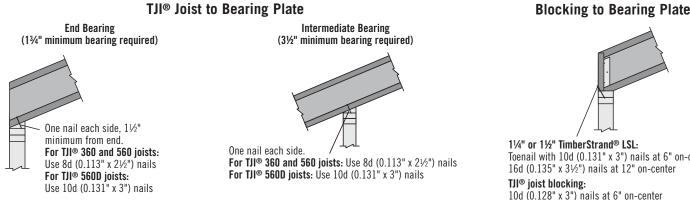
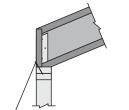
TJI® JOIST NAILING REQUIREMENTS AT BEARING

- 3 rows at 24'-30' height





Toenail with 10d (0.131" x 3") nails at 6" on-center or 16d (0.135" x 31/2") nails at 12" on-center

10d (0.128" x 3") nails at 6" on-center

Shear transfer nailing: Use connections equivalent to sheathing nail schedule

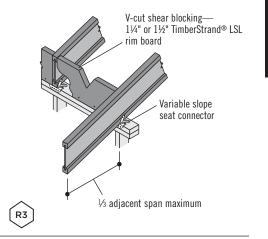
Reorder TJ-9006

ROOF DETAILS (Maximum slope: 3:12)

Beveled Plate Requirements

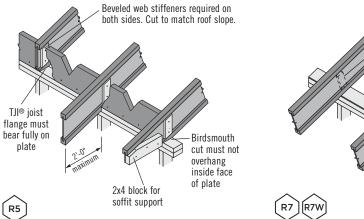
Required Bearing Length	Maximum Slope Without Beveled Plate
1¾"	1/2:12
3½"	1/4:12
5½"	½:12

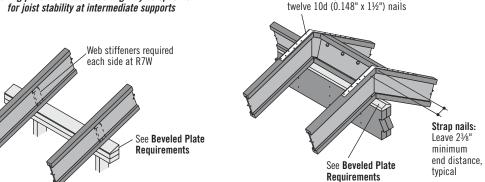
Shear blocking-11/4" or 11/2" TimberStrand® LSL im board or TJI® ioist See Beveled Plate 3 adjacent span maximum



LSTA18 (Simpson or USP) strap with

Birdsmouth Cut Intermediate Bearing Blocking panels or shear blocking may be specified Birdsmouth cut allowed at low end of joist only







Filler block: Attach with

15 nails, 10d (0.128" x 3"),

clinched. Use 15 nails, 16d

 $(0.135" \times 3\frac{1}{2}")$, each side

less than 22" deep: use 25

nails each side with TJI®

560 and 560D joists

22" and deeper.

with TJI® 560 and 560D joists

R14 Additional blocking may be required for shear

Backer block: Install

tight to bottom flange

top mount hangers).

Attach with ten 10d

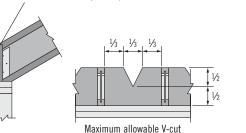
(0.128" x 3") nails,

(tight to top flange with

clinched when possible.

$1\frac{1}{4}$ " or $1\frac{1}{2}$ " TimberStrand® LSL rim board for shear blocking (between joists). Field trim to match joist depth at outer edge of wall or

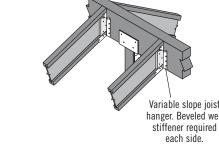
vertical orientation



Shear Blocking and Ventilation Holes

(Roof Only)

locate on wall to match joist depth.



hanger. Beveled web H5 Additional blocking may be required for shear transfer

Parallam® PSL.

Microllam® LVL, and

orientation (wranned)

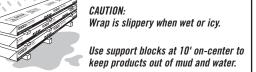
TimberStrand® LSL in flat

H6 For filler and backer block sizes, see table in floor

Variable slope joist hanger. Beveled

web stiffener required each side.

