

VertiClip® SLB-HD

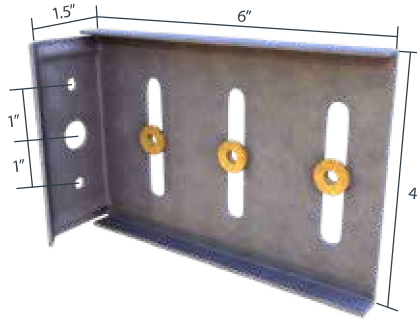
Bypass Slab for Seismic Conditions



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.

The attachment of VertiClip SLB-HD to the primary structure may be made with screw/bolt anchors or weld and is dependent up the base material (steel or concrete) and the design configuration.



VertiClip SLB-HD Allowable (Unfactored) Loads¹

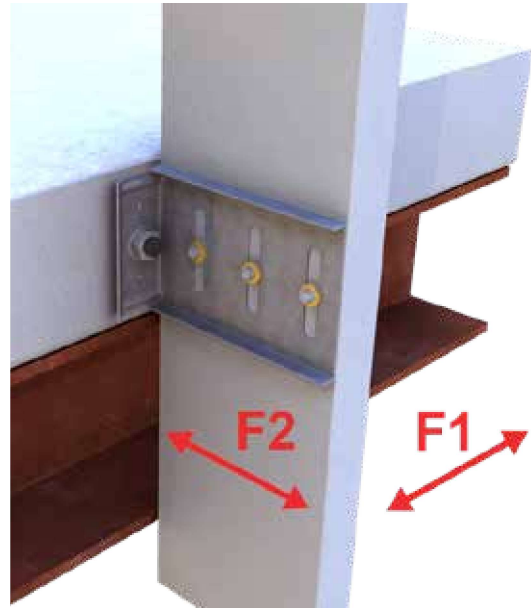
US Patent # 5,906,080

VertiClip® SLB-HD, Recommended Allowable Load (lbs): F1 & F2						
Screw Patterns with #12 Screws	F1 - Load Direction		F2 - Load Direction with (2) 1/4" Concrete Anchors		F2 - Load Direction with (1) 1/2" Concrete Anchor	
	w/2 #12 Screws	w/3 #12 Screws	w/2 #12 Screws	w/3 #12 Screws	w/2 #12 Screws	w/3 #12 Screws
33mil (20ga), 33ksi Stud	95	95	376	564	376	564
43mil (18ga), 33ksi Stud	124	124	560	840	560	840
54mil (16ga), 33ksi Stud	156	156	788	1,182	788	1,003
54mil (16ga), 50ksi Stud	225	225	1,138	1,187	1,003	1,003
68mil (14ga), 50ksi Stud	234	234	1,187	1,187	1,003	1,003
97mil (12ga), 50ksi Stud	234	234	1,187	1,187	1,003	1,003
Maximum Allowable Clip Load	234	234	1,187		1,003	

Notes:

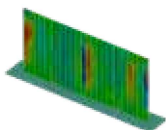
1. VertiClip SLB600-HD is designed to support horizontal loads, and should not be used in axial load-bearing walls.
2. Allowable loads have not been increased for wind, seismic, or other factors.
3. #12 screws are provided with each step bushing for attachment to the stud web. Load requirements do not always justify the use of a third screw.
4. Guide holes for attachment to structure are 0.375" diameter for (2) 1/4" concrete screws, and 0.625" diameter for (1) 1/2" concrete anchor.
5. Fasten within 3/4" of the angle heel (centerline of the 1-1/2" leg) to minimize eccentric load transfer.
6. Total vertical deflection of up to 2" (1" up and 1" down).
7. 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 the forces.
8. The recommended allowable load is for the clip and attachment to the stud only. The design professional must design the attachment to the primary structure.
9. For LRFD strengths contact TSN technical services.

Load Direction



Nomenclature

VertiClip SLB-HD is designed to be used with 6" studs and is designated *VertiClip® SLB600-HD*



VertiClip SLB-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/light-steel-framing-design-resources>