

Top-Flange Hangers JB/JBA/LB/LBAZ/BA/B/HHB

Joist, Beam and Purlin Hangers



This product is preferable to similar connectors because of a) easier installation, b) higher loads, c) lower installed cost, or a combination of these features.

The LBAZ and JBA hangers provide higher loads for 2x10, 2x12 and 2x14 members in 14 gauge and 18 gauge steel, respectively. The nail locations on the JBA enable effective use with nailers.

The B and BA hangers are cost effective hangers featuring min./max. joist nailing option. Min. Nailing featuring Positive Angle Nailing targets moderate load conditions whereas the Max. Nailing generates capacities for higher loads. The unique two level embossment provides added stiffness to the top flange. See tables on pp. 154–159. See Hanger Options on pp. 121–123 for hanger modifications, which may result in reduced loads.

Material: See tables, pp. 154–159.

For modified hangers, gauge may increase from that specified for non-modified hangers. Hanger configurations, height and fastener quantity may increase from the tables depending on joist size, skew and slope.

Finish: BA, JB, JBA, LB, LBAZ and B — Galvanized; HHB — all saddle hangers and all welded sloped and special hangers — Simpson Strong-Tie® gray paint. BA, LB, B and HHB may be ordered hot-dip galvanized; specify HDG.

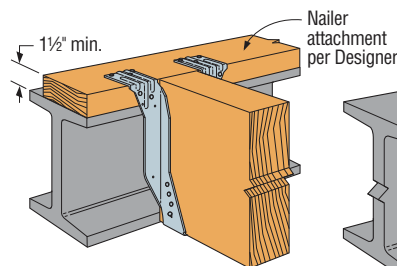
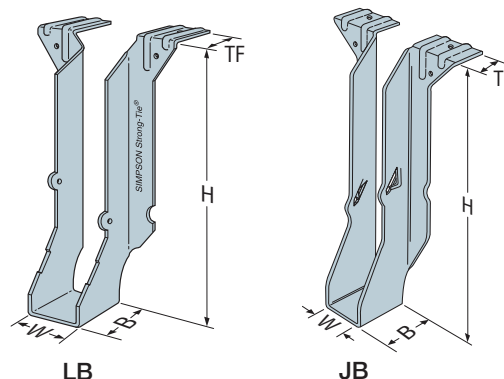
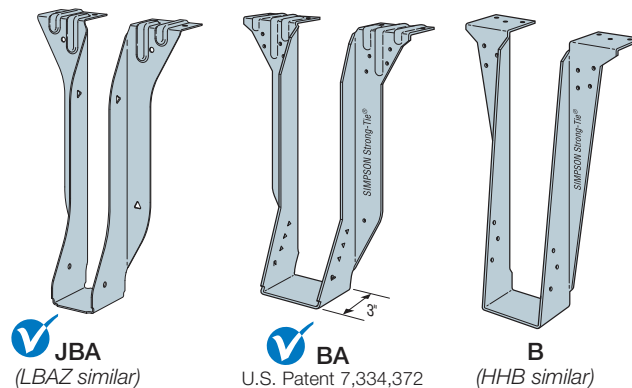
Installation:

- Use specified fasteners; see General Notes and nailer table notes.
- LBAZ, BA, B and HHB may also be welded to steel headers with weld size to match material thickness (approximate thickness shown). The minimum required weld to the top flanges is $\frac{1}{8}$ " x 2" ($\frac{1}{8}$ " x $1\frac{1}{16}$ " for LBAZ) fillet weld to each side of each top flange tab for 14 and 12 gauge and $\frac{3}{16}$ " x 2" fillet weld to each side of each top flange tab for 7 gauge. Distribute the weld equally on both top flanges. Welding cancels the top and face nailing requirements. Consult the code for special considerations when welding galvanized steel. The area should be well-ventilated (see p. 21, note m for welding information). Weld on applications produce the maximum allowable down load listed. For uplift loads refer to technical bulletin T-C-WELDUPLFT at strongtie.com.
- Ledgers must be evaluated for each application separately. Check TF dimension, nail length and nail location on ledger.
- Refer to technical bulletin T-C-SLOPEJST at strongtie.com for information regarding load reductions on selected hangers which can be used without modification to support joists which have shallow slopes ($\leq \frac{3}{4}:12$).
- For attaching to headers made up of multiple 2xs, refer to technical bulletin T-C-MPLYHEADR at strongtie.com.
- For modified hangers, fastener quantity may increase from the tables depending on joist size, skew and slope.
- Bevel cut the carried member for skewed applications.

