

# S/LBV and S/B Hangers

S/LBV and S/B top-flange hangers are manufactured with precision forming and quality control, providing dimensional accuracy and helping to ensure proper bearing area and connection. These hangers are designed for attaching to cold-formed steel members with screws or to structural steel with powder-actuated fasteners or welds.

**Material:** S/LBV — 68 mil (14 ga.); S/B — 97 mil (12 ga.)

**Finish:** Galvanized (G90)

**Installation:**

**Cold-Formed Steel:**

- S/LBV and S/B may be attached to cold-formed steel supporting members with screws to the face and top flanges and provide capacities for downward and uplift.

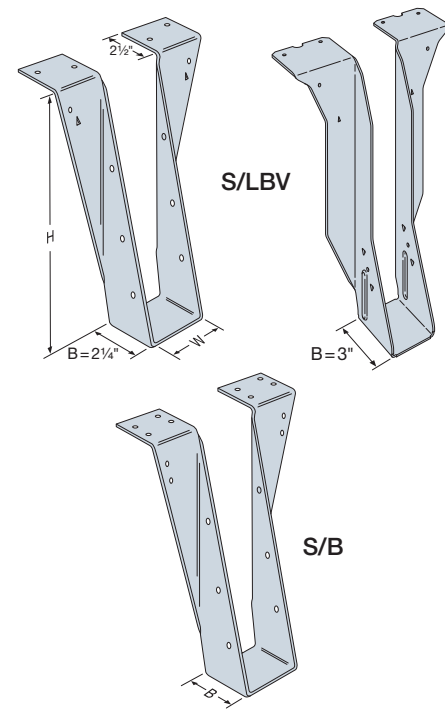
**Structural Steel:**

- S/LBV and S/B may be attached to structural steel support members with powder-actuated fasteners or welds. For powder-actuated fasteners use PDPAT-62KP (0.157" x 5/8") and provide full penetration as required. For welds use a minimum of 1/8" x 2" fillet weld on each top flange as required. Distribute the weld equally on both flanges. Capacities are provided for downward loads.

**Skew Options:**

- S/LBV and S/B may be skewed up to a maximum of 45°. Widths for skewable sections are limited to a maximum of 5.25" (specify right or left skew).

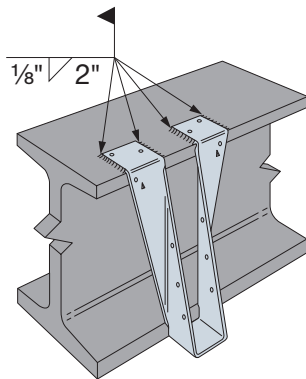
**Codes:** See p. 13 for Code Reference Key Chart



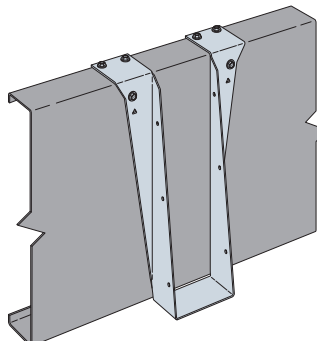
## S/LBV and S/B Hanger Allowable Loads (lb.)

Model	Base Header Material	Hanger Type	Fasteners			Allowable ASD Loads (lb.)		Code Ref.
			Top	Face	Joist	Uplift	Down	
S/LBV	CFS	Straight	(4) #10	(2) #10	(3) #10	1,010	3,150	IBC, LA, FL
		Skewed	(4) #10	(2) #10	(3) #10	1,010	2,220	
	A36 steel 3/16" min.	Straight	(4) 1/8" x 2" weld	—	(3) #10	—	2,920	
			(8) 0.157" x 5/8" PAF	—	(3) #10	—	2,685	
S/B	CFS	Straight	(8) #10	(4) #14	(3) #14	1,855	5,970	
		Skewed	(8) #10	(4) #14	(3) #14	1,855	4,195	
	A36 steel 3/16" min.	Straight	(4) 1/8" x 2" weld	—	(3) #14	—	5,755	
			(8) 0.157" x 5/8" PAF	—	(3) #14	—	3,695	

