'-7"(1)	25'-2"(1)	***29'-1"(1)***	24'-2"(1)	19'-4"(1)
20"	360	31'-0"(1)	26'-10"(1)	21'-5"(1)	24'-9"(1)	20'-7"(1)	16'-6"(1)
	560	35'-1"	31'-6"(1)	25'-2"(1)	29'-1"(1)	24'-2"(1)	19'-4"(1)

L/360 Live Load Deflection (Minimum Criteria per Code)

Depth	TJI®	40 PSF Live Load / 10 PSF Dead Load			40 PSF Live Load / 25 PSF Dead Load		
		16" o.c.	19.2" o.c.	24" o.c.	16" o.c.	19.2" o.c.	24" o.c.
18"	360	31'-9"(1)	26'-10"(1)	21'-5"(1)	24'-9"(1)	20'-7"(1)	16'-6"(1)
	560	35'-11"(1)	31'-6"(1)	25'-2"(1)	***29'-1"(1)***	24'-2"(1)	19'-4"(1)
20"	360	32'-3"(1)	26'-10"(1)	21'-5"(1)	24'-9"(1)	20'-7"(1)	16'-6 "(1)
	560	37'-10"(1)	31'-6"(1)	25'-2"(1)	29'-1"(1)	24'-2"(1)	19'-4"(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:

TJI®	40 PSF Live Load / 10 PSF Dead Load			40 PSF Live Load / 25 PSF Dead Load		
	16" o.c.	19.2" o.c.	24" o.c.	16" o.c.	19.2" o.c.	24" o.c.
360	29'-4"	24'-5"	19'-6"	22'-7"	18'-9"	15'-0"
560	35'-10"	29'-10"	23'-10"	27'-7"	22'-11"	18'-4"

- 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".

How to Use These Tables

1. Determine the appropriate live load deflection criteria.
2. Identify the live and dead load condition.
3. Select on-center spacing.
4. Scan down the column until you meet or exceed the span of your application.
5. Select TJI® joist and depth.

Live load deflection is not the only factor that affects how a floor will perform. To more accurately predict floor performance, use our TJ-Pro™ Ratings.

General Notes

- Tables are based on:
  - Uniform loads.
  - More restrictive of simple or continuous span.
  - Clear distance between supports (1¾" minimum end bearing).
- Assumed composite action with a single layer of 24" on-center span-rated, glue-nailed floor panels for deflection only. **Spans shall be reduced 6" when floor panels are nailed only.**
- Spans generated from iLevel® software may exceed the spans shown in these tables because software reflects actual design conditions.
- For loading conditions not shown, refer to software or to load tables on page 10.

DESIGN PROPERTIES

Design Properties (100% Load Duration)

Depth	TJI®	Basic Properties				Reaction Properties		
		Joist Weight (lbs/ft)	Maximum Resistive Moment(1) (ft-lbs)	Joist Only EI x 10⁶ (lbs-in.²)	Maximum Vertical Shear (lbs)	1¾" End Reaction (lbs)	3½" Intermediate Reaction (lbs)	
							No Web Stiffeners	With Web Stiffeners
18"	360	3.7	9,465	1,085	2,425	1,080	2,460	2,815
	560	4.8	14,550	1,631	3,030	1,265	3,000	3,475
20"	360	4.0	10,515	1,376	2,660	1,080	2,460	2,815
	560	5.1	16,165	2,064	3,345	1,265	3,000	3,475

TJI® joists are intended for dry-use applications

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

General Notes

- Design reaction includes all loads on the joist. Design shear is computed at the inside face of supports and includes all loads on the span(s). Allowable shear may sometimes be increased at interior supports in accordance with ICC ES ESR-1153, and these increases are reflected in span tables.
- The following formulas approximate the uniform load deflection of Δ (inches):

For TJI® 360 Joists

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

For TJI® 560 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

Code Evaluations: See ICC ES ESR-1153 and ICC ES ESR-1387

FLOOR PERFORMANCE AND TJ-PRO™ RATINGS

Legacy Literature
See Note on Front Cover

It's About Choice—

iLevel® Trus Joist® TJ-Pro™ Ratings are generated by a sophisticated computer model designed to predict floor performance and evaluate the relationship between the cost and the "feel" of any given floor system. The methodology is based on extensive laboratory research, more than one million installations, and the combined expertise of some of the best engineers in the field. TJ-Pro™ Ratings go beyond deflection criteria to consider job-specific needs and expectations. In many cases, using TJ-Pro™ Ratings will offer a system that improves performance while actually reducing costs!