Protect products from sun and water. Store and handle

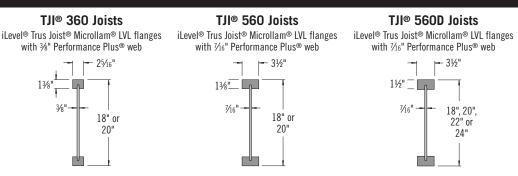


A, Weyerhaeuser, iLevel, Javelin, Microllam, Parallam, Performance Plus, Silent Floor, TimberStrand, TJI, and Trus Joist are registered trademarks of Weyerhaeuser NR. © 2010 Weyerhaeuser NR Company. All rights reserved. Printed in the USA.



DEEP DEPTH ILEVEL® TRUS JOIST® TJI[®] 360, 560, & 560D JOISTS

Installation Guide Featuring iLevel® Trus Joist® Silent Floor® Joists



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

ALLOWABLE HOLES—TJI® JOISTS

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

360 | 1'-0" | 1'-0" | 1'-0" | 1'-0" | 2'-0" | 5'-0" | 10'-0"

560D 1'-0" 1'-0" 1'-0" 1'-0" 1'-6" 5'-6" 11'-0"

560D 1'-0" 1'-0" 1'-0" 1'-0" 1'-0" 1'-0" 1'-0" 7'-0" 11'-0"

22" 560D 1'-0" 1'-0" 1'-0" 1'-0" 3'-0" 4'-6" 7'-0" 9'-6" 12'-6"

18" | **560** | 1'-0" | 1'-0" | 1'-0" | 1'-0" | 1'-0" | 5'-0" | 11'-0"

Table B—Intermediate or Cantilever Support

360 1'-0" 1'-0" 1'-6" 3'-0" 6'-0" 9'-0" 15'-0"

| **560D** | 1'-0" | 1'-0" | 1'-0" | 2'-0" | 6'-0" | 10'-6" | 16'-6" |

560D 1'-0" 1'-0" 1'-0" 1'-0" 1'-6" 6'-0" 12'-0" 16'-0"

22" | **560D** | 1'-0" | 1'-0" | 2'-0" | 3'-6" | 5'-6" | 8'-0" | 11'-0" | 14'-6" | 17'-6" |

Tables are based on uniform load tables in current design literature

■ Leave 1/8" of web (minimum) at top and bottom of hole. **DO NOT cut joist flanges**

located at the center of the joist span provided that no other holes occur in the joist.

18" | **560** | 1'-0" | 1'-0" | 1'-0" | 2'-0" | 6'-0" | 10'-0" | 16'-6"

#TJ-9006 INSTALLATION GUIDE

.888.iLevel8 (1.888.453.8358)

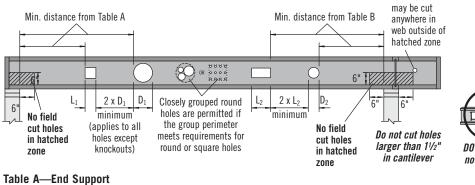
www.iLevel.com

Round Hole Size

4" 6" 7" 8" 10" 12" 14¾" 16¾" 18¾" 20"

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

4" 6" 7" 8" 10" 12" 14¾" 16¾" 18¾" 20"



24" | 560D | 1'-0" | 1'-0" | 1'-6" | 2'-0" | 3'-6" | 5'-0" | 7'-6" | 9'-0" | 11'-6" | 13'-0" | 1'-6" | 4'-0" | 5'-6" | 7'-0" | 10'-0" | 15'-0" | 16'-0" | 16'-6" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17'-0" | 17

24" | 560D | 2'-0" | 4'-0" | 5'-0" | 5'-6" | 7'-6" | 9'-0" | 12'-0" | 14'-0" | 16'-6" | 18'-0" | 5'-0" | 8'-0" | 9'-6" | 11'-0" | 14'-6" | 20'-0" | 21'-0" | 21'-6" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" | 22'-0" |

WARNING: Drilling, sawing, sanding or machining wood products generates wood dust, a substance known to the State of California to cause cancer. For more information on Proposition 65, visit www.wy.com/inform.

