

VertiClip® SLD

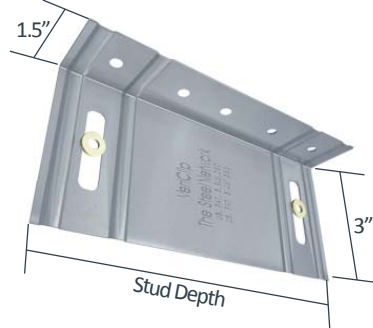
Interior Head of Wall



Material Composition

ASTM A1003/A1003M Structural Grade 50 (340) Type H, ST50H (ST340H): 50ksi (340MPa) minimum yield strength, 65ksi (450MPa) minimum tensile strength, 33mil minimum thickness (20 gauge, 0.0346" design thickness) with ASTM A653/A653M G60 (Z180) 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 SLD Allowable (Unfactored) Loads¹

VertiClip® SLD, Recommended Allowable Load (lbs): F2						
Stud		SLD150	SLD250	SLD362/400	SLD600	SLD800
Thickness Mils (ga)	Yield Strength (ksi)	w/1 #8 screw	w/2 #8 screws	w/2 #8 screws	w/2 #8 screws	w/2 #8 screws
18 (25)	33	51	132	132	132	132
27 (22)	33	51	159	243	243	243
33 (20)	33	51	159	328	328	328
33 (20)	50	51	159	359	405	474
43 (18)	33	51	159	359	405	489
43 (18)	50	51	159	359	405	664
54 (16)	33	51	159	359	405	664
54 (16)	50	51	159	359	405	664
Maximum Allowable Clip Load		51	159	359	405	682

Load Direction



Notes:

- Fasten within 3/4" from the angle heel (centerline of the 1 1/2" leg) to minimize eccentric load transfer.
- Guide holes for attachment to structure are 0.141" for SLD362/400 and SLD600, and are not standard for other clip sizes.
- Total vertical deflection of up to 1 1/2" (3/4" up and 3/4" down). Deflection requirements greater than 3/4" (up and down) are available.
- VertiClip SLD 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.
- #8 screws are provided with each VertiClip SLD step bushing.
- Strengthening ribs are present in 3 5/8" and 6" sizes.

¹ For LRFD Design Strengths refer to ICC-ESR-2049.

Nomenclature

VertiClip SLD is designated by type (SLD), followed by stud depth in inches multiplied by 100.

Example: 6" stud
Designate: VertiClip® SLD600

Shaft Wall

VertiClip SLD may be used in shaft wall assemblies to provide a positive attachment at the top of wall. Sizes include VertiClip SLD150, SLD250, and SLD362 for 2.5", 4", and 6" shaft wall stud depths.



UL2079 & UL®-Classified
WR Grace shaft wall
assembly HW-D-0401.



When to Use VertiClip SLD and VertiClip SL

When to Use VertiClip® SLD and VertiClip® SL																			
Wind Pressure		20 psf				25 psf				30 psf				40 psf					
Deflection Limit		L/360		L/600		L/360		L/600		L/360		L/600		L/360		L/600			
Stud Spacing		16" o.c.	24" o.c.	16" o.c.	24" o.c.	16" o.c.	24" o.c.	16" o.c.	24" o.c.	16" o.c.	24" o.c.	16" o.c.	24" o.c.	12" o.c.	16" o.c.	12" o.c.	16" o.c.		
362/400 Stud Depth	Wall Height (ft)	9'	SLD	SLD	SLD	SL	SLD	SLD	SLD	SL	SLD	SLD	SL	SL*	SLD	SLD	SL	SL	
		10'	SLD	SLD	SL	SL	SLD	SL	SL	SL*	SLD	SL	SL	SL*	SLD	SL	SL	SL*	
		12'	SL	SL*	SL*	SL*	SL	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*
		15'	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*
600 Stud Depth	Wall Height (ft)	9'	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	
		10'	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	
		12'	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SL	SLD	SLD	SLD	SL
		15'	SLD	SLD	SL	SL	SLD	SL	SL	SL	SLD	SL	SL	SL*	SLD	SL	SL	SL*	
		18'	SL	SL	SL	SL*	SL	SL	SL*	SL*	SL	SL*	SL*	SL*	SL	SL*	SL*	SL*	SL*
21'	SL	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*		
800 Stud Depth	Wall Height (ft)	9'	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	
		10'	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	
		12'	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	
		15'	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SLD	SL	SLD	SL	SLD	SLD	SLD	SL	
		18'	SLD	SLD	SLD	SL	SLD	SL	SL	SL	SLD	SL	SL	SL	SLD	SL	SL	SL	
		21'	SLD	SL	SL	SL*	SL	SL	SL	SL*	SL	SL	SL*	SL*	SL	SL	SL*	SL*	
24'	SL	SL	SL*	SL*	SL	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL*	SL	SL*	SL*			

Table Notes:

- SLD considered for use on 43 mil or thinner sections
- A load factor of 0.7 is used for deflection determination
- SL* means a single standard stud will not work. A wider flange wall stud (2" or 2.5" flange) is needed
- All connections can be made with use of 2 screws



UL2079 & UL®-Classified
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assembly HW-D-0401.



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



VertiClip SLD600
ICC-ESR-2049
www.icc-es.org



Meets criteria for New
York MEA 326-06-M

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