CONNECTOR SELECTION GUIDE

FOR RESIDENTIAL CONSTRUCTION

SIMPSON Strong-Tie®

FOR USE WITH PRODUCTS MANUFACTURED BY:

PINK WOOD

This guide lists popular options for Simpson Strong-Tie hangers used with engineered wood products. Not all available hanger and installation combinations are listed. Use in conjunction with the current Simpson Strong-Tie Canadian ***Wood Construction Connectors*** catalogue for detailed hanger information.

LIMIT STATES DESIGN

(800) 999-5099
strongtie.com

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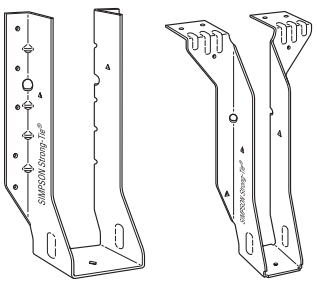
SINGLE I-JOISTS – Canadian / Factored Resistance (lb.)

SIMPSON Strong-Tie

Joist Height (in.)	Top-Flange Hanger							Snap-In Face-Mount Hanger							Face-Mount Hanger						
	Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]		Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]		Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]	
			Header	Joist		D-Fir	S-P-F			Header	Joist		D-Fir	S-P-F			Header	Joist		D-Fir	S-P-F
PKI 10, 20, 23												**Joist Width = 2½"**									
9½	LT259	2	(6) 10d	(1) #8x1¼" WS	105	2625	1725	IUS2.56/9.5	2	(8) 10d	—	175	2385	1690	LF259	2	(10) 10d	(1) #8x1¼" WS	105	2525	2155
11⅞	LT251188	2	(6) 10d	(1) #8x1¼" WS	105	2625	1725	IUS2.56/11.88	2	(10) 10d	—	175	2565	1820	LF2511	2	(12) 10d	(1) #8x1¼" WS	105	2880	2270
14	LT2514	2	(6) 10d	(1) #8x1¼" WS	105	2625	1725	IUS2.56/14	2	(12) 10d	—	175	2565	1820	LF2514	2	(14) 10d	(1) #8x1¼" WS	105	3235	2385
16	LT2516	2	(6) 10d	(1) #8x1¼" WS	105	2625	1725	IUS2.56/16	2	(14) 10d	—	175	2725	1935	MIU2.56/16	2½	(24) 16d	(2) 10dx1½"	375	4930	3485
PKI 35Plus, 40, 50												**Joist Width = 3½"**									
9½	LT359	2	(6) 10d	(1) #8x1¼" WS	105	2415	1725	IUS3.56/9.5	2	(10) 10d	—	175	2415	1685	LF359	2	(10) 10d	(2) #8x1¼" WS	105	2415	2155
11⅞	LT351188	2	(6) 10d	(1) #8x1¼" WS	105	2415	1725	IUS3.56/11.88	2	(12) 10d	—	175	2415	1685	LF3511	2	(12) 10d	(2) #8x1¼" WS	105	2415	2270
14	LT3514	2	(6) 10d	(1) #8x1¼" WS	105	2415	1725	IUS3.56/14	2	(12) 10d	—	175	2415	1685	LF3514	2	(14) 10d	(2) #8x1¼" WS	105	2415	2385
16	LT3516	2	(6) 10d	(1) #8x1¼" WS	105	2415	1725	IUS3.56/16	2	(14) 10d	—	175	2415	1685	MIU3.56/16	2½	(24) 16d	(2) 10dx1½"	375	2745	2745
18	MIT418	2½	(8) 16d	(2) 10dx1½"	375	2745	2420	See current Canadian Limit States catalogue for hanger selection							MIU3.56/18	2½	(26) 16d	(2) 10dx1½"	375	2745	2745
20	MIT420	2½	(8) 16d	(2) 10dx1½"	375	2745	2420								MIU3.56/20	2½	(28) 16d	(2) 10dx1½"	375	2745	2745

