

# StiffClip® LB

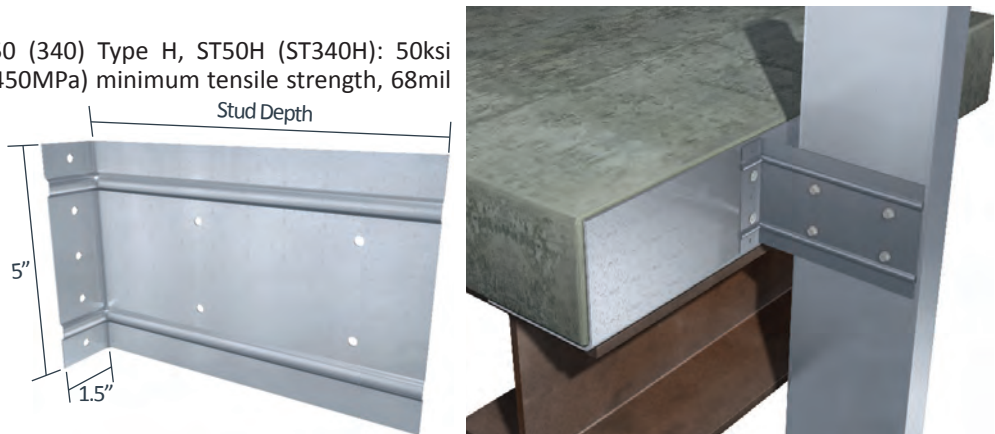
Spandrel Wall Bypass



### Material Composition

ASTM A1003/A1003M Structural Grade 50 (340) Type H, ST50H (ST340H): 50ksi (340MPa) minimum yield strength, 65ksi (450MPa) minimum tensile strength, 68mil minimum thickness (14 gauge, 0.0713" design thickness) with ASTM A653/A653M G90 (Z275) hot dipped galvanized coating.

The attachment of StiffClip to the primary structure may be made with PAFs, screw/bolt anchors or weld and is dependent upon the base material (steel or concrete) and the design configuration.



### StiffClip LB Allowable Loads

StiffClip® LB, Recommended Allowable Load (lbs): F1 & F2												
Stud		F1 Allowable Loads				F2 Allowable Loads						
		LB362	LB600	LB800 (Standard 2" Offset)	LB1000 & LB1200 (Standard 2" Offset)	LB362 & LB600			LB800 (Standard 2" Offset)		LB1000 (Standard 2" & 4" Offset) & LB1200 (Standard 2" Offset)	
Thickness Mils (ga)	Yield Strength (ksi)	w/3 #12 Screws	w/3-4 #12 Screws	w/3 #12 Screws	w/3 #12 Screws	w/2 #12 Screws	w/3 #12 Screws	w/4 #12 Screws	w/3 #12 Screws	w/4 #12 Screws	w/3 #12 Screws	w/4 #12 Screws
		Pattern 2	Patterns 2 & 3	Pattern 4	Pattern 12	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 12	Pattern 13
33 (20)	33	190	191	190	190	376	565	752	565	752	565	752
33 (20)	50	275	275	275	275	544	817	1,089	817	1,089	816	1,062
43 (18)	33	248	248	248	248	560	841	1,120	841	1,120	840	1,062
43 (18)	50	359	359	322	359	810	1,215	1,620	1,215	1,620	1,062	1,062
54 (16)	33	312	312	312	312	788	1,183	1,576	1,183	1,576	1,062	1,062
54 (16)	50	450	450	322	450	1,138	1,709	1,954	1,709	1,954	1,062	1,062
68 (14)	50	568	536	322	532	1,610	1,954	1,954	1,954	1,954	1,062	1,062
97 (12)	50	768	536	322	532	1,698	1,954	1,954	1,954	1,954	1,062	1,062
<b>Max Allowable Clip Load</b>		<b>768</b>	<b>536</b>	<b>322</b>	<b>532</b>	<b>1,954</b>			<b>1,954</b>		<b>1,062</b>	