• For simple span (5' minimum), uniformly loaded joists used in residential applications, one maximum size round hole may be



Square or Rectangular Hole Size

4" 6" 7" 8" 10" 12" 14¾" 16¾" 18¾" 20"

1'-0" 3'-0" 4'-6" 6'-6" 14'-6" 15'-0" 16'-0" 16'-6" 17'-0"

Square or Rectangular Hole Size

4" 6" 7" 8" 10" 12" 14¾" 16¾" 18¾" 20"

-0" | 1'-6" | 4'-0" | 6'-6" | 11'-0" | 12'-0" | 14'-6"

-0" | 1'-0" | 3'-6" | 5'-6" |10'-6"|11'-6"|13'-6"|

8'-6" | 6'-0" | 8'-6" |11'-6"|16'-6"|18'-0"|20'-0"|

1'-0" | 5'-6" | 8'-0" | 11'-0" | 16'-0" | 17'-0" | 19'-0"

'-0" | 2'-6" | 5'-0" | 8'-0" | 13'-6" | 16'-6" | 18'-6" | 19'-6" |

2'-0" | 6'-0" | 8'-0" |10'-0"|19'-0"|20'-0"|21'-0"|21'-6"|22'-0"|

DO NOT cut or notch flange.

ST <u></u> 00

DEPTH

DEEP





A Weverhaeuser

carefully! IMPORTANT

read carefully! IMPORTANT! Please

ease

IMPORTANT!

Ŋ 8

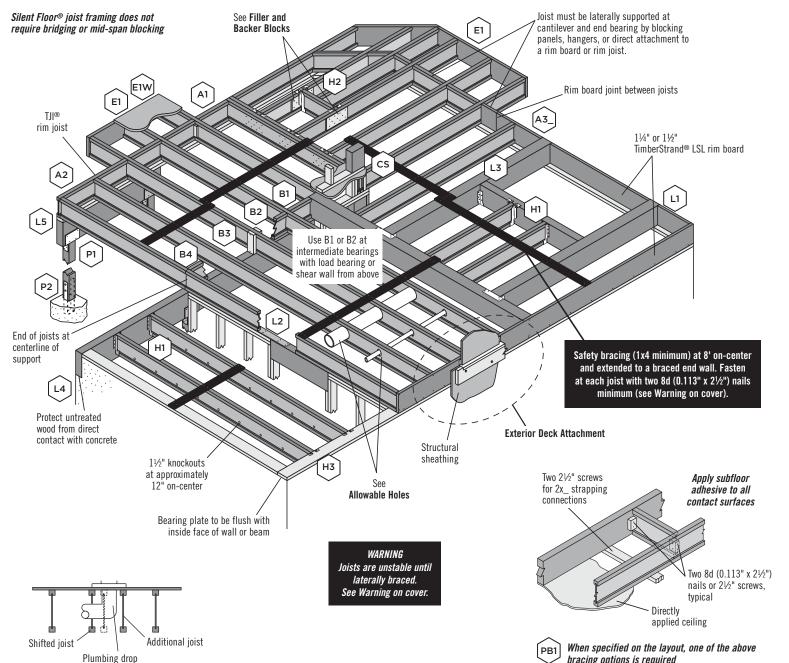
0 360

For beveled plate requirements, refer to table under Beveled Plate Requirements above

SB

PRODUCT STORAGE

SILENT FLOOR® JOIST FRAMING



Fastening Floor Panels to TJI® Joist Flanges and TimberStrand® LSL Rim Board

	Closest On-Center Spacing per Row			
Nail Size	TJI® 360, 560 and 560D	TimberStrand® LSL Rim Board		
		1¼"	1½"	
8d (0.113" x 2½")	3"	4"	3"	
8d (0.131" x 2½")	3"	4"	3"	
Od (0.128" x 3"), 12d (0.128" x 3¼")	3"	4"	3"	
10d (0.148" x 3"), 12d (0.148" x 3¼")	4"(1)	4"	4"	
16d (0.162" x 3½")	6"	6"(2)	6"(2)	