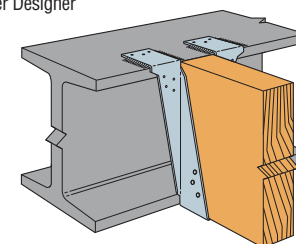
Options:

- See modification tables for allowed options and associated load reductions on p. 149

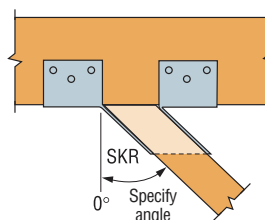
Codes: See p. 14 for Code Reference Key Chart



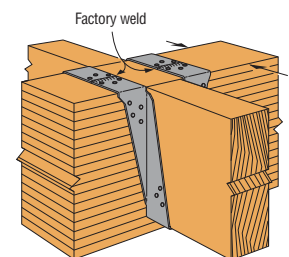
Typical BA Installation
on Wood Nailer
(LB, B similar)



LB, BA, B and HHB are acceptable for weld-on applications. See Installation Information.



Top View B Hanger
Skewed Right



Typical BD
Saddle Installation

Saddle Hanger

Saddle hangers are made to order; add "D" to model (e.g. BD412); specify S (for saddle) dimension. They may be used for most conditions except at end wall locations and are preferred for nailer applications. Minimum S dimension (saddle width) is $3\frac{3}{16}$ ". Minimum supporting member width is $3\frac{1}{2}$ ". Minimum nailer thickness apply (see pp. 148 and 209). Saddle hangers achieve catalog load listed. Saddle hangers on stud walls do not achieve catalog loads.

Top-Flange Hangers JB/JBA/LB/LBAZ/BA/B/HHB

Joist, Beam and Purlin Hangers (cont.)

B Series with Various Header Applications

Solid Sawn Joist Hangers

Joist or Purlin Size	Model No.	Ga.	Dimensions (in.)				Fasteners		Allowable Loads by Header Type and Fastener					Code Ref.	
			W	H	B	TF	Header	Joist	Uplift (160)	LVL	PSL	DF/SP	SPF/HF		
2x	JB26	18	1 $\frac{1}{16}$	See p. 154	1 $\frac{1}{2}$	1 $\frac{1}{16}$	(4) 10d	(2) prong	—	—	—	1,040	815	110, L11, FL	
	JB28				1 $\frac{1}{2}$	1 $\frac{1}{16}$	(4) 10d	(2) prong	—	—	—	1,050	820		
	JB210A JB212A JB214A				2	1 $\frac{1}{16}$	(6) 16d	(2) 10d x 1 $\frac{1}{2}$ "	315	—	—	1,685	1,190		
					(6) 10d	(2) 10d x 1 $\frac{1}{2}$ "	315	—	—	1,445	1,015				
2x	LB26	14	1 $\frac{1}{16}$	See p. 154	1 $\frac{1}{2}$	1 $\frac{1}{16}$	(4) 16d	(2) 10d x 1 $\frac{1}{2}$ "	290	—	—	1,380	860		119, L14, FL
	LB28				1 $\frac{1}{2}$	1 $\frac{1}{16}$	(4) 16d	(2) 10d x 1 $\frac{1}{2}$ "	290	—	—	1,270	790		
	LB210AZ LB212AZ LB214AZ				2	1 $\frac{1}{16}$	(6) 16d	(2) 10d x 1 $\frac{1}{2}$ "	380	—	—	1,865	1,330		
					(6) 10d	(2) 10d x 1 $\frac{1}{2}$ "	380	—	—	1,705	1,220				
4x	BA min.	14	3 $\frac{3}{16}$	See pp. 154–159	3	2 $\frac{1}{16}$	(16) 10d	(2) 10d x 1 $\frac{1}{2}$ "	265	3,230	3,630	3,080	2,425	119, L14, FL	
							(16) 16d	(2) 10d x 1 $\frac{1}{2}$ "	265	4,015	3,705	3,435	2,665		
	(16) 16d						(8) 10d x 1 $\frac{1}{2}$ "	1,170	3,555	3,630	3,625	2,465			
								1,170	4,715	4,320	3,800	2,665			
3x, 4x	B	12	See pp. 154–159	See pp. 154–159	2 $\frac{1}{2}$	2 $\frac{1}{2}$	(14) 10d	(6) 10d x 1 $\frac{1}{2}$ "	990	3,575	3,195	3,625	2,190		
							(14) 16d	(6) 10d x 1 $\frac{1}{2}$ "	990	4,135	3,355	3,800	2,650		