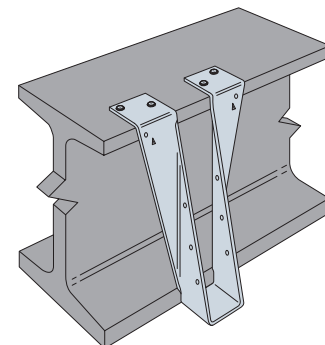
- Designer shall ensure that the joist member adequately transfers load to hanger. Header must be braced to prevent buckling per designer specification.
- Load is based on the Simpson Strong-Tie® PDPAT-62KP (0.157" x 5/8") powder-actuated fasteners. Steel headers with thicknesses between 1/4" and 3/4" having minimum  $F_y = 36$  ksi. A Red (level 5) or Purple (level 6) powder load may be required to achieve specified penetration.
- Tabulated loads are based on testing with full bearing of 2 1/2" flange-depth minimum with 68 mil (14 ga.) CFS for S/LBV and 97 mil (12 ga.) CFS for S/B hanger.
- S/LBV2.12 and S/LBV4.18 bearing depth dimension, B, is 3", other S/LBV hanger sizes are 2 1/4".
- See the current *Fastening Systems* catalog at [strongtie.com](http://strongtie.com) for more information on Simpson Strong-Tie fasteners.



**S/LBV**  
Weld-On Applications  
(S/B similar)



**S/LBV Installed to a**  
CFS Header with Screws  
(S/B similar)



**S/LBV Installed to a**  
Steel Beam with PAF(s)  
(S/B similar except 8 PAF(s))

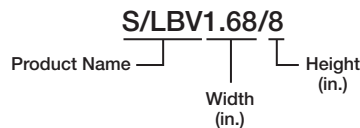
# S/LBV and S/B Hangers

The Standard Hanger Sizes table below are hangers with common widths and heights.

## Standard Hanger Sizes

Joist width (in.)	S/LBV	S/B	W (in.)	H (in.)
1½	S/LBV1.68/6	S/B1.68/6	1 1¼	6
	S/LBV1.68/8	S/B1.68/8		8
	S/LBV1.68/10	S/B1.68/10		10
	S/LBV1.68/12	S/B1.68/12		12
	S/LBV1.68/14	S/B1.68/14		14
2	S/LBV2.12/6	S/B2.12/6	2 ½	6
	S/LBV2.12/8	S/B2.12/8		8
	S/LBV2.12/10	S/B2.12/10		10
	S/LBV2.12/12	S/B2.12/12		12
	S/LBV2.12/14	S/B2.12/14		14
2½	S/LBV2.56/8	S/B2.56/8	2 ¾	8
	S/LBV2.56/10	S/B2.56/10		10
	S/LBV2.56/12	S/B2.56/12		12
3	S/LBV3.12/8	S/B3.12/8	3 ½	8
	S/LBV3.12/10	S/B3.12/10		10
	S/LBV3.12/12	S/B3.12/12		12
(2) 1½	S/LBV3.38/6	S/B3.38/6	3 ¾	6
	S/LBV3.38/8	S/B3.38/8		8
	S/LBV3.38/10	S/B3.38/10		10
	S/LBV3.38/12	S/B3.38/12		12
	S/LBV3.38/14	S/B3.38/14		14
(2) 2	S/LBV4.18/6	S/B4.18/6	4 ¾	6
	S/LBV4.18/8	S/B4.18/8		8
	S/LBV4.18/10	S/B4.18/10		10
	S/LBV4.18/12	S/B4.18/12		12
	S/LBV4.18/14	S/B4.18/14		14

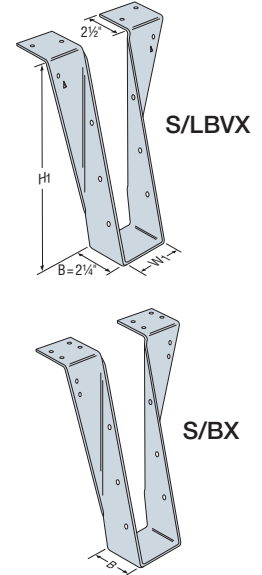
**Standard size ordering:**  
Joist 800S162-54 using an S/LBV hanger.