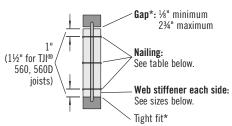
(1) Can be reduced to 3" on-center for light gauge steel straps with 10d (0.148" x 1½") nails

(2) Can be reduced to 4" on-center if nail penetration into the narrow edge is no more than of 1\%" (to avoid splitting).

General Notes

- Maximum spacing of nails is 24" on-center.
- Nailing rows must be offset at least ½" and staggered.
- 14 ga. staples may be substituted for 8d (0.131" x 2½") nails if minimum penetration of 1" into the TJI® joist or rim board is achieved.
- Table also applies for the attachment of TJI® rim joists and blocking panels to the wall plate.

FASTENING OF FLOOR PANELS WEB STIFFENERS

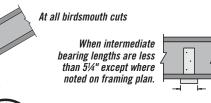


install web stiffener tight to top flange (gap at

Web Stiffener Requirements

		L	Min. Web	Nailing Requirements			
'ILT	TJI®	Depth (in.)	Stiffener Size	Туре	Nail Qty. at Bearing		
		()			End	Intermediate	
	360	All	1⁄8" x 25∕16"	8d (0.113" x 2½")	3	3	
	560	All	2x4	16d (0.135" x 3½")	3	ა 	
		18"	2x4	16d (0.135" x 3½")	4	4	
	560D	20"			5	5	
		22"			6	11	
		24"			6	13	

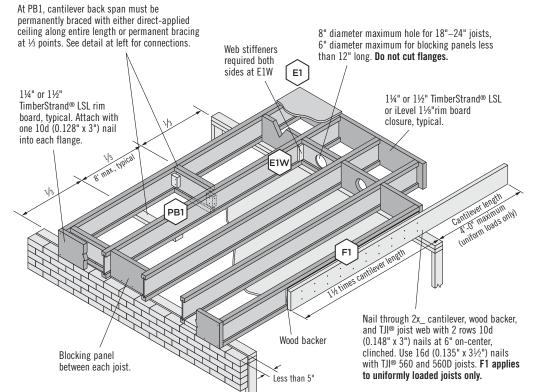
TJI® 560D joists, and when the following conditions occur:



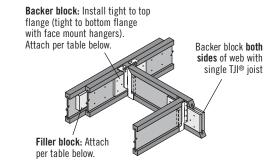


If the sides of the hanger do not extend to laterally support at least 3/8" of the TJI® joist top flange.

CANTILEVERS



FILLER AND BACKER BLOCKS



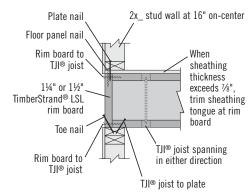
With top mount hangers, backer block required (H2) only for downward loads exceeding 250 lbs or for uplift conditions.

Filler and Backer Block Sizes

TJI®	Donah	Tuna	Filler/Backer	· Nail		
ارا	I® Depth Type		Size	Size	Quantity	
360	18" to	Filler	2x12 + ½" sheathing	10d (0.128" x 3")	15 one side	
360	20"	Backer	1" net	10d (0.128" x 3")	15	
560, 560D	18" to	Filler	Two 2x12	16d (0.135" x 3½")	15 each side	
	20"	20"	Backer	2x12	10d (0.128" x 3")	15
560D	22" to	Filler	Four ¾" x 15" sheathing	16d (0.135" x 3½")	25 each side	
	24"	Backer	Two ¾" x 15" sheathing	10d (0.128" x 3")	15	

(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.

