



FOR USE WITH PRODUCTS
MANUFACTURED BY:



Effective Date: October 2004

CONNECTOR SELECTION GUIDE



This guide lists popular options for Simpson Strong-Tie® hangers used with Wood Construction Connectors. 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 information.

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LIMIT
STATES
DESIGN

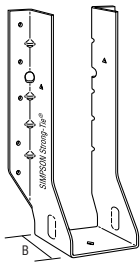
SINGLE I-JOISTS - Canadian/Factored Resistance (lb.)

Joist Height	Top Flange						Snap In Face Mount						Face Mount								
	Model	B Dim	Fastener Type		Uplift (115)	Download ²		Model	B Dim	Fastener Type		Uplift (115)	Download		Model	B Dim	Fastener Type		Uplift (115)	Download	
			Header	Joist		DF	SPF			Header	Joist		DF	SPF			Header	Joist		DF	SPF
NJ Series																					
Joist Width = 1 1/2"																					
9 1/4	LT15925	2	6-10d	1-#8x1 1/2 WS	105	2560	1490	No IUS for this depth.						LF159	2	10-10d	1-#8x1 1/2 WS	105	2435	1845	
9 1/2	LT159	2	6-10d	1-#8x1 1/2 WS	105	2560	1490	No IUS for this depth.						LF159	2	10-10d	1-#8x1 1/2 WS	105	2435	1845	
11 7/8	LT151188	2	6-10d	1-#8x1 1/2 WS	105	2560	1490	No IUS for this depth.						LF1511	2	12-10d	1-#8x1 1/2 WS	105	2435	1845	
NJH Series																					
Joist Width = 2 1/2"																					
9 1/2	LT259	2	6-10d	1-#8x1 1/2 WS	105	2560	1490	IUS2.56/9.5	2	8-10d	—	105	2385	1700	LF259	2	10-10d	1-#8x1 1/2 WS	105	2525	2155
11 7/8	LT251188	2	6-10d	1-#8x1 1/2 WS	105	2560	1490	IUS2.56/11.88	2	10-10d	—	105	2565	1835	LF2511	2	12-10d	1-#8x1 1/2 WS	105	2880	2270
14	LT2514	2	6-10d	1-#8x1 1/2 WS	105	2560	1490	IUS2.56/14	2	12-10d	—	105	2565	1835	LF2514	2	14-10d	1-#8x1 1/2 WS	105	3235	2385
16	LT2516	2	6-10d	1-#8x1 1/2 WS	105	2560	1490	IUS2.56/16	2	14-10d	—	105	2725	1950	MIU316	2 1/2	20-16d	2-10dx1 1/2	270	4185	2955
NJU Series																					
Joist Width = 3 1/2"																					
9 1/2	LT359	2	6-10d	2-#8x1 1/2 WS	105	2560	1490	No IUS for this depth.						LF359	2	10-10d	2-#8x1 1/2 WS	105	2525	2155	
11 7/8	LT351188	2	6-10d	2-#8x1 1/2 WS	105	2560	1490	IUS3.56/11.88	2	12-10d	—	105	2375	1695	LF3511	2	12-10d	2-#8x1 1/2 WS	105	2880	2270
14	LT3514	2	6-10d	2-#8x1 1/2 WS	105	2560	1490	IUS3.56/14	2	12-10d	—	105	2375	1695	LF3514	2	14-10d	2-#8x1 1/2 WS	105	3235	2385
16	LT3516	2	6-10d	2-#8x1 1/2 WS	105	2560	1490	IUS3.56/16	2	14-10d	—	105	2375	1695	MIU416	2 1/2	20-16d	2-10dx1 1/2	270	4185	2955
18	MIT418	2 1/2	6-16d	2-10dx1 1/2	390	3300	2730	No IUS for this depth.						MIU418	2 1/2	22-16d	2-10dx1 1/2	270	4185	2955	