TJ-Pro™ Ratings Advantages

- Works as part of iLevel® Trus Joist® TJ-Beam® and TJ-Xpert® software
- Provides a new method for accurately predicting floor performance
- Takes perceptions of the homeowner into account
- Provides cost comparison

Perceived Floor Performance

How do most people perceive a floor assembly with a TJ-Pro™ Rating of 45 points? 84% find it good to excellent and 16% find it marginal to unacceptable.

ALLOWABLE HOLES

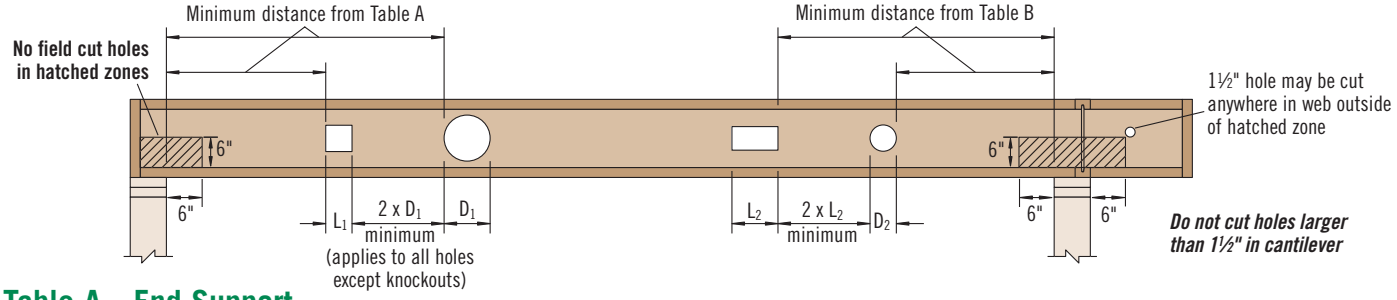


Table A—End Support

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

Depth	TJI®	Round Hole Size									Square or Rectangular Hole Size								
		4"	5"	6"	7"	8"	10"	12"	15"	17"	4"	5"	6"	7"	8"	10"	12"	15"	17"
18"	360	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"	5'-0"	10'-0"		1'-0"	1'-0"	1'-0"	3'-0"	5'-0"	10'-0"	11'-0"	13'-6"	
	560	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	5'-0"	11'-0"		1'-0"	1'-0"	1'-6"	4'-0"	6'-6"	11'-0"	12'-0"	14'-6"	
20"	360	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"	7'-0"	10'-6"	1'-0"	1'-0"	1'-0"	1'-0"	2'-6"	8'-0"	11'-6"	14'-0"	15'-6"
	560	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	7'-0"	11'-0"	1'-0"	1'-0"	1'-0"	1'-0"	4'-0"	9'-6"	12'-6"	14'-6"	15'-6"

Table B—Intermediate or Cantilever Support

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

Depth	TJI®	Round Hole Size									Square or Rectangular Hole Size								
		4"	5"	6"	7"	8"	10"	12"	15"	17"	4"	5"	6"	7"	8"	10"	12"	15"	17"
18"	360	1'-0"	1'-0"	1'-0"	1'-6"	3'-0"	6'-0"	9'-0"	15'-0"		1'-0"	1'-6"	4'-0"	6'-6"	9'-0"	14'-6"	16'-6"	19'-6"	
	560	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"	6'-0"	10'-0"	16'-6"		1'-0"	3'-6"	6'-0"	8'-6"	11'-6"	16'-6"	18'-0"	20'-0"	
20"	360	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	3'-0"	6'-0"	11'-0"	15'-6"	1'-0"	1'-0"	1'-6"	4'-0"	7'-0"	12'-6"	16'-6"	19'-0"	21'-0"
	560	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-6"	5'-6"	12'-0"	16'-0"	1'-0"	1'-0"	3'-0"	6'-0"	8'-6"	14'-0"	17'-6"	19'-6"	20'-6"

- Rectangular holes based on measurement of longest side.

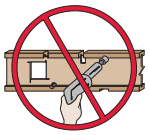
How to Use These Tables

1. Using **Table A**, **Table B**, or both if required, determine the hole shape/size and select the TJI® 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.