RIM BOARD



(A3) to bearing plate with connections equivalent to decking schedule.

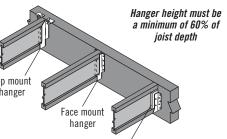
B W Web stiffeners required on each side of joist at intermediate bearings. Refer to your Javelin® framing plan.

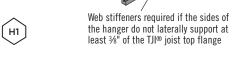
Bearing requirements as shown on the Javelin® framing plan ments listed

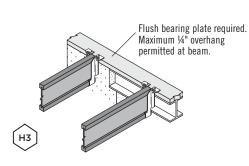
FRAMING CONNECTORS

Approved Hangers

- The following manufacturers are approved to supply hangers for iLevel products: — Simpson Strong-Tie™ 1-800-999-5099
- USP Structural Connectors[™] 1-800-328-5934
- Hanger design loads differ by support type and may exceed the capacity of the support and/or supported member. Contact your iLevel representative or refer to iLevel software.







Nailing Requirements

- Fill all round, dimple, and positive-angle holes with the proper nails. Hanger nails are usually a heavier gauge because of the higher loads they need to carry.
- Unless specified otherwise, full capacity of straps or connectors can only be achieved if the following nail penetration is provided:

	Face Mount	Top Mour
10d (0.148" x 1½")	1½" min.	1½" min
10d (0.148" x 3")	1¾" min.	3" min.
16d (0.162" x 3½")	2" min.	3½" min

■ Top mount hangers should be fastened to TJI® joist headers with 10d (0.148" x 1½") nails. Fasten face mount hangers to 3½" or wider TJI® joist headers with 10d (0.148" x 3") or 16d (0.162" x 3½") nails.

and Squeak Prevention Tips

- Nails must be completely set.
- member or hanger.
- the hanger. On Simpson Strong-Tie™ ITT, IUT and VPA connectors, bend the bottom flange tabs over and nail to TJI® ioist bottom flange
- Reduce squeaks by adding subfloor adhesive to the hanger seat.

MULTIPLE-MEMBER BEAMS

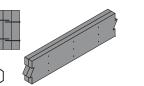
Multiple-Member Connections For Top-Loaded Beams Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.

		l	1 4315	161		
Piece Width	# of Plies ⁽¹⁾	Member Depth	Туре	Min. Length	# Rows	O.C. Spacing
1¾"	2, 3, or 4	≤11⅓"	10d (0.128")	3"	3	12"
			12d-16d (0.148"-0.162")	3½"	2	12"
		≥14"	10d (0.128")	3"	4	12"
			12d-16d (0.148"-0.162")	3"	3	12"
	2 or 3	All	SDS, WS, or TrussLok™ screws	33/8"	2	16"
	4	All	SDS, WS, or TrussLok™ screws	5"	2	16"
3½"	2	All	SDS, WS, or TrussLok™ screws	5"	2	16"
	2	All	½" bolts	8"	2	24"

(1) For 3- and 4-ply members, connectors must be installed on both sides. Stagger fasteners on opposite side of beam by ½" of the required connector spacing.

Multiple-Member Connections for Side-Loaded Beams

 Additional nailing or bolting may be required with side-loaded multiple member beams. Refer to current product literature.



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

1.55E

TimberStrand® LSL

91/4"--91/5"

11¼"–11⅓"

14"-16"

Header or Max. Round Beam Depth Hole Size

See allowed hole zone at left.

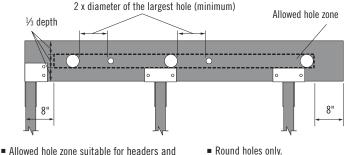
35/8"

45/8"

Beam bearing length is critical and must be considered for each application. See your iLevel® Javelin® framing plan.

ALLOWABLE HOLES—BEAMS, HEADERS, AND WALL STUDS

1.55E TimberStrand® LSL Headers and Beams



Allowed hole zone suitable for headers and beams with uniform and/or concentrated loads anywhere along the member.

