VertiClip[®] SLB-HD Bypass Slab for Seismic Conditions

The Steel Network, Inc. www.steelnetwork.com 🎞 1-888-474-4876

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.



Load Direction

VertiClip SLB-HD Allowable (Unfactored) Loads¹

US Patent # 5,906,080

VertiClip [®] SLB-HD, Recommended Allowable Load (lbs): F1 & F2						
Stud		F1 Allowable (ASD) Loads	F2 Allowable (ASD) Loads with Two ¼" Concrete Fasteners		F2 Allowable (ASD) Loads with One ½" Concrete Anchor	
Thickness Mils (ga)	Yield Strength (ksi)	w/2-3 #12 Screws	w/2* #12 Screws	w/3 #12 Screws	w/2* #12 Screws	w/3 #12 Screws
33 (20)	33	95	376	564	376	564
43 (18)	33	124	560	840	560	840
54 (16)	33	156	788	1,182	788	1,003
54 (16)	50	225	1,140	1,187	1,003	1,003
68 (14)	50	234	1,187	1,187	1,003	1,003
97 (12)	50	234	1,187	1,187	1,003	1,003
Maximum Allowable Clip Load		234	1,187		1,003	

Notes:

- Fasten within $\frac{3}{2}$ " from the angle heel (centerline of the 1 $\frac{1}{2}$ " leg) to minimize eccentric load transfer.
- Guide holes for structure connection are 0.375" diameter for (2) 1/2" concrete screws, and 0.625" diameter for (1) ½" concrete anchor.
- VertiClip SLB-HD allows up to 2" of vertical deflection (1" up and 1" down).
- VertiClip SLB600-HD is designed to support horizontal loads and should not be used in axial-load-bearing wall construction.
- Allowable loads have not been increased for wind, seismic, or other factors.
- (3) bushings are provided with each clip. Based on the application and evaluation by the design professional, two may be sufficient. If only the outer two slots are used to accommodate greater building tolerances, allowable loads may be reduced.
- 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.
- The recommended allowable load is for the clip and attachment to the stud only. The design professional must design attachment to the primary structure.
- ¹ For LRFD Design Strengths refer to ICC-ESR-2049.
- * First and third bushings installed

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/Site/TechnicalData