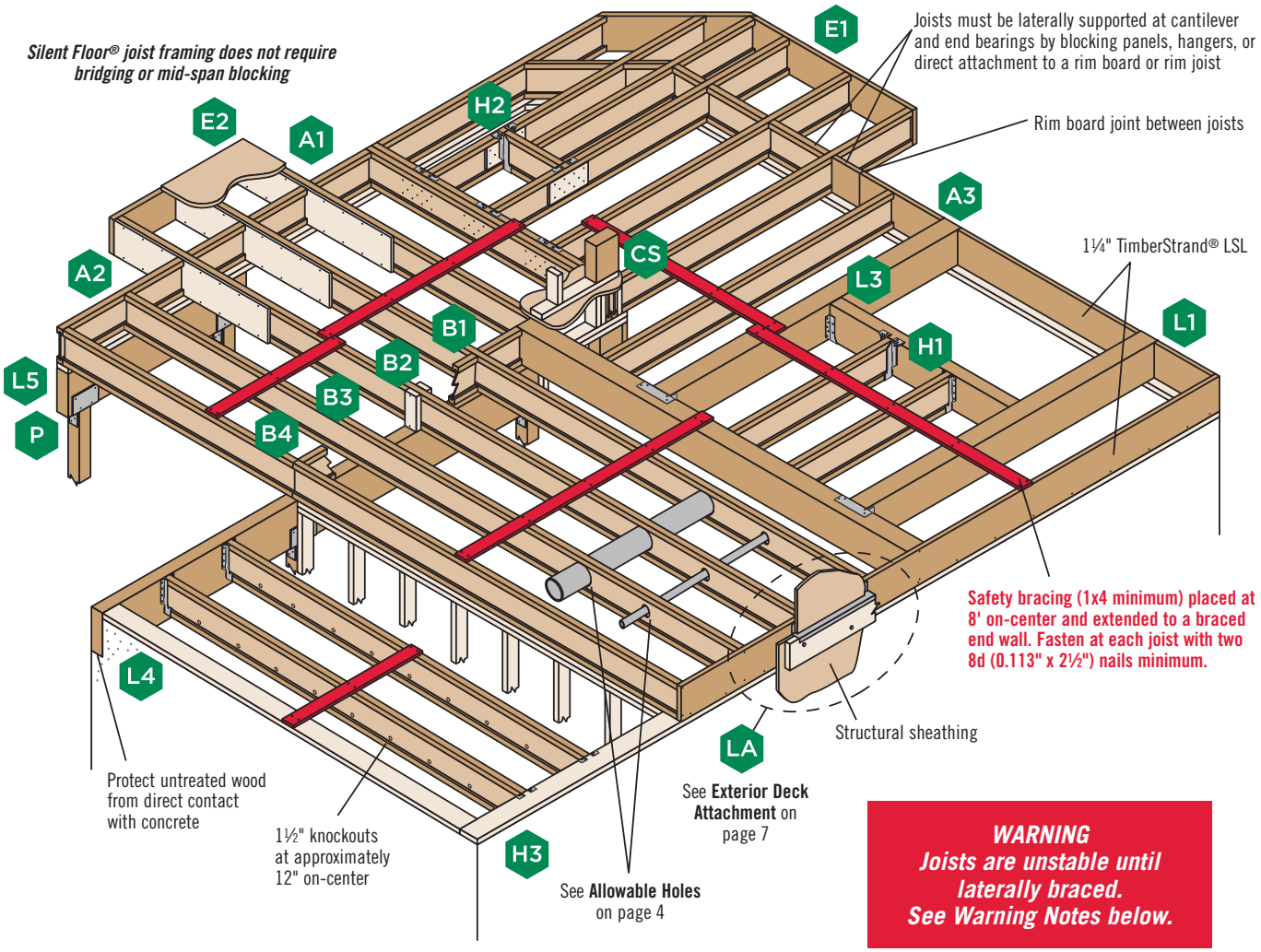
General Notes

- 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. For other load conditions or hole configurations, use TJ-Beam® software or contact your iLevel representative.

DO NOT cut or notch flange.



DO NOT cut holes in cantilever reinforcement.



WARNING
Joists are unstable until laterally braced.
See Warning Notes below.

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.

WARNING

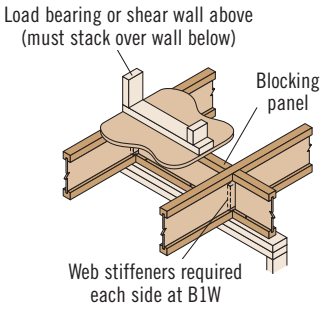
Joists are unstable until braced laterally

Bracing Includes:

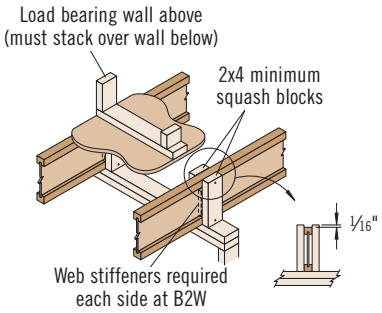
- Blocking
- Hangers
- Rim Board
- Sheathing
- Rim Joist
- Strut Lines

WARNING NOTES: *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 TJI® 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 TJI® 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.

