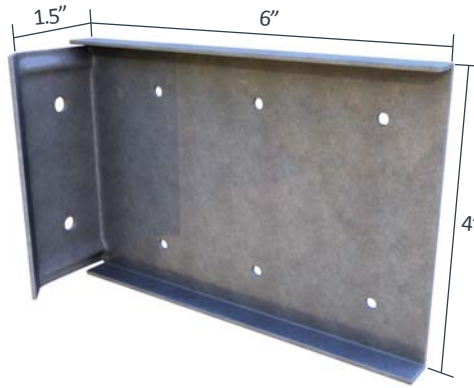


# StiffClip® LB-HD

Spandrel Wall Bypass for Seismic Conditions

### Material Composition

ASTM A1003/A1003M Structural Grade 50 (340) Type H, ST50H (ST340H): 50ksi (340 MPa) minimum yield strength, 65ksi minimum tensile strength, 68mil minimum thickness (14 gauge, 0.0713" design thickness) with ASTM A653/653M G90 (Z275) hot dipped galvanized coating.



### StiffClip LB-HD Allowable Loads

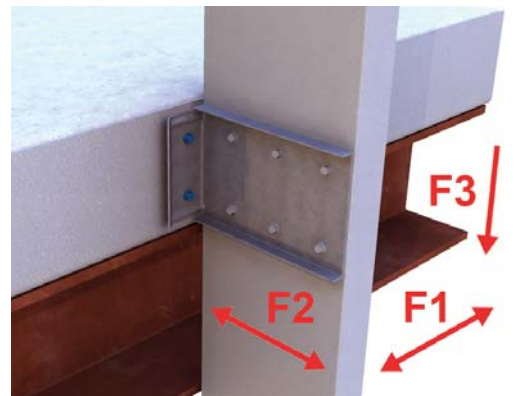
StiffClip® LB-HD, Recommended Allowable Load (lbs): F1, F2 & F3								
Stud		F1 Allowable (ASD) Loads	F2 Allowable (ASD) Loads			F3 Allowable (ASD) Loads		
Thickness Mills (ga)	Yield Strength (ksi)	w/3-6 <sup>1</sup> #12 Screws	w/3 #12 Screws	w/4 #12 Screws	w/6 #12 Screws	w/3 #12 Screws	w/4 #12 Screws	w/6 #12 Screws
33 (20)	33	191	524	754	1,130	318	450	599
43 (18)	33	248	780	1,122	1,130	474	670	892
54 (16)	33	312	1,096	1,130	1,130	666	942	1,254
54 (16)	50	450	1,130	1,130	1,130	962	1,361	1,811
68 (14)	50	567	1,130	1,130	1,130	1,361	1,924	1,966
97 (12)	50	809	1,130	1,130	1,130	1,435	1,966	1,966
<b>Maximum Allowable Clip Load</b>		<b>857</b>	<b>1,130</b>	<b>1,130</b>	<b>1,130</b>	<b>1,966</b>	<b>1,966</b>	<b>1,966</b>

### Note:

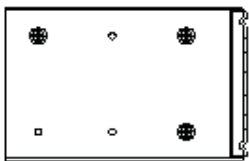
- Fasten within ¼" from the angle heel (centerline of the 1 ½" leg) to minimize eccentric load transfer.
- Guide holes for stud connection are 0.172" diameter for #12 screws. Guide holes for structure connection are 0.257" diameter for (2) ¼" concrete screws.
- StiffClip LB-HD resists both horizontal 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 act on the connection, it is the responsibility of the designer to check the interaction of forces.
- The recommended allowable load is for the clip and attachment to the stud only. The design professional must design attachment to the primary structure.
- Torsional effects are considered on screw group for F2 & 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.

<sup>1</sup> Only two screws near clip support are considered effective.

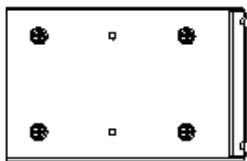
### Load Direction



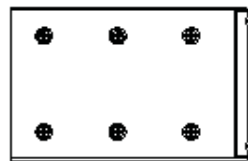
### Screw Patterns



3 Screw Pattern



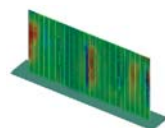
4 Screw Pattern



6 Screw Pattern

### Nomenclature

StiffClip LB-HD is designed to be used with 6" studs and is designated *StiffClip® LB600-HD*



StiffClip LB-HD 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>