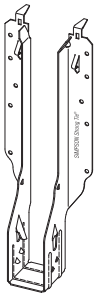
Joist Height (in.)	45° Skew							Adjustable Height							Field Slope and Skew						
	Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]		Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]		Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]	
			Header	Joist		D-Fir	S-P-F			Header	Joist		D-Fir	S-P-F			Header	Joist		D-Fir	S-P-F
PKI 10, 20, 23												**Joist Width = 2½"**									
9½	SUR/L2.56/9	3 3/16	(14) 16d	(2) 10dx1½"	385	3950	2805	THAI322	2¼	(6) 10d	(2) 10dx1½"	—	3000	2385	LSSUH310	3½	(14) 16d	(12) 10dx1½"	1155	2345	1665
11⅞	SUR/L2.56/11	3 3/16	(16) 16d	(2) 10dx1½"	385	3950	2805	THAI322	2¼	(6) 10d	(2) 10dx1½"	—	3000	2385	LSSUH310	3½	(14) 16d	(12) 10dx1½"	1155	2345	1665
14	SUR/L2.56/14	3 3/16	(18) 16d	(2) 10dx1½"	385	3950	2805	THAI322	2¼	(6) 10d	(2) 10dx1½"	—	3000	2385	LSSUH310	3½	(14) 16d	(12) 10dx1½"	1155	2345	1665
16	SUR/L2.56/14	3 3/16	(18) 16d	(2) 10dx1½"	385	3950	2805	See current Canadian Limit States catalogue for hanger selection							See current Canadian Limit States catalogue for hanger selection						
PKI 35Plus, 40, 50												**Joist Width = 3½"**									
9½	SUR/L410	3 3/16	(14) 16d	(6) 16d	1695	4065	2875	THAI422	2¼	(6) 10d	(2) 10dx1½"	—	3000	2385	LSSU410	3½	(14) 16d	(12) 10dx1½"	1155	2345	1665
11⅞	SUR/L410	3 3/16	(14) 16d	(6) 16d	1695	4065	2875	THAI422	2¼	(6) 10d	(2) 10dx1½"	—	3000	2385	LSSU410	3½	(14) 16d	(12) 10dx1½"	1155	2345	1665
14	SUR/L414	3 3/16	(18) 16d	(8) 16d	2265	4095	2895	THAI422	2¼	(6) 10d	(2) 10dx1½"	—	3000	2385	LSSU410	3½	(14) 16d	(12) 10dx1½"	1155	2345	1665
16	SUR/L414	3 3/16	(18) 16d	(8) 16d	2265	4095	2895	THAI422	2¼	(6) 10d	(2) 10dx1½"	—	3000	2385	LSSU410	3½	(14) 16d	(12) 10dx1½"	1155	2345	1665
18	See current Canadian Limit States catalogue for hanger selection							See current Canadian Limit States catalogue for hanger selection							See current Canadian Limit States catalogue for hanger selection						
20																					

1. See General Notes on page 4.
2. Shaded hangers require web stiffeners at joist ends. Web stiffeners may be required for non-shaded hangers by others.
3. The B Dim is the length of the hanger seat.
4. THAI hangers require a minimum of 4 top and 2 face nails installed.



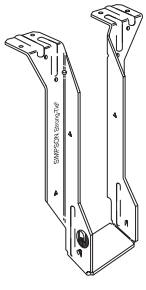
LF **LT**

LF – 18 gauge
LT – 18 gauge
The LF and LT series feature fast and easy installation. No web stiffeners required and only one or two screws secures joist in hanger.



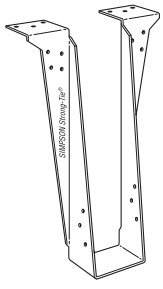
IUS

IUS – 18 gauge
The IUS is a hybrid hanger that incorporates the advantages of face-mount and top-flange hangers. Joist nails are not required.



MIT

MIT – 16 gauge
The MIT's Positive Angle Nailing helps minimize splitting of the I-joist's bottom flange. Features uplift capacity and extended seat design.



B

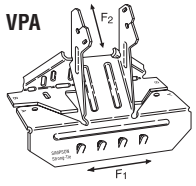
B – 12 gauge
The B series offers versatility for I-joists and SCL lumber. Enhanced load capacity widens the range of applications for these hangers.

DOUBLE I-JOISTS – Canadian / Factored Resistance (lb.)