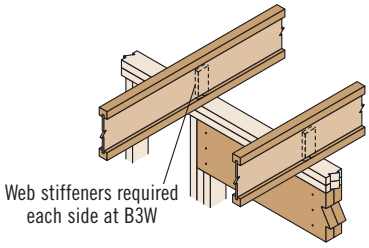


B1 B1W ***IRC 502.7 requires lateral restraint (blocking) at all intermediate supports in Seismic Design Categories D_0, D_1, and D_2 to strengthen the floor diaphragm***

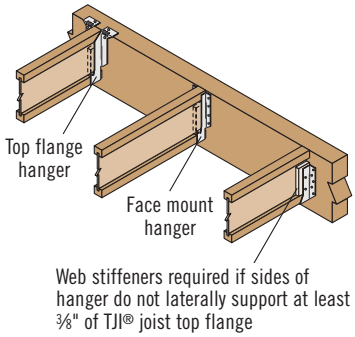


B2 B2W ***Blocking panels may be required with shear walls above or below—see detail B1***

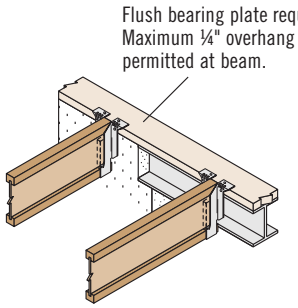
Intermediate Bearing– No Load Bearing Wall Above



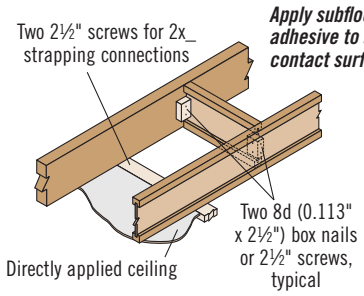
B3 B3W ***Blocking panels may be required with shear walls above or below—see detail B1***



H1

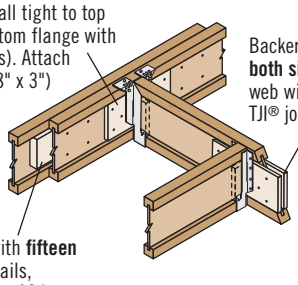


H3



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

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.



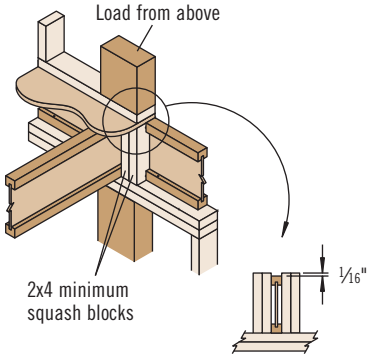
Filler block: Nail with **fifteen** 10d (0.128" x 3") nails, clinched. Use **fifteen** 16d (0.135" x 3½") nails from each side with TJI® 560 joists.

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

Filler and Backer Block Sizes

TJI®	360	560
Depth	18" or 20"	18" or 20"
Filler Block(1) (Detail H2)	2x12 + ½" sheathing	Two 2x12
Backer Block(1) (Detail F1 or H2)	1" net	2x12

(1) If necessary, increase filler and backer block height for face mount hangers and maintain 1/8" gap at top of joist. See detail W. Filler and backer block dimensions should accommodate required nailing without splitting. The suggested minimum length is 24" for filler and 12" for backer blocks.



CS ***Use 2x4 minimum squash blocks to transfer load around TJI® joist***

Fastener Spacing and Diaphragm Design Information

TJI®	Closest On-Center Spacing per Row(1)			Diaphragm Design Information	
	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	Maximum Capacity (plf)
360 and 560	3"	4"(2)	6"	3"	720
Rim Board	4"	4"	6"(3)	–	–

(1) One row of fasteners permitted (two at abutting panel edges) for diaphragms. Stagger nails when using 4" on-center spacing and maintain 3/8" joist and panel edge distance. For other applications, multiple rows of fasteners are permitted if the rows are offset at least ½" and staggered.

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

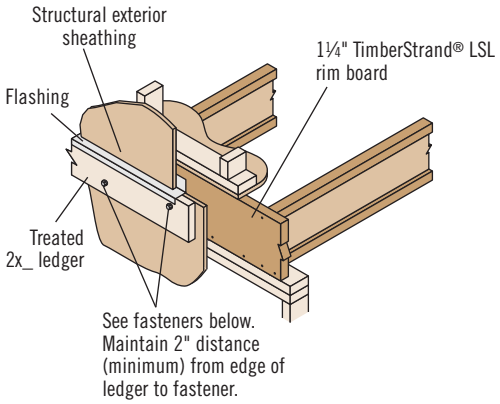
(3) Can be reduced to 4" on-center with maximum nail penetration of 1⅜" into the narrow edge.

