

PRODUCT APPLICATION

The StiffClip® LB series connects exterior wall studs to the building's structure through a unique design incorporating the use of stiffened legs of a 90° angle to increase bending strength. StiffClip LB resists horizontal and vertical loads. The allowable design load table shown below is based on the use of StiffClip LB as it is attached to various steel stud depths, material thicknesses and yield strengths. Design loads consider loads on the clip and #12 screw fasteners to the stud web. Pre-drilled guide holes in each leg allow for greater installation efficiency.

MATERIAL COMPOSITION

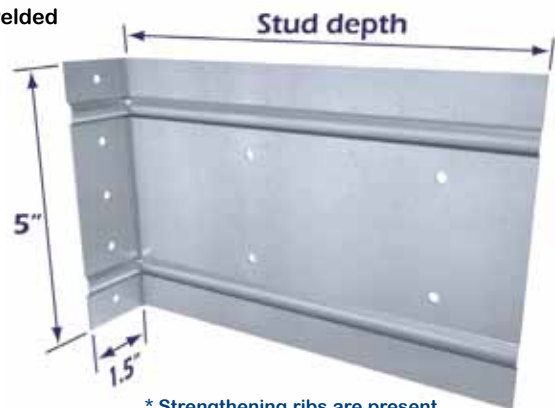
Steel: ASTM A653/A653M, Grade 50 (340), 50ksi (340MPa) minimum yield strength, 65ksi (450MPa) minimum tensile strength, G-90 (Z275) hot-dipped galvanized coating. Material thickness: 68mil (14ga, .0713" design thickness).

The attachment of StiffClip to the structure may be made with either a PAF or weld and is dependent upon base material properties and the design configuration.

Allowable load tables incorporate eccentric loading of fasteners. Values with a welded connection may increase.

Note:

- ◆ For PAF's, fasten within ¾" from the angle heel centerline of the 1½" leg.
- ◆ Guide holes for attachment to structure are .172" in diameter, and are standard for LB362, LB600, and LB800



* Strengthening ribs are present in 3 5/8", 6", and 8" sizes.

STIFFCLIP LB INSTALLATION



Secure LB to pour stop with engineered attachment.



Connect clip to stud with screws provided.

STIFFCLIP LB NOMENCLATURE

StiffClip LB is available for various stud depths. To specify, multiply stud depth by 100.

Example: 6" stud depth

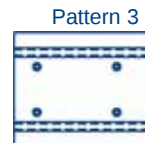
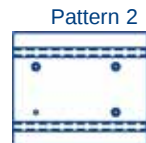
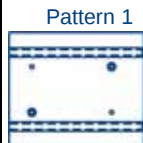
Designate: StiffClip LB600.

STIFFCLIP LB VALUE

- ◆ Various lengths allow for construction tolerance
- ◆ Guide holes for attachment to structure and stud
- ◆ Replaces expensive bracing
- ◆ Structurally load tested

QUANTITY / ORDER INFORMATION

Designation	Qty/Box	Lbs/Box	Pcs/Skid	Lbs/Skid
LB362/400	50	30	2250	1350
LB600	50	45	2250	2025
LB800	50	50	1600	1600
LB1000	25	40	1125	1800
LB1200	25	44	800	1408