Joist Height	Adjustable Height						Field Slope and Skew						45° Skew								
	Model	B Dim	Fastener Type		Uplift (115)	Download		Model	B Dim	Fastener Type		Uplift (115)	Download		Model	B Dim	Fastener Type		Uplift (115)	Download	
			Header	Joist		DF	SPF			Header	Joist		DF	SPF			Header	Joist		DF	SPF
NJ Series																					
Joist Width = 1 1/2"																					
9 1/4	THAI222	2 1/4	6-10d	2-10dx1 1/2	—	2740	2075	LSSU210	3 1/2	9-10d	7-10dx1 1/2	915	2090	1495	SUR/L210	2	10-16d	10-10dx1 1/2	1665	3820	2700
9 1/2	THAI222	2 1/4	6-10d	2-10dx1 1/2	—	2740	2075	LSSU210	3 1/2	9-10d	7-10dx1 1/2	915	2090	1495	SUR/L210	2	10-16d	10-10dx1 1/2	1665	3820	2700
11 7/8	THAI222	2 1/4	6-10d	2-10dx1 1/2	—	2740	2075	LSSU210	3 1/2	9-10d	7-10dx1 1/2	915	2090	1495	SUR/L210	2	10-16d	10-10dx1 1/2	1665	3820	2700
NJH Series																					
Joist Width = 2 1/2"																					
9 1/2	THAI322	2 1/4	6-10d	2-10dx1 1/2	—	2740	2075	LSSUH310	3 1/2	14-16d	12-10dx1 1/2	1220	2620	1850	SUR/L310	2 5/8	14-16d	6-10dx1 1/2	890	4065	2875
11 7/8	THAI322	2 1/4	6-10d	2-10dx1 1/2	—	2740	2075	LSSUH310	3 1/2	14-16d	12-10dx1 1/2	1220	2620	1850	SUR/L2.56/11	3	16-16d	2-10dx1 1/2	195	2930	2070
14	THAI322	2 1/4	6-10d	2-10dx1 1/2	—	2740	2075	LSSUH310	3 1/2	14-16d	12-10dx1 1/2	1220	2620	1850	SUR/L314	2 5/8	18-16d	8-10dx1 1/2	1555	4095	2895
16	See current <i>Canadian Limit States</i> catalogue for hanger selection.						See current <i>Canadian Limit States</i> catalogue for hanger selection.						SUR/L314	2 5/8	18-16d	8-10dx1 1/2	1555	4095	2895		
NJU Series																					
Joist Width = 3 1/2"																					
9 1/2	THAI422	2 1/4	6-10d	2-10dx1 1/2	—	2740	2075	LSSU410	3 1/2	14-16d	12-10dx1 1/2	1220	3055	2160	SUR/L410	2 5/8	14-16d	6-16d	1395	4065	2875
11 7/8	THAI422	2 1/4	6-10d	2-10dx1 1/2	—	2740	2075	LSSU410	3 1/2	14-16d	12-10dx1 1/2	1220	3055	2160	SUR/L410	2 5/8	14-16d	6-16d	1395	4065	2875
14	THAI422	2 1/4	6-10d	2-10dx1 1/2	—	2740	2075	LSSU410	3 1/2	14-16d	12-10dx1 1/2	1220	3055	2160	SUR/L414	2 1/2	18-16d	8-16d	1555	4095	2895
16	See current <i>Canadian Limit States</i> catalogue for hanger selection.						See current <i>Canadian Limit States</i> catalogue for hanger selection.						SUR/L414	2 1/2	18-16d	8-16d	1555	4095	2895		
18	See current <i>Canadian Limit States</i> catalogue for hanger selection.						See current <i>Canadian Limit States</i> catalogue for hanger selection.						SUR/L414	2 1/2	18-16d	8-16d	1555	4095	2895		

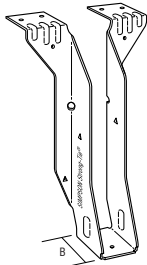
1. Shaded hangers require web stiffeners at joist ends. Web stiffeners may be required for non-shaded hangers by joist manufacturer.
2. THAI hangers require a minimum of 4 top and 2 face nails installed.

Specified Nail	CSA 086-01 Nail
8d	2 1/2" common wire
10d	3" common wire
16d	3 1/2" common wire

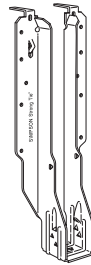


LF

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

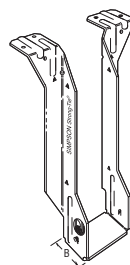


LT



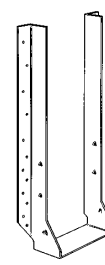
IUS

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



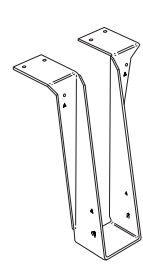
MIT

MIT – 16 gauge
 The MIT's Positive Angle Nailing helps eliminate splitting of the I-joists' bottom flange. Features uplift capacity and extended seat design (to allow installation of slightly undercut joists).



MIU

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



LBV

LBV – 14 gauge
 The LBV is designed especially for use with multiple ply headers 1 1/2" or 1 3/4" thick, and may be used for weld-on applications.