General Notes

- Maximum spacing of nails is 24" on-center.
- If more than one row of nails is used, the rows must be offset at least ½" and staggered.
- 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 TJI® rim joists and blocking panels to the wall plate.

Also see nailing requirements on page 7

Exterior Deck Attachment

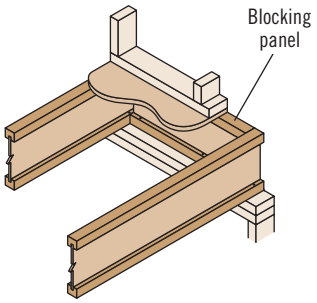


Fastener	Allowable Load(1) (lbs)
	1¼" TimberStrand® LSL Rim Board
⅜" lag bolt	400
½" lag bolt	475

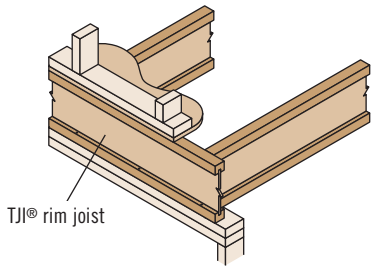
(1) Allowable load determined in accordance with AC 124.

- Corrosion-resistant fasteners required for wet-service applications.

LA



A1



Vertical Load Transfer at Bearing

Allowable Uniform Vertical Loads (PLF)	
TJI® rim joist or blocking	1,550
1¼" TimberStrand® rim board or blocking	3,450

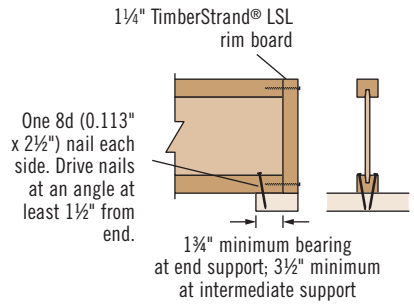
- Loads may not be increased for duration of load.

A2

Must have 1¾" minimum joist bearing at ends

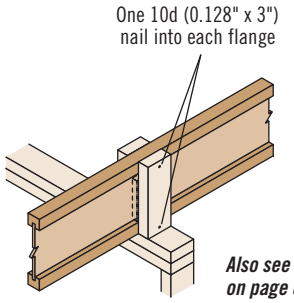
TJI® Joist Nailing Requirements at Bearing

TJI® Joist to Bearing Plate



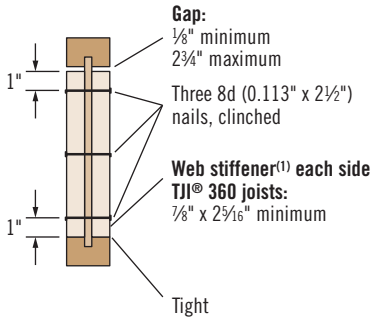
Shear transfer: Connections equivalent to floor panel nailing schedule

Squash Blocks to TJI® Joist (Load bearing wall above)

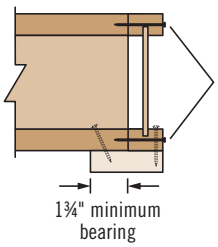


Also see detail B2 on page 6

Web Stiffener Attachment

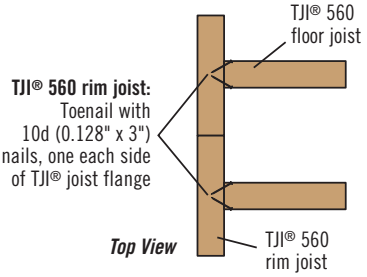


Rim to TJI® Joist



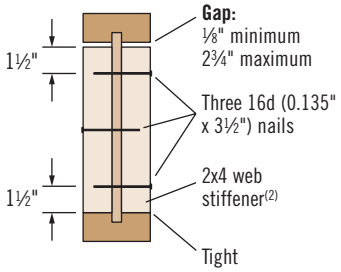
1¼" TimberStrand® LSL rim board:
One 10d (0.128" x 3") nail into each flange