SIMPSON Strong-Tie

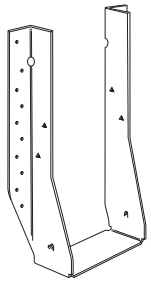
Joist Height (in.)	Top-Flange Hanger							Face-Mount Hanger							45° Skew						
	Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]		Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]		Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]	
			Header	Joist		D-Fir	S-P-F			Header	Joist		D-Fir	S-P-F			Header	Joist		D-Fir	S-P-F
PKI 10, 20, 23												**Joist Width = 5"**									
9½	MIT39.5-2	2½	(8) 16d	(2) 10dx1½"	375	3490	2420	MIU5.12/9	2½	(16) 16d	(2) 10dx1½"	375	4550	3230	HSUR/L5.12/9	2 13/16	(12) 16d	(2) 10dx1½"	195	2995	2350
11 7/8	MIT311.88-2	2½	(8) 16d	(2) 10dx1½"	375	3490	2420	MIU5.12/11	2½	(20) 16d	(2) 10dx1½"	375	4550	3230	HSUR/L5.12/11	2 13/16	(16) 16d	(2) 10dx1½"	195	4190	2965
14	MIT314-2	2½	(8) 16d	(2) 10dx1½"	375	3490	2420	MIU5.12/14	2½	(22) 16d	(2) 10dx1½"	375	4930	3485	HSUR/L5.12/14	2 13/16	(20) 16d	(2) 10dx1½"	195	4190	2965
16	MIT5.12/16	2½	(8) 16d	(2) 10dx1½"	375	3490	2420	MIU5.12/16	2½	(24) 16d	(2) 10dx1½"	375	4930	3485	HSUR/L5.12/16	2 13/16	(24) 16d	(2) 10dx1½"	195	4190	2965
PKI 35Plus, 40, 50												**Joist Width = 7"**									
9½	B7.12/9.5	2½	(14) 16d	(6) 16d	1650	5940	3910	HU410-2	2½	(18) 16d	(8) 16d	2280	5780	4690	HU410-2X[7]	2½	(18) 16d	(8) 16d	1710	3755	3050
11 7/8	B7.12/11.88	2½	(14) 16d	(6) 16d	1650	5940	3910	HU412-2	2½	(22) 16d	(8) 16d	2280	5780	4690	HU412-2X[7]	2½	(22) 16d	(8) 16d	1710	3755	3050
14	B7.12/14	2½	(14) 16d	(6) 16d	1650	5940	3910	HU414-2	2½	(26) 16d	(12) 16d	3420	7025	5780	HU414-2X[7]	2½	(26) 16d	(12) 16d	2565	4565	3755
16	B7.12/16	2½	(14) 16d	(6) 16d	1650	5940	3910	HU414-2	2½	(26) 16d	(12) 16d	3420	7025	5780	HU414-2X[7]	2½	(26) 16d	(12) 16d	2565	4565	3755
18	B7.12/18	2½	(14) 16d	(6) 16d	1650	5940	3910	See current Canadian Limit States catalogue for hanger selection							See current Canadian Limit States catalogue for hanger selection						
20	B7.12/20	2½	(14) 16d	(6) 16d	1650	5940	3910														

Joist Height (in.)	Adjustable Height							Field Slope and Skew							Variable Pitch							
	Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]		Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]		Model	B Dim (in.)	Fastener Type		Uplift K_D = 1.15	Download[8]	
			Header	Joist		D-Fir	S-P-F			Header	Joist		D-Fir	S-P-F			Header	Joist		D-Fir	S-P-F
PKI 10, 20, 23												**Joist Width = 5"**										
9½	THAI-2[5]	2¼	(6) 10d	(2) 10dx1½"	—	2800	2800	LSU5.12[6]	3½	(24) 16d	(16) 10dx1½"	910	2600	1845								
11 7/8	THAI-2[5]	2¼	(6) 10d	(2) 10dx1½"	—	2800	2800	LSU5.12[6]	3½	(24) 16d	(16) 10dx1½"	910	2600	1845								
14	THAI-2[5]	2¼	(6) 10d	(2) 10dx1½"	—	2800	2800	LSU5.12[6]	3½	(24) 16d	(16) 10dx1½"	910	2600	1845								
16	See current Canadian Limit States catalogue for hanger selection							See current Canadian Limit States catalogue for hanger selection														
PKI 35Plus, 40, 50												**Joist Width = 7"**										
9½	See current Canadian Limit States catalogue for hanger selection							See current Canadian Limit States catalogue for hanger selection														
11 7/8																						
14																						
16																						
18																						
20																						
PKI 10, 20, 23															**Joist Width = 2½"**							
All															VPA3	2	(9) 10d	(2) 10dx1½"	370	2050	1855	
PKI 35Plus, 40, 50															**Joist Width = 3½"**							
All															VPA4	2	(9) 10d	(2) 10dx1½"	370	2050	1855	



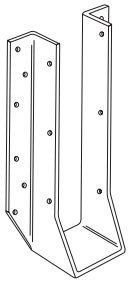
VPA – 18 gauge
This variable pitch connector allows a sloped beam to sit on a top plate without having to notch, birdmouth, bevel or toe nail. It also provides uplift capacity. Adjustable from 3:12 to 12:12 pitch.