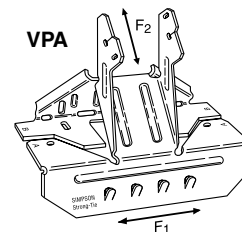
DOUBLE I-JOISTS - Canadian/Factored Resistance (lb.)



Joist Height	Top Flange						Face Mount						45° Skew											
	Model	B Dim	Fastener Type		Uplift (115)	Download DF SPF	Model	B Dim	Fastener Type		Uplift (115)	Download DF SPF	Model	B Dim	Fastener Type		Uplift (115)	Download DF SPF						
			Header	Joist					Header	Joist					Header	Joist								
Double NJ Series																			Joist Width = 3"					
9 1/4	LBV29.25-2	2 1/4	6-16d	2-10dx1 1/2	390	2920	3335	MIU29-2	2 1/2	14-16d	2-10dx1 1/2	270	4185	2955	SUR/L210-2	2 5/8	14-16d	6-16dx2 1/2	1395	4065	2875			
9 1/2	MIT29.5-2	2 1/2	6-16d	2-10dx1 1/2	390	3330	2730	MIU29-2	2 1/2	14-16d	2-10dx1 1/2	270	4185	2955	SUR/L210-2	2 5/8	14-16d	6-16dx2 1/2	1395	4065	2875			
11 7/8	MIT211.88-2	2 1/2	6-16d	2-10dx1 1/2	390	3330	2730	MIU211-2	2 1/2	16-16d	2-10dx1 1/2	270	4185	2955	SUR/L210-2	2 5/8	14-16d	6-16dx2 1/2	1395	4065	2875			
Double NJH Series																			Joist Width = 5"					
9 1/2	MIT39.5-2	2 1/2	6-16d	2-10dx1 1/2	390	3330	2730	MIU39-2	2 1/2	14-16d	2-10dx1 1/2	270	4185	2955	HSUR/L5.12/9	2 1 3/8	12-16d	2-10dx1 1/2	195	2995	2350			
11 7/8	MIT311.88-2	2 1/2	6-16d	2-10dx1 1/2	390	3330	2730	MIU311-2	2 1/2	16-16d	2-10dx1 1/2	270	4185	2955	HSUR/L5.12/11	2 1 3/8	16-16d	2-10dx1 1/2	195	4195	2965			
14	MIT314-2	2 1/2	6-16d	2-10dx1 1/2	390	3330	2730	MIU314-2	2 1/2	18-16d	2-10dx1 1/2	270	4185	2955	HSUR/L5.12/14	2 1 3/8	20-16d	2-10dx1 1/2	195	4195	2965			
16	MIT5.12/16	2 1/2	6-16d	2-10dx1 1/2	390	3330	2730	MIU316-2	2 1/2	20-16d	2-10dx1 1/2	270	4185	2955	HSUR/L5.12/16	2 1 3/8	24-16d	2-10dx1 1/2	195	4195	2965			
Double NJU Series																			Joist Width = 7"					
9 1/2	WPI49.5-2	2 1/2	3-16d	2-10dx1 1/2	—	4475	3715	HU410-2	2 1/2	18-16d	8-16d	1865	6605	4670	HU410-2X ²	2 1/2	18-16d	8-16d	1400	6605	4670			
11 7/8	WPI411.88-2	2 1/2	3-16d	2-10dx1 1/2	—	4475	3715	HU412-2	2 1/2	22-16d	8-16d	1865	6605	4670	HU412-2X ²	2 1/2	22-16d	8-16d	1400	6605	4670			
14	WPI414-2	2 1/2	3-16d	2-10dx1 1/2	—	4475	3715	HU414-2	2 1/2	26-16d	12-16d	2685	8710	6160	HU414-2X ²	2 1/2	26-16d	12-16d	2010	8710	6160			
16	WPI416-2	2 1/2	3-16d	2-10dx1 1/2	—	4475	3715	HU414-2	2 1/2	26-16d	12-16d	2685	8710	6160	HU414-2X ²	2 1/2	26-16d	12-16d	2010	8710	6160			
18	WPI418-2	2 1/2	3-16d	2-10dx1 1/2	—	4475	3715	HU414-2	2 1/2	26-16d	12-16d	2685	8710	6160	HU414-2X ²	2 1/2	26-16d	12-16d	2010	8710	6160			