TJI® 360 rim joist:
One 16d (0.135" x 3½") nail into each flange



Locate rim board joint between joists

TJI® 560 Joists Only



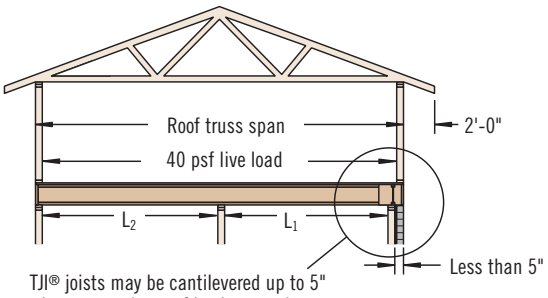
W

(1) PS1 or PS2 sheathing, face grain vertical

(2) Construction grade or better

Cantilevers Less Than 5" (Brick Ledge)

See Section A of cantilever table on page 9

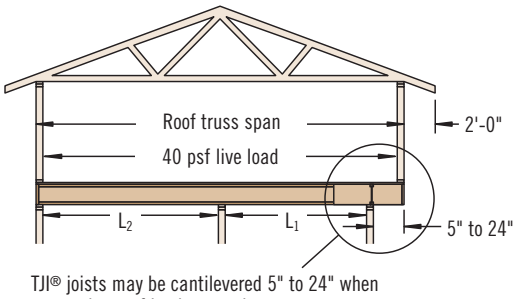


TJI® joists may be cantilevered up to 5" when supporting roof load, assuming:

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

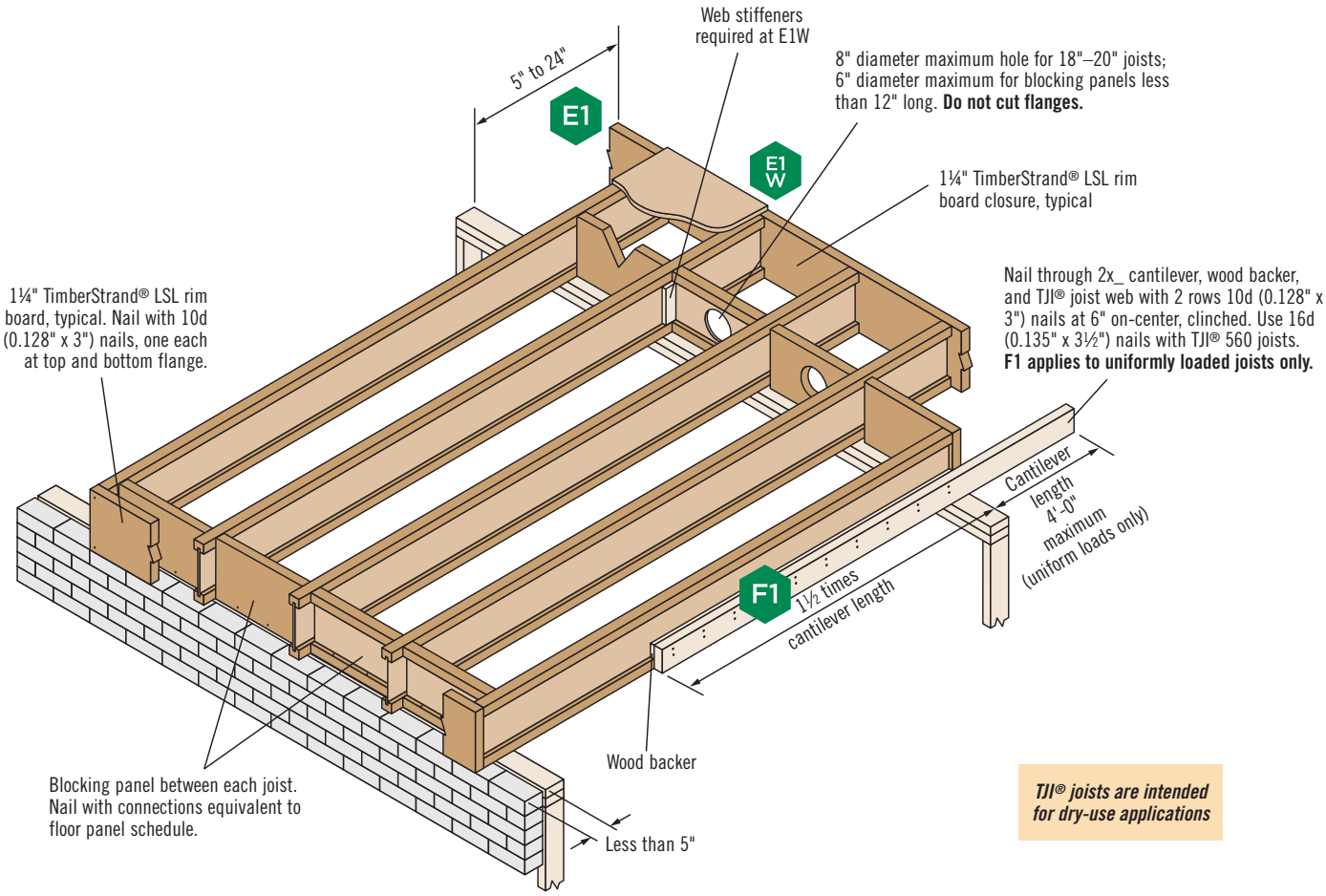
Cantilevers 5" to 24"