1. See General Notes on page 4.
2. Shaded hangers require web stiffeners at joist ends. Web stiffeners may also be required for non-shaded areas by the joist manufacturer.
3. The B Dim is the length of the hanger seat.
4. THAI hangers must require a minimum of 4 top and 2 face nails installed.
5. THAI-2 must be special ordered. Specify width between 3⅛" and 5⁵⁄₁₆".
6. LSUs are not field skewable. (Field-slope only.) Skewed option must be special ordered; specify skew angle.
7. HU skewed option must be special ordered. Specify skew angle and direction (e.g. HU414-2X R45°)
8. Connection capacity is the lower of the tabulated hanger capacity or the I-joist bearing end reaction limit as published by the manufacturer (either with or without web stiffeners.)



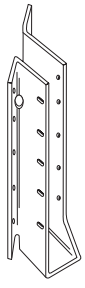
MIU

MIU – 16 gauge
The MIU series features 16 gauge steel and extra nailing for higher loads.



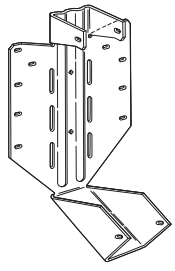
HU

HU – 14 gauge
The HU series features uplift capacity and a large selection of sizes and load ranges. HU hangers have triangle holes that can be filled for increased loads. Web stiffeners required when used with I-joists.



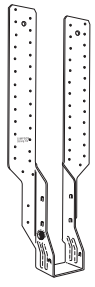
SUL

SUR/L – 16 gauge
HSUR/L – 14 gauge
All models are skewed 45°. Normally accommodates a 40°–50° skew. The installation of these hangers does not require a beveled end cut.



LSSU

LSSU210 – 18 gauge
LSU – 14 gauge
Others – 16 gauge
LSSU models provide uplift capacity and can be field sloped and/or skewed to 45°. Web stiffeners required when used with I-joists .



THAI

THAI – 18 gauge
THAI-2 – 14 gauge
This hanger has extra long straps and can be field-formed to give height adjustability and top flange hanger convenience. Positive angle nailing helps minimize splitting of the I-joist's bottom flange. Minimum nailing is shown in the table above. Strap must be field-formed over the top of the header by a minimum of 2½". Web stiffeners required when used with I-joists.

GENERAL CONNECTOR INSTALLATION

General Notes

1. See current *Wood Construction Connectors* catalogue for Important Information and General Notes section and for hanger models, joist sizes and support conditions not shown. See pages below for installation information.
2. Unless otherwise noted, factored resistances listed in tables are in pounds and address the attachment of the hanger to a solid support member. Loads listed under the Download heading cover Douglas Fir, Southern Pine, SPF, LVL and LSL. Joist or beam reactions should be checked by a qualified designer to ensure proper hanger selection. See below for I-joist headers.
3. Factored uplift resistances assume SPF flanges and have been increased by 15% for earthquake and wind loading with no further increase allowed. Reduce loads according to code for normal duration loading such as cantilever construction.
4. The top flange of an I-joist must be laterally supported to prevent rotation; see Prevent Rotation below.
5. For top flange hangers, configuration and thickness of hanger top flange need to be considered for flush framing conditions.
6. For this publication, support members are assumed to be at least 5½" tall. The horizontal thickness of the support member must be at least the length of the nail being used and at least the length of the hanger top flange.
   Exception: face mount hangers may be mounted on support members narrower than the nail length provided the nail penetration is at least 1¾" for 10d or 2 inches for 16d; nails are clinched.
7. THAI hangers shown in the single and double I-joist tables are based on the "top flange" installation and require that the carrying member have a horizontal thickness of at least 2½". Install 4 top nails and 2 face nails. THAI hangers are not rated for uplift.
8. All nails shown are common wire nails unless otherwise noted.
   16d = 0.162" dia. x 3½" long
   10d = 0.148" dia. x 3" long
   10d x 1½" = 0.148" dia. x 1½" long