StiffClip® LB, Recommended Allowable Load (lbs): F3															
Stud		LB362			LB600 (Standard 1" Offset)			LB800 (Standard 2" Offset)				LB800 (4" Offset)			
Thickness Mils (ga)	Yield Strength (ksi)	w/2 #12 Screws	w/3 #12 Screws	w/4 #12 Screws	w/2 #12 Screws	w/3 #12 Screws	w/4 #12 Screws	w/3 #12 Screws	w/4 #12 Screws	w/6 #12 Screws	w/10 #12 Screws	w/4 #12 Screws	w/6 #12 Screws	w/8 #12 Screws	
		Pattern 1	Pattern 2	Pattern 3	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Pattern 7	Pattern 8	Pattern 9	Pattern 10	
33 (20)	33	235	350	468	251	377	503	320	370	534	793	259	331	417	
33 (20)	50	340	506	678	362	544	727	463	536	773	1,149	376	479	604	
43 (18)	33	350	522	697	373	561	749	477	552	795	1,182	386	493	622	
43 (18)	50	506	753	1,009	539	810	1,082	689	798	1,150	1,710	559	713	899	
54 (16)	33	493	733	981	524	789	1,053	670	776	1,119	1,663	544	693	875	
54 (16)	50	711	1,059	1,417	757	1,139	1,521	968	1,121	1,616	2,401	785	1,001	1,263	
68 (14)	50	1,006	1,498	2,004	1,071	1,610	1,792	1,369	1,586	2,286	3,397	1,111	1,417	1,561	
97 (12)	50	1,061	1,579	2,114	1,129	1,698	1,792	1,443	1,673	2,411	3,583	1,172	1,494	1,561	
<b>Max Allowable Clip Load</b>		<b>2,658</b>			<b>1,792</b>			<b>3,863</b>				<b>1,561</b>			

**\*\*StiffClip LB Allowable Load tables and important notes continued on next page.**

### Nomenclature

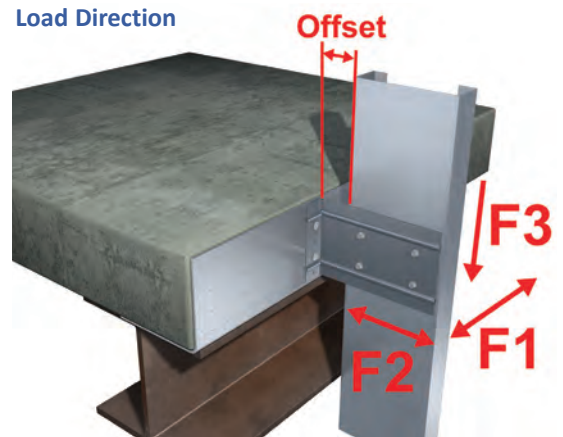
StiffClip LB is available for various stud depths. To specify, multiply stud depth by 100.

**Example:** 6" stud depth  
**Designate:** StiffClip® LB600

StiffClip® LB, Recommended Allowable Load (lbs): F3										
Stud		LB1000 (Standard 2" Offset)			LB1200 (Standard 2" Offset)			LB1000 (4" Offset)		
Thickness Mils (ga)	Yield Strength (ksi)	w/2 #12 Screws	w/3 #12 Screws	w/4 #12 Screws	w/2 #12 Screws	w/3 #12 Screws	w/4 #12 Screws	w/4 #12 Screws	w/6 #12 Screws	w/10 #12 Screws
		Pattern 11	Pattern 12	Pattern 13	Pattern 11	Pattern 12	Pattern 13	Pattern 14	Pattern 15	Pattern 16
33 (20)	33	203	364	406	211	381	421	290	410	602
33 (20)	50	294	525	588	305	550	610	419	593	871
43 (18)	33	302	541	605	314	566	627	431	610	896
43 (18)	50	438	782	875	454	818	907	624	883	1,192
54 (16)	33	426	761	851	441	796	883	607	859	1,192
54 (16)	50	615	1,099	1,229	637	1,150	1,275	876	1,192	1,192
68 (14)	50	869	1,554	1,739	902	1,627	1,803	1,192	1,192	1,192
97 (12)	50	917	1,639	1,793	951	1,715	1,899	1,192	1,192	1,192
<b>Max Allowable Clip Load</b>		<b>1,793</b>			<b>1,899</b>			<b>1,192</b>		