See Section B of cantilever table on page 9



TJI® joists may be cantilevered 5" to 24" when supporting roof load, assuming:

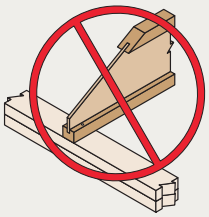
- simple or continuous span
- $L_1 \leq L_2$
- minimum backspan = 2x cantilever length



TJI® joists are intended for dry-use applications

These Conditions Are NOT Permitted

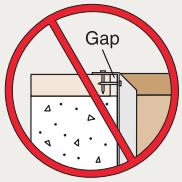
DO NOT bevel cut joist beyond inside face of wall.



DO NOT use sawn lumber for rim board or blocking.

Sawn lumber may shrink after installation.

DO NOT install hanger overhanging face of plate or beam.



Flush bearing plate with inside face of wall or beam.

Cantilever Reinforcement

Depth	TJI®	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"
18" or 20"	360	24'			X			X		X	X									
		26'			X		X	X		X	X									E1W
		28'			X		X	X	X	X	X									E1W
		30'		X	X		X	X	X	X	X						E1W			X
		32'		X	X	X	X	X	X	X	X						E1W			X
		34'		X	X	X	X	X	X	X	X						E1W		E1W	X
		36'		X	X	X	X	X	X	X	X			E1W			X		E1W	X
		38'	X	X	X	X	X	X	X	X	X			E1W			X		E1W	X
		40'	X	X	X	X	X	X	X	X	X			E1W		E1W	X		X	X
18" or 20"	560	24'						X			X									
		26'						X		X	X									
		28'			X			X		X	X									
		30'			X		X	X		X	X									
		32'			X		X	X	X	X	X									
		34'			X		X	X	X	X	X									E1W
		36'		X	X		X	X	X	X	X									E1W
		38'		X	X	X	X	X	X	X	X									E1W
		40'		X	X	X	X	X	X	X	X						E1W			X

How to Use This Table

1. Identify TJI® 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 8:
   - Blank cells indicate that no reinforcement is required.
   - X indicates that cantilever will not work. Use TJ-Beam® or TJ-Xpert® software, or 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.
  - More restrictive of simple or continuous span.
  - Roof truss with 24" soffits.
- Designed for 2x4 and 2x6 plate widths.
- For conditions beyond the scope of this table, including cantilevers longer than 24", use our TJ-Beam® or TJ-Xpert® software.

FLOOR LOAD TABLES

Floor—100% (PLF) for 6'–18' Spans

Depth	TJI®	Joist Clear Span													
		6'		8'		10'		12'		14'		16'		18'	
		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
18"	360	*	320	*	241	*	193	*	162	*	139	*	121	*	108
	560	*	390	*	294	*	236	*	197	*	169	*	148	*	132
20"	360	*	320	*	241	*	193	*	162	*	139	*	121	*	108
	560	*	390	*	294	*	236	*	197	*	169	*	148	*	132

Floor—100% (PLF) for 20'–30' Spans

Depth	TJI®	Joist Clear Span											
		20'		22'		24'		26'		28'		30'	
		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
18"	360	*	97	*	88	76	81	61	75				
	560	*	119	*	108	*	99	89	91	72	85	60	79
20"	360	*	97	*	88	*	81	*	75				
	560	*	119	*	108	*	99	*	91	*	85	75	79

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

How to Use These Tables

1. Calculate actual total and live load in pounds per linear foot (plf).
2. Select appropriate **Joist Clear Span**.
3. Scan down the column to find a TJI® joist that meets or exceeds actual total and live loads.

General Notes

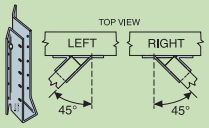
- Tables are based on:
  - Uniform loads.
  - No composite action provided by sheathing.
  - More restrictive of simple or continuous span.
- **Total Load** limits joist deflection to L/240.
- **Live Load** is based on joist deflection of L/480.
- If a live load deflection limit of L/360 is desired, multiply value in **Live Load** column by 1.33. The resulting live load may not exceed the **Total Load** shown.