TimberStrand® LSL

No holes in cantilevers

TimberStrand® LSL Wall Studs

5/4" minimum

edge distance

Maximum diameter:

■ 13/8" for 31/2" thick walls

 $2\frac{3}{16}$ " for $5\frac{1}{2}$ " $-11\frac{1}{4}$ " thick walls

hole zone

Other iLevel® Headers and Beams

Microllam® LVL

hole zone

and Parallam® PSL

Microllam® LVL and

Parallam® PSL

middle 1/3 span

1.3E TimberStrand® LSL allowed hole zone

allowed hole zone

2 x diameter of

the largest hole

No holes in headers or beams in plank orientation.

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

⅓ depth

Other iLevel® Beams

Header or Beam Depth	Max. Roun Hole Size
43/8"	1"
5½"	13/4"
7¼"–20"	2"

illustrations and tables.

■ See allowed hole zone at left.

Connector Installation Allowed hole zone suitable for headers and beams with uniform loads only.

- Leave ½6" clearance between the member and the support
- Joist-to-beam connections require hangers: do not toenail.
- Seat the supported member tight to the bottom of

Round holes only.

■ 1/8" for 3½" thick walls ■ 1¾" for 5½"-11¼" thick walls

No holes in headers or beams in plank

DO NOT cut a notch and a hole in the same cross section.

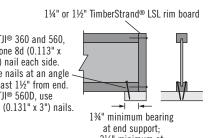
One notch may be cut anywhere except the middle $\frac{1}{2}$ of the length of the stud or column. Holes may be drilled anywhere along the length of the stud or column but must be at least 5%" from the edge.



TJI® JOIST NAILING REQUIREMENTS AT BEARING—(A_)(B_) TJI® Joist to Bearing Plate Rim to TJI® Joist

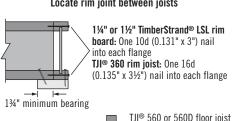
For TJI® 360 and 560. use one 8d (0.113" x 2½") nail each side. Drive nails at an angle at least 1½" from end. For TJI® 560D, use 10d (0.131" x 3") nails. 1¾" minimum bearing at end support; 3½" minimum at

intermediate support



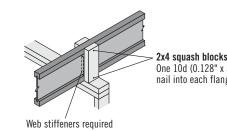
Shear transfer: Connections equivalent to floor panel nailing schedule

Locate rim joint between joists



TJI® 560 or 560D floor joist TJI® 560 or 56D rim inist: Toenail with 10d (0.131" x 3") nails, one each side of TJI® ioist flange

∼ TJI® 560 or 560D rim joist



at B_W ONLY. Refer to framing plan.

bracing options is required

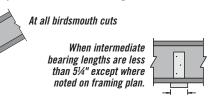
Squash Blocks to TJI® Joist Load bearing wall above

2x4 squash blocks: One 10d (0.128" x 3") nail into each flange

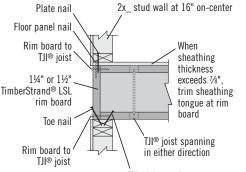
* With a point load from above and no support below,

TJI®	Depth (in.)	Stiffener Size	Туре	Nail Qty. at Bearing		
	(,		туре	End	Intermediate	
360	All	1⁄8" x 25∕16"	8d (0.113" x 2½")	3	2	
560	All	2x4	16d (0.135" x 3½")	3	ა 	
560D	18"	2x4	16d (0.135" x 3½")	4	4	
	20"			5	5	
	22"			6	11	
	24"			6	13	

Web stiffeners are always required for 22" and 24"







At a minimum, attach TimberStrand® LSL rim board

iLevel® Javelin® Framing Plans

A— At A1, joists require full bearing width. At A2 and A3, joists require full bearing width minus rim board or rim joist thickness.

are job specific and supersede minimum bearing require-