

VertiClip® SLS

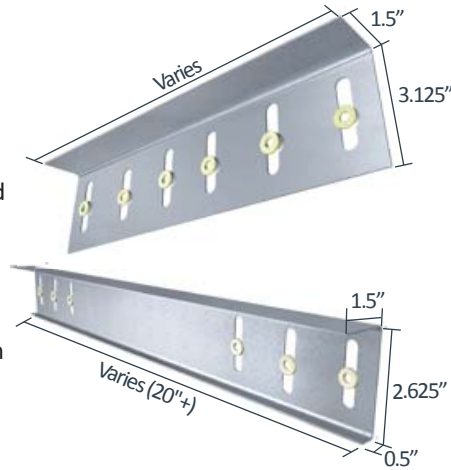
Bypass Structure



Material Composition

ASTM A1003/A1003M Structural Grade 50 (340) Type H, ST50H (ST340H): 50ksi (340 MPa) minimum yield strength, 65ksi (450 MPa) 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 VertiClip 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.



US Patents #5,467,566 & #5,906,080

VertiClip SLS Allowable (Unfactored) Loads¹

VertiClip® SLS, Recommended Allowable Load (lbs): F1							
Stud		SLS362/400-9, -12	SLS600-12	SLS600-15, -18, -20	SLS600-24	SLS800-12	SLS800-15, 18, -20
Thickness Mils (ga)	Yield Strength (ksi)	w/2 #12 screws	w/2 or 3 #12 screws	w/2 or 3 #12 screws	w/2 or 3 #12 screws	w/2 or 3 #12 screws	w/2 or 3 #12 screws
33 (20)	33	95	95	95	95	95	95
33 (20)	50	124	138	130	100	138	125
43 (18)	33	124	124	124	100	124	124
43 (18)	50	124	164	130	100	141	125
54 (16)	33	124	156	130	100	141	125
54 (16)	50	124	164	130	100	141	125
68 (14)	50	124	164	130	100	141	125
97 (12)	50	124	164	130	100	141	125
Max Allowable Clip Load		124	164	130	100	141	125

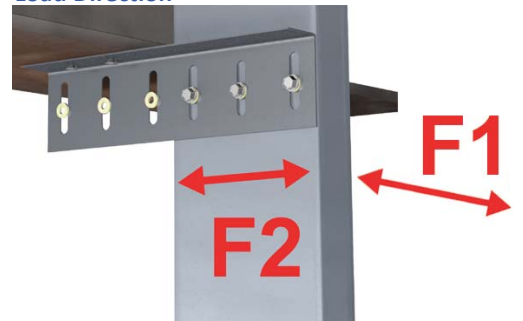
VertiClip® SLS, Recommended Allowable Load (lbs): F2										
Stud		SLS362/400-9, -12	SLS600-12		SLS600-15, -18, -20		SLS600-24		SLS800-12, -15, 18, -20	
Thickness Mils (ga)	Yield Strength (ksi)	w/2 #12 screws	w/2 #12 screws	w/3 #12 screws	w/2 #12 screws	w/3 #12 screws	w/2 #12 screws	w/3 #12 screws	w/2 #12 screws	w/3 #12 screws
33 (20)	33	377	377	565	377	565	377	565	377	565
33 (20)	50	544	544	817	544	817	544	817	544	817
43 (18)	33	561	561	841	561	841	561	841	561	841
43 (18)	50	810	810	1,215	810	1,215	810	1,215	810	1,215
54 (16)	33	789	789	1,183	789	1,183	789	1,183	789	1,183
54 (16)	50	1,139	1,139	1,709	1,139	1,709	1,139	1,709	1,139	1,709
68 (14)	50	1,245	1,610	2,070	1,610	2,122	1,610	1,896	1,610	1,816
97 (12)	50	1,245	1,698	2,070	1,698	2,122	1,698	1,896	1,698	1,816
Max Allowable Clip Load		1,245	2,070		2,122		1,896		1,816	

Notes:

- VertiClip SLS series 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.
- #12 screws are provided with each Step Bushing.
- Return lip added for clips longer than 20".
- Allowable load tables incorporate eccentric loading of fasteners. Values with welded connection may increase.
- Fasten within ¼" from the angle heel (centerline of the 1½" leg) to minimize eccentric load transfer.
- Minimum 3" of SLS required for attachment to structure to steel and 5.5" min. with concrete.
- Total vertical deflection of up to 1½" (¾" up and ¾" down). Deflection requirements greater than ¾" up and down are available.

¹ For LRFD Design Strengths refer to ICC-ESR-1903.

Load Direction



Nomenclature

VertiClip SLS is designated by stud depth and clip length required. Clip length includes a minimum of 3" for steel (5.5" for concrete) of clip material for attachment to structure added to stud depth, plus the distance of the stud from the structure.

Example: 6" stud, 6" tolerance, 3" to structure

Designate: VertiClip® SLS600-15

* Use of strengthening ribs and return bends varies with each clip.

Example Details



Return lip added for clips longer than 20" (up to 36")



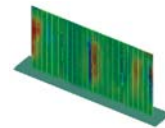
VertiClip SLS at jamb (studs facing each other).



VertiClip SLS600-12
ICC-ESR-1903
www.icc-es.org



VertiClip SLS Series
LARR #25631
www.ladbs.org



VertiClip SL Series
Blast and Seismic Design data
www.steelnetwork.com

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