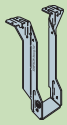
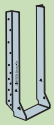
PSF to PLF Conversions

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

Legacy Literature
See Note on Front Cover

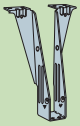
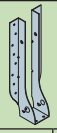
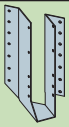
FRAMING CONNECTORS (SIMPSON STRONG-TIE®)

Joist		Single Joist—Top Flange				Single Joist—Face Mount				Face Mount Skewed 45° Joist Hanger			
													
Depth	TJI®	Hanger	Capacity (lbs)	Nailing		Hanger	Capacity (lbs)	Nailing		Hanger	Capacity (lbs)	Nailing	
				Header	Joist			Header	Joist			Header	Joist
18"	360	MIT3518	1,265	16d	10d x 1½"	MIU2.37/18	1,265	16d	10d x 1½"	***SUR/L2.37/14***	1,265	16d	10d x 1½"
	560	MIT418	1,460	16d	10d x 1½"	MIU3.56/18	1,460	16d	10d x 1½"	***SUR/L414***	1,460	16d	10d x 1½"
20"	360	MIT3520	1,265	16d	10d x 1½"	MIU2.37/20	1,265	16d	10d x 1½"	***SUR/L2.37/14***	1,265	16d	10d x 1½"
	560	MIT420	1,460	16d	10d x 1½"	MIU3.56/20	1,460	16d	10d x 1½"	***SUR/L414***	1,460	16d	10d x 1½"

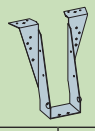
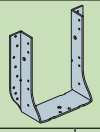
Joist		Double Joist—Top Flange				Double Joist—Face Mount			
									
Depth	TJI®	Hanger	Capacity (lbs)	Nailing		Hanger	Capacity (lbs)	Nailing	
				Header	Joist			Header	Joist
18"	360	***LBV4.75/18***	2,460	16d	10d x 1½"	MIU4.75/18	2,530	16d	10d x 1½"
	560	***B7.12/18***	2,920	16d	16d	***HU414-2***	2,920	16d	16d
20"	360	***LBV4.75/20***	2,460	16d	10d x 1½"	MIU4.75/20	2,530	16d	10d x 1½"
	560	***B7.12/20***	2,920	16d	16d	***HU414-2***	2,920	16d	16d

Hanger information on this page was provided by either Simpson Strong-Tie® or USP Structural Connectors®. For additional information, please refer to their literature.

FRAMING CONNECTORS (USP STRUCTURAL CONNECTORS®)

Joist		Single Joist—Top Flange				Single Joist—Face Mount				Face Mount Skewed 45° Joist Hanger(1)			
													
Depth	TJI®	Hanger	Capacity (lbs)	Nailing		Hanger	Capacity (lbs)	Nailing		Hanger	Capacity (lbs)	Nailing	
				Header	Joist			Header	Joist			Header	Joist
18"	360	THO23180	1,235	10d	10d x 1½"	***THF23180***	1,265	10d	10d x 1½"	***SKH2324L/R***	1,110	10d	10d x 1½"
	560	THO35180	1,430	10d	10d x 1½"	THF35157	1,460	10d	10d x 1½"	***SKH418L/R***	1,460	16d	16d
20"	360	THO23200	1,235	10d	10d x 1½"	***THF23180***	1,265	10d	10d x 1½"	***THF2314O-SK45L/R***	1,265	10d	10d x 1½"
	560	THO35200	1,430	10d	10d x 1½"	THF35157	1,460	10d	10d x 1½"	***SKH418L/R***	1,460	16d	16d

(1) Miter cut is required at end of joists.

Joist		Double Joist—Top Flange				Double Joist—Face Mount			
									
Depth	TJI®	Hanger	Capacity (lbs)	Nailing		Hanger	Capacity (lbs)	Nailing	
				Header	Joist			Header	Joist
18"	360	***THO23180-2***	2,770	16d	10d	***THF23160-2***	2,530	10d	10d
	560	***BPH7118***	3,180	16d	10d	***HD7160***	2,920	16d	10d
20"	360	***THO23200-2***	2,770	16d	10d	***THF23160-2***	2,530	10d	10d
	560	***BPH7120***	3,180	16d	10d	***HD7160***	2,920	16d	10d

General Notes

Bold italic hangers require web stiffeners.

Capacities will vary with different nailing criteria or other support conditions; contact your iLevel representative for assistance.

- 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 TJI® 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 iLevel® engineered lumber or sawn lumber (Douglas fir or southern pine species).
- Minimum support width for single- and double-joist top mount hangers is 3".
- Minimum support width for face mount hangers with 10d and 16d nails is 1¾" and 2", respectively.

iLevel® by Weyerhaeuser

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Legacy Literature
See Note on Front Cover

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OUR GUARANTEE

May 2008
Reorder TJ-4005

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NW