

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

S/LBV Series Model No.	S/B Series Model No.	Width (in)	Model No.	Dimensions			Fasteners			Allowable ASD Loads		Code Ref.	Model Series	Connection Type		Max Allowable Down Load	Code Ref.
				W	H	B	Top	Face	Joist	Uplift	Down			Joist	Structural Steel		
S/LBV.56	S/B1.56	1 9/16	S/LBV	See Table	6 to 20	2 1/2	4-#10	2-#10	3-#10	1010	3150	FC1	HUC	#10	4 - 1" Segments	3280	170
S/LBV.81	S/B1.81	1 13/16	S/LBV-Skew				4-#10	2-#10	3-#10	1010	2220						
S/LBV.2.06	S/B2.06	2 1/16	S/LBV-Weld				Weld	-	3-#10	-	2965						
S/LBV2.37	S/B2.37	2 5/8															
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 3/8															
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															

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

"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

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

Nailing Options	Fasteners			Allowable Loads			Code Ref.	
	Top	Face	Joist	Uplift (133)	LVL Header			
					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
	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
THAI -2 Maximum	-	30-10d	2-10dx1 1/2	215	215	3390	3900	4315

Model	Fasteners			Allowable Loads			Code Ref.
	Top	Face	Joist	Uplift (133)	Uplift (160)	LVL	
ITT Series	4-10dx1 1/2	2-10dx1 1/2	2-10dx1 1/2	235	235	1235	I19,I12,F18
	4-10d	2-10d	2-10dx1 1/2	235	235	1450	
	4-16d	2-16d	2-10dx1 1/2	235	235	1500	
MIT Series	4-10dx1 1/2	4-10dx1 1/2	2-10dx1 1/2	215	215	2035	I19,I12,F18
	4-10d	4-10d	2-10dx1 1/2	215	215	2335	
	4-16d	4-16d	2-10dx1 1/2	215	215	2550	

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 1/2	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 3/16	11 1/16	2 1/2	30-16d	10-10dx1 1/2	1440	4020	4405	3480	4000	4350		

Joist Size	Model No.	Ga	Dimensions			Fasteners		DF/SP Allowable Loads				SPF/HF Allowable Loads				Code Ref.
			W	H	B	Header	Joist	Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Uplift (160)	Floor (100)	Snow (115)	Roof (125)	
2x6	LUS26	18	1 1/4	4 3/4	1 3/4	4-10d	4-10d	1115	830	955	1040	935	700	805	875	I7, L3, F6
2x8	LUS28	18	1 1/4	6 3/4	1 3/4	6-10d	4-10d	1115	1055	1210	1320	935	890	1025	1115	
2x10	LUS210	19	1 1/4	7 3/4	1 3/4	8-10d	4-10d	1115	1275	1470	1595	935	1085	1245	1355	

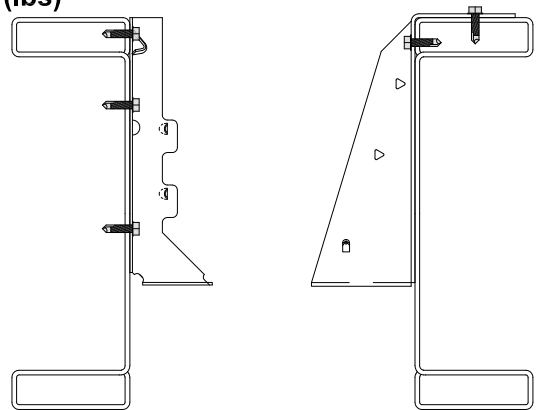
Actual Joist Size	Model No.	Ga	Dimensions			Fasteners		Allowable Loads						Code Ref.	
			W	H	B	Face	Joist	DF/SP Species Header			SPF Species Header				
1 3/4 x 11 1/4	IUT11	18	1 13/16	11 1/16	2	10-10dx1 1/2	2-10dx1 1/2	255	910	1045	1140	780	865	975	I9,L5,
	MIU1.81/11	16	1 13/16	11 1/16	2	10-10d	2-10dx1 1/2	255	1110	1275	1390	960	1105	1200	F8

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)

Shear	Design Minimum Gage	Thickness of Attachment									
		134	118	98	79	59	45	35			
		10	11	12	14	16	18	20			
1/4	Screw	-134	860					455	355		
		-118	860					455	355		
		-098	860					455	355		
		-079	650								
		-059	650								
		-134	665					380	300		
	#12	Screw	-118	665					380	300	
			-098	665					380	300	
			-079	600							
			-059	600							
			-134	465					345	270	
			-118	465					345	270	
Tension	Design Minimum Gage	134	118	98	79	59	45	35			
		127	112	93	75	56	43	33			
		10	11	12	14	16	18	20			
		1/4	Screw	-134	615					505	395
				-118	540					505	395
				-098	450						
	-079			365							
	-059			270							
	-134			515					380		
	#12	Screw	-118	455					380	295	
			-098	380					380	295	
			-079	305							
-059			225								
-134			470					380	295		
-118			410					380	295		
#10	Screw	-098	340								
		-079	275								
		-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 Fy= 50ksi and tensile strength of Fu=65ksi. For hangers 18 ga and thinner values are based on members with a minimum yield strength of Fy= 33ksi and tensile strength Fu=45ksi.
- When attaching hangers to toe-side refer to Detail 09-029
- Detail subject to local code provisions.

	100 Smorgon Way Troutville, VA 24175 Phone : 540-992-1600 Fax: 540-992-5998 www.litesteelbeam.com sales@litesteelbeam.com	Description: Simpson Hanger Tables	Rev #: B	Dwg #: 09-005
		DRAWING NOT TO SCALE	Rev Date: 05/11/2010	Dwg Date: 03/09/2009
			Drawn By: AWN	Drawn By: AWN
			Checked By: JAM	Checked By: JAM