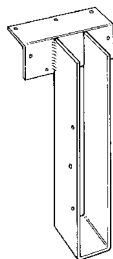
Joist Height	Adjustable Height						Field Slope and Skew											
	Model	B Dim	Fastener Type		Uplift (115)	Download DF SPF	Model	B Dim	Fastener Type		Uplift (115)	Download DF SPF						
			Header	Joist					Header	Joist								
Double NJ Series													Joist Width = 3"					
9 1/4	THAI-2	2 1/2	6-10d	2-10dx1 1/2	—	2935	2935	LSSU210-2	3 1/2	18-16d	12-10dx1 1/2	1220	3055	2160				
9 1/2	THAI-2	2 1/2	6-10d	2-10dx1 1/2	—	2935	2935	LSSU210-2	3 1/2	18-16d	12-10dx1 1/2	1220	3055	2160				
11 7/8	THAI-2	2 1/2	6-10d	2-10dx1 1/2	—	2935	2935	LSSU210-2	3 1/2	18-16d	12-10dx1 1/2	1220	3055	2160				
Double NJH Series													Joist Width = 5"					
9 1/2	THAI-2	2 1/2	6-10d	2-10dx1 1/2	—	2935	2935	LSU5.12 ³	3 1/2	24-16d	16-10dx1 1/2	910	2600	1835				
11 7/8	THAI-2	2 1/2	6-10d	2-10dx1 1/2	—	2935	2935	LSU5.12 ³	3 1/2	24-16d	16-10dx1 1/2	910	2600	1835				
14	THAI-2	2 1/2	6-10d	2-10dx1 1/2	—	2935	2935	LSU5.12 ³	3 1/2	24-16d	16-10dx1 1/2	910	2600	1835				
16	See current Canadian Limit States catalogue for hanger selection.						See current Canadian Limit States catalogue for hanger selection.											
Double NJU Series													Joist Width = 7"					
9 1/2	See current Canadian Limit States catalogue for hanger selection.						See current Canadian Limit States catalogue for hanger selection.											
11 7/8	See current Canadian Limit States catalogue for hanger selection.						See current Canadian Limit States catalogue for hanger selection.											
14	See current Canadian Limit States catalogue for hanger selection.						See current Canadian Limit States catalogue for hanger selection.											
16	See current Canadian Limit States catalogue for hanger selection.						See current Canadian Limit States catalogue for hanger selection.											
18	See current Canadian Limit States catalogue for hanger selection.						See current Canadian Limit States catalogue for hanger selection.											

Joist Height	Variable Pitch					
	Model	B Dim	Fastener Type		Uplift (115)	Down Load DF SPF
			Header	Joist		
NJ Series						
Joist Width = 1 1/2"						
All	VPA2	2 1/2	8-10d	2-10dx1 1/2	390	1525 1525
NJH Series						
Joist Width = 2 1/2"						
All	VPA3	2 1/2	9-10d	2-10dx1 1/2	390	1785 1785
NJU Series						
Joist Width = 3 1/2"						
All	VPA4	2 1/2	11-10d	2-10dx1 1/2	390	1785 1785

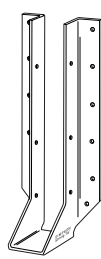


VPA – 18 gauge
This variable pitch connector allows a sloped member to sit on a top plate without having to notch, birdmouth, bevel, or toe nail. It also provides uplift capacity. Adjustable from 3:12 to 12:12 pitch.

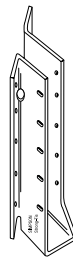
1. Shaded hangers require web stiffeners at joist ends. Web stiffeners may be required for non-shaded hangers by joist manufacturer.
2. Skewed option must be special ordered. Specify skew angle and direction (i.e. HU310-2X, SKR45°).
3. LSU5.12 Skew option must be factory ordered.
4. THAI hangers require a minimum of 4 top and 2 face nails installed. THAI-2 must be special ordered, specify seat width between 3 3/8" and 5 5/16".



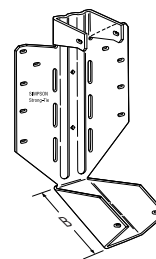
WPU
HWU Similar



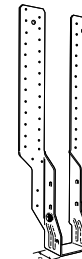
HU



SUL



LSSU



THAI

W, WI: Top flange – 12 gauge
Stirrup – 12 gauge
WP, WPI, WPU: Top flange – 7 gauge
Stirrup – 12 gauge
HWU: Top flange – 3 gauge
Stirrup – 10 gauge
This welded series offers the greatest design flexibility and versatility, and a large selection of sizes. Suitable for welded and nailer applications, and modifications including slopes and skews. Web stiffeners required when used with I-joists.

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.

SUR/L – 16 gauge
SURI/LI – 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. Web stiffeners required when used with I-joists.

LSSUH310 – 16 gauge
LSSU410 – 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.