- Uplift loads are based on DF/SP lumber and have been increased for wind or earthquake loading with no further increase allowed. Reduce where other loads govern.
- For SPF use 0.86 x DF/SP uplift load.
- Where noted for single-ply joist hangers use (6) 10d x 1 $\frac{1}{2}$ " nails.
- Nails:** 16d = 0.162" dia. x 3 $\frac{1}{2}$ " long, 10d = 0.148" dia. x 3" long, 10d x 1 $\frac{1}{2}$ " = 0.148" dia. x 1 $\frac{1}{2}$ " long. See pp. 26–27 for other nail sizes and information.

Nailer Table

Model No.	Nailer	Top Flange Nailing	Joist Nailing	Allowable Loads		
				Uplift (160)	DF/SP	SPF/HF
JB210A JB212A JB214A	2x	(6) 10d x 1 $\frac{1}{2}$ "	(2) 10d x 1 $\frac{1}{2}$ "	315	1,265	965
	3x	(6) 16d x 2 $\frac{1}{2}$ "	(2) 10d x 1 $\frac{1}{2}$ "	315	1,290	—
				—	—	—
LB26	2x	(4) 10d x 1 $\frac{1}{2}$ "	(2) 10d x 1 $\frac{1}{2}$ "	—	850	—
LB28	2x	(4) 10d x 1 $\frac{1}{2}$ "	(2) 10d x 1 $\frac{1}{2}$ "	—	915	—
LB210AZ LB212AZ LB214AZ	2x	(6) 10d x 1 $\frac{1}{2}$ "	(2) 10d x 1 $\frac{1}{2}$ "	375	1,265	1,065
	3x	(6) 16d x 2 $\frac{1}{2}$ "	(2) 10d x 1 $\frac{1}{2}$ "	375	1,290	—
LB216	2x	(4) 10d x 1 $\frac{1}{2}$ "	(2) 10d x 1 $\frac{1}{2}$ "	—	1,150	—
BA	2x	(10) 10d x 1 $\frac{1}{2}$ "	(2) 10d x 1 $\frac{1}{2}$ "	265 ^{1,3}	2,220	1,755
	(2) 2x	(14) 10d	(2) 10d x 1 $\frac{1}{2}$ "	265 ^{1,3}	2,695	2,235
	3x	(14) 16d x 2 $\frac{1}{2}$ "	(2) 10d x 1 $\frac{1}{2}$ "	265 ^{1,3}	3,230	—
	4x	(14) 16d	(2) 10d x 1 $\frac{1}{2}$ "	265 ^{1,3}	3,230	—
	Steel	(6) PDPAT-62KP	(2) 10d x 1 $\frac{1}{2}$ "	—	3,695	3,695
B	(2) 2x	(14) 10d	(6) 10d x 1 $\frac{1}{2}$ "	710 ^{1,4}	3,615	2,770
	3x	(14) 16d x 2 $\frac{1}{2}$ "	(6) 10d x 1 $\frac{1}{2}$ "	830 ^{1,4}	3,725	—
	4x	(14) 16d	(6) 10d x 1 $\frac{1}{2}$ "	830 ^{1,4}	3,800	—