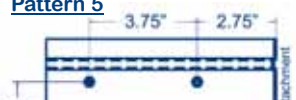


LOAD DIRECTION



ALLOWABLE LOADS

StiffClip Series	Stud Thickness Mils (ga)	Fy (Yield) Stud (ksi)	LB362 and LB600				LB362			LB600		
			F1 w/ 3 Screws Pattern 2 (kips)	F2 w/ 2 Screws Pattern 1 (kips)	F2 w/ 3 Screws Pattern 2 (kips)	F2 w/ 4 Screws Pattern 3 (kips)	F3 w/ 2 Screws Pattern 1 (kips)	F3 w/ 3 Screws Pattern 2 (kips)	F3 w/ 4 Screws Pattern 3 (kips)	F3 w/ 2 Screws Pattern 1 (kips)	F3 w/ 3 Screws Pattern 2 (kips)	F3 w/ 4 Screws Pattern 3 (kips)
LB Series Clip is 14ga (68mils)	33 (20)	33	0.190	0.376	0.564	0.752	0.235	0.350	0.468	0.216	0.373	0.431
	33 (20)	50	0.275	0.544	0.817	1.089	0.340	0.506	0.678	0.313	0.539	0.623
	43 (18)	33	0.248	0.560	0.840	1.120	0.350	0.522	0.697	0.322	0.555	0.641
	43 (18)	50	0.359	0.810	1.215	1.620	0.506	0.753	1.009	0.466	0.802	0.928
	54 (16)	33	0.312	0.788	1.182	1.576	0.493	0.733	0.981	0.453	0.781	0.902
	54 (16)	50	0.450	1.138	1.707	1.954	0.711	1.059	1.417	0.654	1.128	1.303
	68 (14)	50	0.568	1.610	1.954	1.954	1.006	1.498	2.004	0.926	1.594	1.843
	97 (12)	50	0.768	1.698	1.954	1.954	1.061	1.579	2.114	0.976	1.681	1.923

ALLOWABLE LOADS			Clip thickness is 14ga (68mil).									
StiffClip Series	Stud Thickness Mils (ga)	Fy (Yield) Stud (ksi)	LB800				LB800			LB800, 4" Offset		
			F1 w/ 3 Screws Pattern 4 (kips)	F2 w/ 3 Screws Pattern 4 (kips)	F2 w/ 4 Screws Pattern 5 (kips)	F3 w/ 3 Screws Pattern 4 (kips)	F3 w/ 4 Screws Pattern 5 (kips)	F3 w/ 6 Screws Pattern 6 (kips)	F3 w/ 10 Screws Pattern 7 (kips)	F3 w/ 4 Screws Pattern 8 (kips)	F3 w/ 6 Screws Pattern 9 (kips)	F3 w/ 8 Screws Pattern 10 (kips)
LB800 Series Clip is 14ga (68mils)	33 (20)	33	0.190	0.564	0.752	0.320	0.370	0.534	0.793	0.259	0.331	0.417
	33 (20)	50	0.275	0.817	1.089	0.463	0.536	0.773	1.149	0.376	0.479	0.604
	43 (18)	33	0.248	0.840	1.120	0.477	0.552	0.795	1.182	0.386	0.493	0.622
	43 (18)	50	0.322	1.215	1.620	0.689	0.798	1.150	1.710	0.559	0.713	0.899
	54 (16)	33	0.322	1.182	1.576	0.670	0.776	1.119	1.663	0.544	0.693	0.875
	54 (16)	50	0.322	1.707	1.954	0.968	1.121	1.616	2.401	0.785	1.001	1.263
	68 (14)	50	0.322	1.954	1.954	1.369	1.586	2.286	3.397	1.111	1.417	1.561
97 (12)	50	0.322	1.954	1.954	1.443	1.673	2.411	3.583	1.172	1.494	1.561	
StiffClip Series	Stud Thickness Mils (ga)	Fy (Yield) Stud (ksi)	LB800			LB800			LB800, 4" Offset			
			F1 w/ 3 Screws Pattern 12 (kips)	F2 w/ 3 Screws Pattern 12 (kips)	F2 w/ 4 Screws Pattern 13 (kips)	F3 w/ 2 Screws Pattern 11 (kips)	F3 w/ 3 Screws Pattern 12 (kips)	F3 w/ 4 Screws Pattern 13 (kips)	F3 w/ 2 Screws Pattern 11 (kips)	F3 w/ 3 Screws Pattern 12 (kips)	F3 w/ 4 Screws Pattern 13 (kips)	
LB1000 & 1200 Series Clip is 14ga (68mils)	33 (20)	33	0.190	0.564	0.752	0.203	0.364	0.406	0.211	0.381	0.421	
	33 (20)	50	0.275	0.817	1.062	0.294	0.525	0.588	0.305	0.550	0.610	
	43 (18)	33	0.248	0.840	1.062	0.302	0.541	0.605	0.314	0.566	0.627	
	43 (18)	50	0.359	1.062	1.062	0.438	0.782	0.875	0.454	0.818	0.907	
	54 (16)	33	0.312	1.062	1.062	0.426	0.761	0.851	0.441	0.796	0.883	
	54 (16)	50	0.450	1.062	1.062	0.615	1.099	1.229	0.637	1.150	1.275	
	68 (14)	50	0.532	1.062	1.062	0.869	1.554	1.739	0.902	1.627	1.803	
97 (12)	50	0.532	1.062	1.062	0.917	1.639	1.793	0.951	1.715	1.899		
StiffClip Series	Stud Thickness Mils (ga)	Fy (Yield) Stud (ksi)	LB1000, 4" Offset			Important Notes: ◆ Allowable loads have not been increased for wind, seismic, or other factors. ◆ Loads are based on the use of #12 screws. ◆ Loads listed reflect force in a single direction. When multiple loads react on the connection, it is the responsibility of the designer to check the interaction of forces. ◆ Torsional effects are considered on screw group for F3 allowable loads. ◆ StiffClips LB1000 and LB1200 contain 1/2" return lips on the top and bottom of the leg attaching to the stud for increased stiffness.						
			F3 w/ 4 Screws, Pattern 14, (kips)	F3 w/ 6 Screws, Pattern 15, (kips)	F3 w/ 10 Screws, Pattern 16, (kips)							
LB1000, 4" Offset (6" to stud and 4" distance from structure)	33 (20)	33	0.290	0.410	0.602	 						
	33 (20)	50	0.419	0.593	0.871							
	43 (18)	33	0.431	0.610	0.896							
	43 (18)	50	0.624	0.883	1.192							
	54 (16)	33	0.607	0.859	1.192							
	54 (16)	50	0.876	1.192	1.192							
	68 (14)	50	1.192	1.192	1.192							