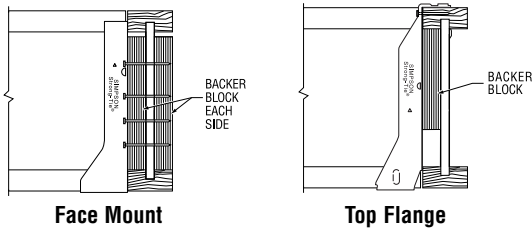
THAI – 18 gauge
THAI-2 – 14 gauge
This hanger has extra long straps and can be field-formed to give height adjustability and top flange hanger convenience. Positive angle nailing helps eliminate splitting of the I-joist's bottom flange. Not all strap nail holes need to be filled for maximum nailing. Web stiffeners required when used with I-joists.

General Notes

- See current Canadian *Wood Construction Connectors* catalogue for Important Information and General Notes sections and for hanger models, joist sizes, and header situations not shown.
- Loads listed address hanger/header/fastener limitations assuming header material is Douglas Fir-Larch/Southern Pine or Spruce Pine Fir. For LVL headers made primarily of Douglas Fir/Southern Pine, use the values found in the DF column. For LVL headers made primarily from Spruce Pine Fir or similar less dense veneers, use the values found in the SPF column. Loads are in pounds. Joist reaction should be checked by a qualified designer to ensure proper hanger selection.
- Factored uplift resistances 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.
- For this publication, carrying members are assumed to be at least 5½ inches tall. The horizontal thickness of the carrying member must be at least the length of nail being used or the top flange dimension, whichever is greater.
Exception: narrower carrying members may be used with **face mount** hangers but the horizontal thickness must be at least 1¾ inches for 10d nails; 2 inches for 16d nails. Clinch nails on back side.
- THAI hangers in this publication are based on a "top flange" installation and require that the carrying member have a horizontal thickness of at least 2½ inches. Backer blocks are required when the header is an I-joist.
- All nails shown are common nails unless otherwise noted.

I-Joists 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.

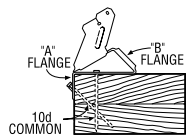


Use 10dx1 1/2" nails for all Top Flange hangers attached to an I-joist header. See table for factored resistance.

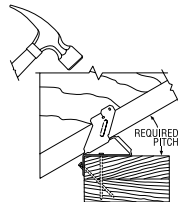
Model	I-Joist Header Flange Material	
	DF/SCL	SPF
LT	1695	1695
MIT	1780	1210
LBV	1780	1455
WP	2940	2940

Face Mount hangers attached to an I-joist header that is less than 2" wide, apply the following Load Adjustment Factors to the table loads. For 16d common use .64. For 10d common use .77.

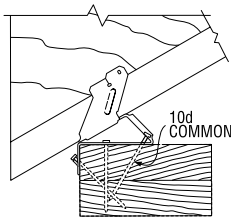
VPA Installation



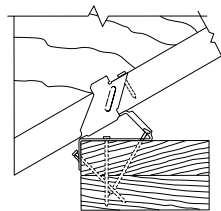
Step 1
Install top nails and face PAN nails in "A" flange to outside wall top plate.



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

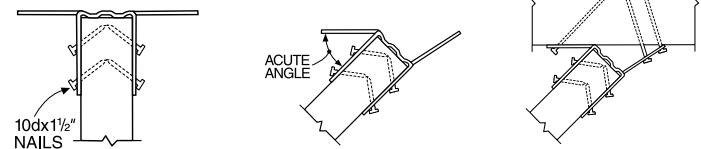


Step 3
Install "B" flange nails in the obround nail holes, locking the pitch.



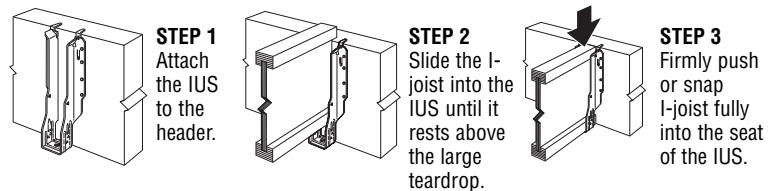
Step 4
Bend tab with hammer and install nail into tab nail hole. Hammer nail in at a slight angle to prevent splitting.

LSSU Installation

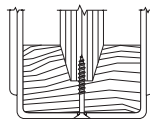


- Nail hanger to slope-cut joist, installing seat nail first. No bevel necessary for skewed installation.
- Skew flange to form acute angle. Bend other flange back. Bend along the centerline of slots. Bend one time only.
- Attach hanger to header, acute angle first. Install nails at an angle.

IUS Installation Sequence



LF/LT Screw Installation



LT Installation

Use 8 gauge (0.164" diameter) x 1½ wood screw (#8x1½") 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).

Refer to the current *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.

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