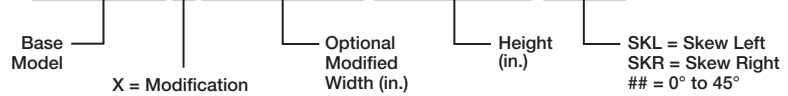
The S/ hangers can be ordered special to fit different width, height or skew from the standard hangers. Below is a table with base model and the modified options.

## Hanger Modification Options: Custom Width, Height and Skew

S/LBV	S/B	W (in.)	Modified W range, W <sub>1</sub> (in.)	H <sub>1</sub> (in.)	Skew
S/LBV1.56X	—	1 ⅞	1.56	S/LBV 6 to 20 S/B 6 to 30	Left or right 0° to 45°
S/LBV1.68X	S/B1.68X	1 11⁄16	1.57 to 1.68		
S/LBV2.12X	S/B2.12X	2 ¼	1.69 to 2.12		
S/LBV2.56X	S/B2.56X	2 9⁄16	2.13 to 2.56		
S/LBV3.12X	S/B3.12X	3 ⅜	2.57 to 3.12		
S/LBV3.38X	S/B3.38X	3 ⅜	3.13 to 3.38		
S/LBV4.18X	S/B4.18X	4 ½	3.38 to 4.18		
S/LBV5.25X	S/B5.25X	5 ¼	4.19 to 5.25		
—	S/B7.5X	7 ¼	5.26 to 7.25		



### S/LBV2.12 X W<sub>1</sub> = Specify H<sub>1</sub> = Specify SKL##



## Customizable Options for Hangers

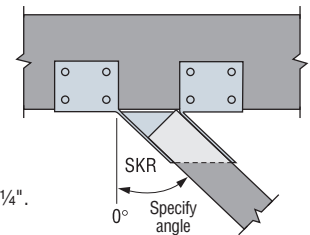
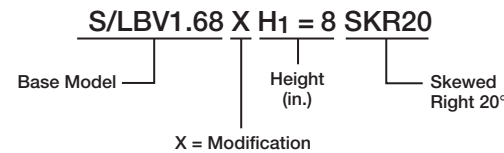
**Optional Modified Width (W<sub>1</sub>)** is defined in the W<sub>1</sub> range from the table and measured in 1/16" increments less than the base model width. For example, if a 2.50" wide S/LBV hanger is needed, start with the wider S/LBV2.56X base model and add "W<sub>1</sub> = 2.25" after X. If W<sub>1</sub> is left blank, then the width of the base model will be used.

**Height 1 (H<sub>1</sub>)** is the modified hanger height defined in the H<sub>1</sub> range from the table and measured in 1/16" increments. For example, if a 9.25" long hanger height is needed, add "H<sub>1</sub> = 9.25" after X or the W<sub>1</sub> value if also modifying the width.

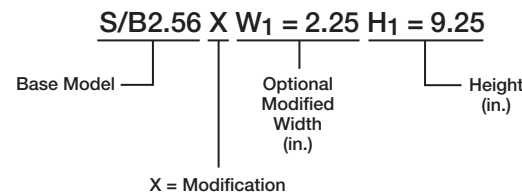
**Skew** is the modified skew slope where SKL is for left skew or SKR for right skew followed by a value for the skew angle ranging from 0 to 45°. For example, add "SKL20" after the H<sub>1</sub> value for a 20° left skewed hanger.

For more examples of modified hangers, see EX1 and EX2 below:

**EX1:** Joist 800S162-54 using S/LBV hanger skewed right 20°.



**EX2:** Need a 12 ga. hanger with a W<sub>1</sub> = 2¼" and a H<sub>1</sub> = 9¼".



Top View S/B Hanger Skewed Right (S/LBV similar)