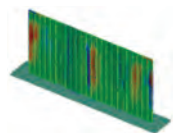
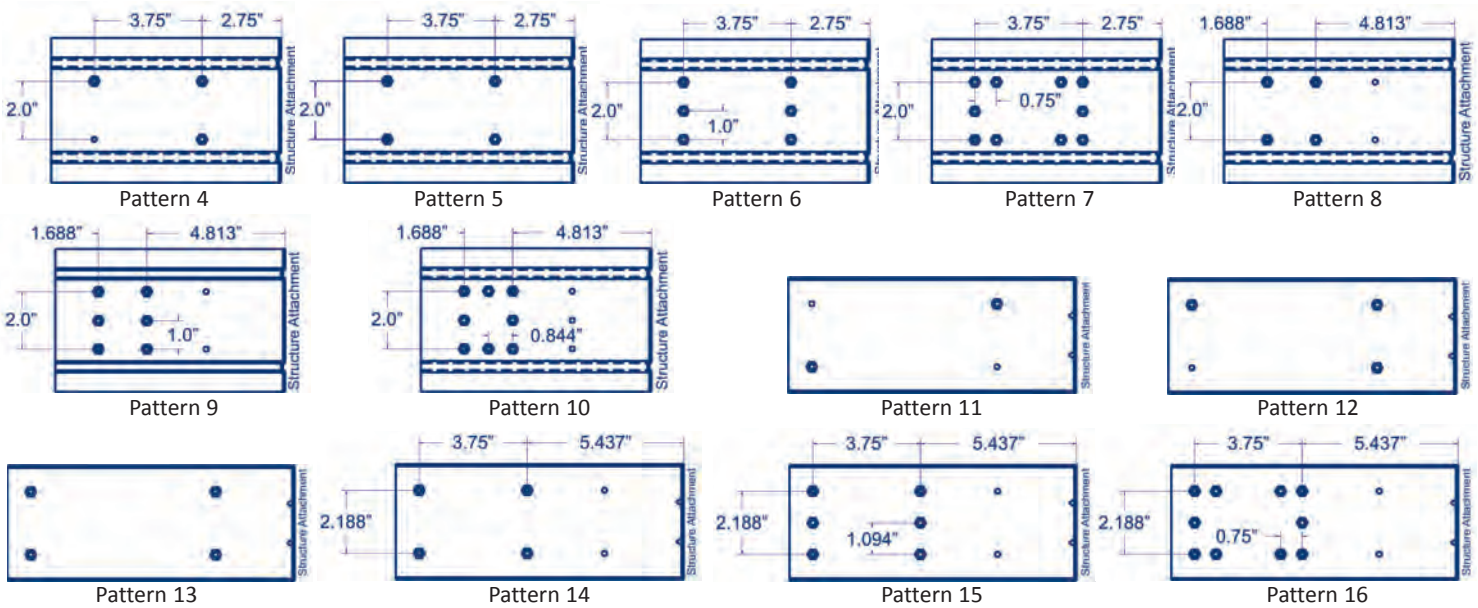
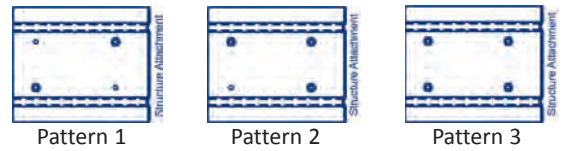
**Notes:**

- Allowable load tables incorporate eccentric loading of fasteners. Values with a welded connection may increase.
- StiffClip LB resists horizontal and vertical loads.
- Allowable loads have not been increased for wind, seismic, or other factors.
- 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. It is assumed that half of the torsional moment is taken by the connection to the structure and half is taken by the connection to the stud.
- Design loads consider loads on the clip and #12 screw fasteners to the stud web.
- Strengthening ribs are present in 3 5/8", 6", and 8" sizes. StiffClip LB's 10" and 12" sizes contain 1/2" return lips on the top and bottom of the leg attaching to the stud for increased stiffness.



**Screw Patterns**

**\*\*Important Consideration:** Pattern diagrams indicate fastener placement only. Each standard StiffClip LB product comes with 4 predrilled guide holes shown in Patterns 1, 2, & 3. Alternate patterns can be implemented in the field or requested from TSN as a custom part.



StiffClip LB Series  
Blast and Seismic Design Data  
www.steelnetwork.com

\*\* For more information or to review a copy of this report, please visit our website at <http://www.steelnetwork.com/Site/TechnicalData>