Important Notes:

- ◆ Allowable loads have not been increased for wind, seismic, or other factors.
- ◆ Loads are based on the use of #12 screws.
- ◆ Loads listed reflect force in a single direction. When multiple loads react on the connection, it is the responsibility of the designer to check the interaction of forces.
- ◆ Torsional effects are considered on screw group for F3 allowable loads.
- ◆ StiffClips LB1000 and LB1200 contain 1/2" return lips on the top and bottom of the leg attaching to the stud for increased stiffness.

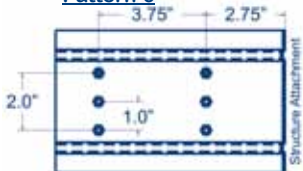
Pattern 4



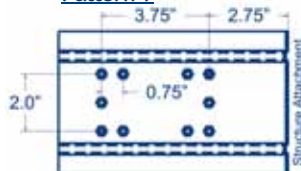
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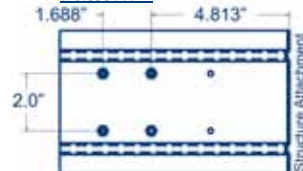
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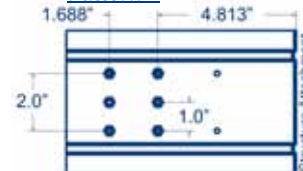
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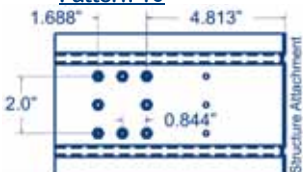
Pattern 8



Pattern 9



Pattern 10



Pattern 11



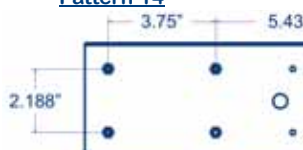
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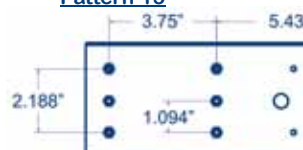
Pattern 13



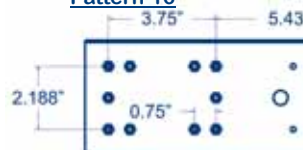
Pattern 14



Pattern 15



Pattern 16



Important Consideration: Pattern diagrams indicate fastener placement only. Each standard StiffClip® LB product comes with 4 guide holes to stud.