

# Simpson Strong-Tie Cold-Formed Steel Connectors For Residential & Mid-Rise Construction ~C-CFS10

S/LBV Series	S/B Series	Width	Model No.	Dimensions			Fasteners			Allowable ASD Loads		Code	Model Series	Connection Type		Max Allowable Down Load	Code Ref.
Model No.	Model No.	(in)		W	H	B	Top	Face	Joist	Uplift	Down	Ref.		Joist	Structural Steel		
S/LBV1.56	S/B1.56	1 9/16	S/LBV	See Table	6 to 20	2 1/4	4-#10	2-#10	3-#10	1010	3150	FC1	#10	4 - 1" Segments	3280	170	
S/LBV1.81	S/B1.81	1 13/16	S/LBV-Skew				4-#10	2-#10	3-#10	1010	2220						
S/LBV2.06	S/B2.06	2 1/16	S/LBV-Weld				Weld	-	3-#10	-	2965						
S/LBV2.37	S/B2.37	2 3/8															
S/LBV2.56	S/B2.56	2 9/16															
S/LBV2.68	S/B2.68	2 11/16															
S/LBV3.12	S/B3.12	3 1/8															
S/LBV3.56	S/B3.56	3 9/16															
S/LBV3.62	S/B3.62	3 5/8															
S/LBV4.06	S/B4.06	4 1/16															
S/LBV4.12	S/B4.12	4 1/8															
S/LBV4.28	S/B4.28	4 9/32															
S/LBV4.75	S/B4.75	4 3/4															
S/LBV5.50	S/B5.50	5 1/2															

"The Designer can also refer to our current Wood Construction Connector catalog. Many of the connectors listed there may be used for cold-formed steel construction, using the screw values found in this catalog."  
 ~Simpson Strong-Tie C-CFS10 Pg 75

Tabulated loads are based on testing with full bearing of 2 1/2" flange-depth minimum 68 mil (14ga) CFS

## Simpson Strong-Tie Wood Construction Connectors 2009-2010 ~ C-2009

Nailing Options	Fasteners			Uplift			LVL Header			Code	Ref.
	Top	Face	Joist	(133)	(160)	Floor (100)	Snow (115)	Roof (125)			
THAI Minimum	4-10d x 1 1/2"	2-10dx1 1/2"	2-10dx1 1/2"	-	-	1400	1400	1400	119,112,F18		
	4-10d	2-10d	2-10dx1 1/2"	-	-	1715	1715	1715			
THAI Maximum	-	20-10d	2-10dx1 1/2"	215	215	2200	2200	2200			
THAI - 2 Minimum	4-10d	2-10d	2-10dx1 1/2"	-	-	2020	2020	2020	119,112,F18		
THAI - 2 Maximum	-	30-10d	2-10dx1 1/2"	215	215	3390	3900	4315			

Actual Joist Size	Model No.	Ga	Dimensions			Fasteners		Allowable Loads						Code Ref.	
			W	H	B	Face	Joist	DF/SP Species Header			SPF Species Header				
1 3/4 x 11 1/4 - 11 7/8	HU11 (Min)	14	1 13/16	11 1/16	2 1/2	22-16d	6-10dx1 1/2"	865	2950	3390	3685	2550	2935	3190	170
	HU11 (Max)		1 13/16	11 1/16	2 1/2	30-16d	10-10dx1 1/2"	1440	4020	4315	4405	3480	4000	4350	

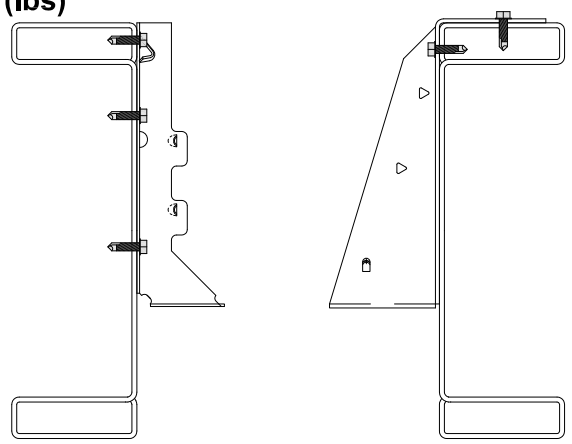
Joist Size	Model No.	Ga	Dimensions			DF/SP Allowable Loads				SPF/HF Allowable Loads				Code Ref.		
			W	H	B	Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Uplift (160)	Floor (100)	Snow (115)	Roof (125)			
2x6	LUS26	18	1 9/16	4 3/4	1 3/4	4-10d	4-10d	1115	830	955	1040	935	700	805	875	17, L3, F6
2x8	LUS28	18	1 9/16	6 5/8	1 3/4	6-10d	4-10d	1115	1055	1210	1320	935	890	1025	1115	
2x10	LUS210	19	1 9/16	7 9/16	1 3/4	8-10d	4-10d	1115	1275	1470	1595	935	1085	1245	1355	
2x12																

Fasteners Required for wood hangers attaching to LSB, do so by one of the following methods:

- Follow screw values found in Simpson Strong-Tie C-CFS10.
- Use same number of #10 Buildex TEK screws in place of specified nails to achieve similar performance.
- Use chart below to determine proper number and size of Buildex TEK screws to achieve desired load capacity.
- Modifications of hanger including but not limited to change or addition of holes or a change in the number of connectors should be reviewed by your local design professional, hanger manufacturer, or code inspector.

### TEK Screw Table - Hanger to LSB - Allowable Loads per Screw (lbs)

	Design Minimum Gage	Thickness of Attachment							
		134	118	98	79	59	45	35	
<b>Shear</b>	1/4	-134	860					455	355
		-118	860					455	355
		-098	860					455	355
		-079	650						
		-059	650						
		-059	650						
	#12	-134	665					380	300
		-118	665					380	300
		-098	665					380	300
		-079	600						
		-059	600						
		-059	600						
#10	-134	465					345	270	
	-118	465					345	270	
	-098	465					345	270	
	-079	465					345	270	
	-059	465					345	270	
	-059	465					345	270	
<b>Tension</b>	1/4	-134	615					505	395
		-118	540					505	395
		-098	450						
		-079	365						
		-059	270						
		-059	270						
	#12	-134	515					380	295
		-118	455					380	295
		-098	380						
		-079	305						
		-059	225						
		-059	225						
#10	-134	470					380	295	
	-118	410					380	295	
	-098	340							
	-079	275							
	-059	205							
	-059	205							



NOTES:

- The maximum load is not to exceed the capacity of the LSB, hanger, or screws.
- Allowable load values shown are the minimum values based on 2007 AISI NAS for both the connector and the connected material using Buildex TEK screws. Buildex TEK ultimate values can be found in the ITW Buildex 2009 Product Catalog.
- Values for LSB and hangers 16 ga and thicker are based on members with a minimum yield strength of  $F_y = 50$  kpsi and tensile strength of  $F_u = 65$  kpsi. For hangers 18 ga and thinner values are based on members with a minimum yield strength of  $F_y = 33$  kpsi and tensile strength  $F_u = 45$  kpsi.
- When attaching hangers to toe-side refer to Detail 09-029
- Detail subject to local code provisions.

		Description: Simpson Hanger Tables			
100 Smorgon Way P.O. Box 577 Troutville, VA 24175 www.litesteelbeam.com	Office: 540-992-1600 Toll Free: 877-285-2607 Fax: 540-992-5998	Drawing: 09-005	Dwg Date: 3/9/2009	Rev: A B	Rev Date: 6/4/2009 5/11/2010
		Drawn By: Newland	Eng: Moses	Mkg:	