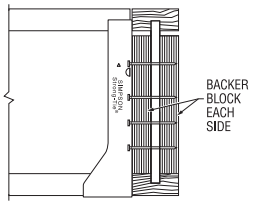
I-Joist Headers

I-Joist Headers: When supporting one I-joist from another, backer blocks must be used. Backer blocks are to be made from plywood, OSB or dimension lumber. The thickness of a backer block should be the same thickness as the void in the side of the I-joist and a minimum of 12" wide. Attach with (10) 10d common nails clinched as necessary, prior to installing the hanger. For top-flange hangers, install backer blocks tight to top flange. For face-mount hangers, install backer blocks tight to bottom flange.

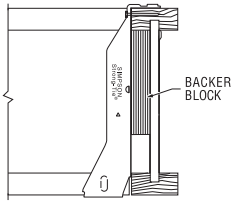
Use 10d x 1½" nails for all top-flange hangers attached to an I-joist header. See table for factored resistance. For face-mount hangers using 10d nails with headers less than 1¾" wide horizontally but at least 1½" wide, apply a reduction factor of 0.77 to all table values.

Factored Resistance Hangers on I-Joist Headers (lb.)

Model	I-Joist Header Flange Material
	SPF
LT	1695
MIT	1900
LBV	2200
BA	2420

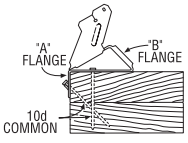


Face Mount

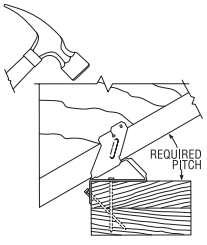


Top Flange

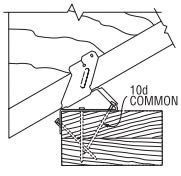
VPA Installation



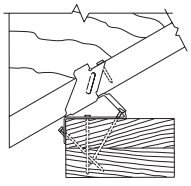
STEP 1
Install top nails and face PAN nails in "A" flange to outside wall top plate.



STEP 2
Seat rafter with a hammer, adjusting "B" flange to the required pitch.

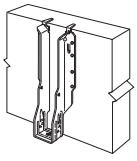


STEP 3
Install "B" flange nails in the obround nail holes, locking the pitch.

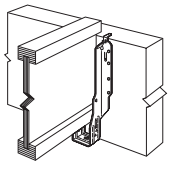


STEP 4
Bend tab with hammer and install nail into tab nail hole. Hammer nail in at approx. 45° angle to limit splitting.

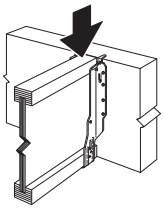
IUS Installation Sequence



STEP 1
Attach the IUS to the header



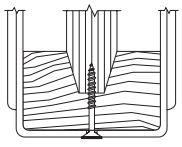
STEP 2
Slide the I-joist into the IUS until it rests above the large tear drop.



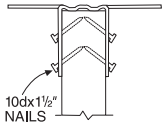
STEP 3
Firmly push or snap I-joist fully into the seat of the IUS.

LF/LT Screw Installation

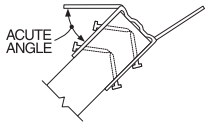
Use 8 gauge (0.164" diameter) x 1¼" wood screw (#8 x 1¼") to secure joist to hanger. To avoid stripping of the bottom chord screw hole, DO NOT over tighten screw. Use specified screw to seat joist into hanger (required only for LF and LT hangers).



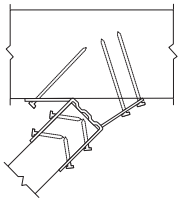
LSSU Installation



1. Nail hanger to slope-cut joist, installing seat nail first. No bevel necessary for skewed installation.



2. Skew flange to form acute angle. Bend other flange back. Bend along the centerline of slots. Bend one time only.



3. Attach hanger to header, acute angle first. Install nails at an angle.

Refer to the current Canadian *Wood Construction Connectors* catalogue for General Notes, Warranty Information and other important information, including Terms and Conditions of Sale, Building Code Evaluation listings and Corrosion Resistance.

CSG-PINKWDCAN17 5/17 exp. 12/19

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