- Uplift values are for DF/SP nailers only. Refer to technical bulletin [T-C-NAILUPLFT](#) at [strongtie.com](#) for SPF values.
- For joist members 2 $\frac{1}{2}$ " or wider, 16d x 2 $\frac{1}{2}$ " joist nails should be installed for additional uplift loads on the 3x and 4x nailer applications of 970 lb. and 1,010 lb. respectively.
- If joist nailing is increased to (8) 10d x 1 $\frac{1}{2}$ ", higher uplift loads are allowed. See technical bulletin [T-C-NAILUPLFT](#) at [strongtie.com](#).
- If joist nailing is increased to (6) 16d x 2 $\frac{1}{2}$ ", higher uplift loads are allowed for joist members at least 2 $\frac{1}{2}$ " wide. See technical bulletin [T-C-NAILUPLFT](#) at [strongtie.com](#).
- Attachment of nailer to supporting member is by the Designer.

Top-Flange Hangers JB/JBA/LB/LBAZ/BA/B/HHB

Joist, Beam and Purlin Hangers (cont.)

B Series Modifications and Associated Load Reductions

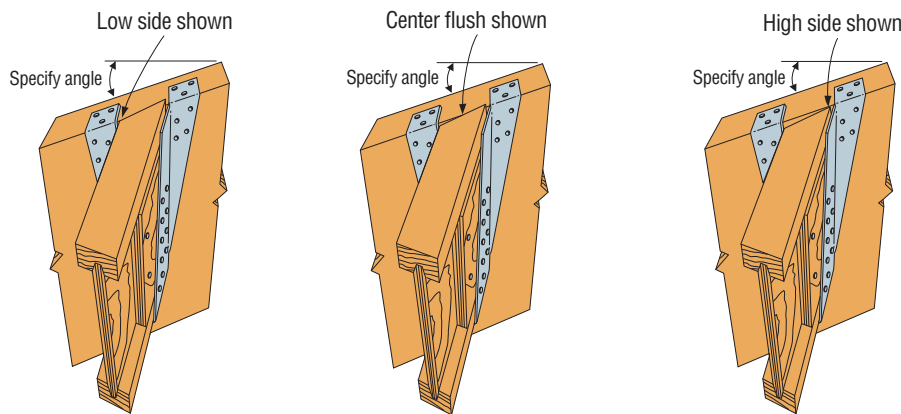
Hanger	Condition	Seat						Top Flange		
		Sloped Down 45° Max.	Sloped Up 45° Max.	Skewed 45° Max.	Sloped Down and Skewed		Sloped Up and Skewed		Top Flange Sloped 35° Max.	Top Flange Bent Open or Closed 30° Max.
B	Min. height →	6	6	6	9¼	14	9¼	14	14	9¼
	W < 2½"	0.82	0.66	0.95	0.54	0.82	0.64	0.64	(90-x) / 90	(90-x) / 90
	W ≥ 2½"	0.80	0.95	1.00	0.70	1.00	0.80	0.80	(90-x) / 90	(90-x) / 90
HB	Min. height →	8	8	8	11¼	14	11¼	14	14	11¼
	W < 2½"	0.84	0.70	1.00	0.47	0.84	0.62	0.69	(90-x) / 90	(90-x) / 90
	W ≥ 2½"	0.87	0.70	0.96	0.59	0.87	0.70	0.70	(90-x) / 90	(90-x) / 90
HHB, GB HGB	Min. height →	9¼	—	—	—	—	—	—	—	—
	All widths	0.70	—	—	—	—	—	—	—	—

1. Reduction factors are not cumulative. Use the lowest factor that applies.

Reduction Factor Instructions

Allowable Download = Lower of (Seat or Top Flange) × (Table Load)

Allowable Uplift = 0.90 × (Table Load) for B with W < 2½"
 = 0.71 × (Table Load) for HB with W < 2½"
 = 1.00 × (Table Load) for all others



B hanger sloped down and skewed left with sloped top flange installation. When ordering, specify low side flush, center flush or high side flush.

