

# VertiClip® SLT

Structure/Slab Bypass

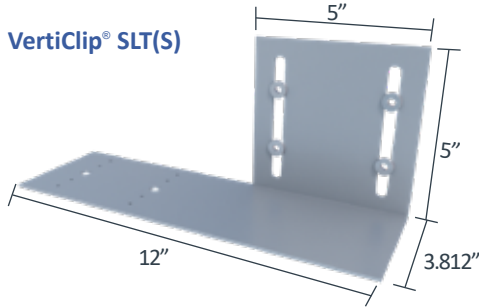


## Material Composition

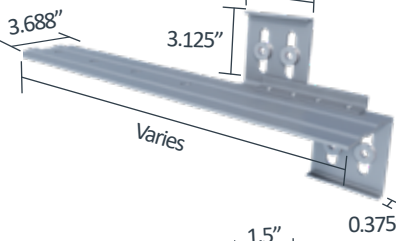
ASTM A1003/A1003M Structural Grade 50 (340) Type H, ST50H (ST340H): 50ksi (340MPa) minimum yield strength, 65ksi (450MPa) minimum tensile strength, 97mil minimum thickness (12 gauge, 0.1017" design thickness) with ASTM A653/A653M G90 (Z275) hot dipped galvanized coating.

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

## VertiClip® SLT(S)



## VertiClip® SLT(L)



## VertiClip® SLT9.5

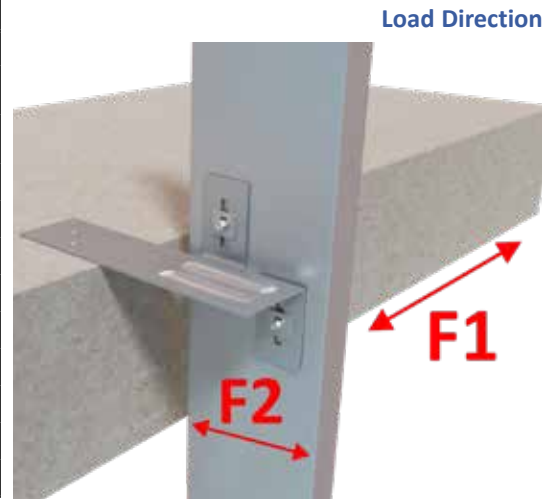


US Patents #5,467,566 & #5,906,080

## VertiClip SLT Allowable (Unfactored) Loads

VertiClip® SLT & SLT(L), Recommended Allowable Load (lbs): F1 & F2										
	F1 Load Direction			F2 Load Direction						
	SLT9.5	SLT(L)12, SLT(L)15 & SLT(L)18		SLT-9.5	SLT(L)-12		SLT(L)-15		SLT(L)-18	
Screw Patterns with #12 Screws	w/2 #12 screws	w/2 #12 screws	w/4 #12 screws	w/2 #12 screws	w/2 #12 screws	w/4 #12 screws	w/2 #12 screws	w/4 #12 screws	w/2 #12 screws	w/4 #12 screws
33mil (20ga), 33ksi Stud	190	190	380	376	376	752	376	744	376	700
33mil (20ga), 50ksi Stud	276	276	452	510	544	903	544	744	544	700
43mil (18ga), 33ksi Stud	248	248	452	510	560	903	560	744	560	700
43mil (18ga), 50ksi Stud	341	358	452	510	810	903	744	744	700	700
54mil (16ga), 33ksi Stud	312	312	452	510	788	903	744	744	700	700
54mil (16ga), 50ksi Stud	341	450	452	510	903	903	744	744	700	700
68mil (14ga), 50ksi Stud	341	452	452	510	903	903	744	744	700	700
97mil (12ga), 50ksi Stud	341	452	452	510	903	903	744	744	700	700
<b>Max Allowable Clip Load</b>	<b>341</b>	<b>452</b>	<b>510</b>	<b>903</b>	<b>744</b>	<b>700</b>	<b>744</b>	<b>700</b>	<b>700</b>	<b>700</b>

VertiClip® SLT(S), Recommended Allowable Load (lbs): F1 & F2				
Thickness Mils (ga)	F1 Load Direction		F2 Load Direction	
	Back Fasteners	Front Fasteners	Back Fasteners	Front Fasteners
	w/4 #12 screws	w/4 #12 screws	w/4 #12 screws	w/4 #12 screws
33mil (20ga), 33ksi Stud	190	190	379	379
33mil (20ga), 50ksi Stud	276	276	548	548
43mil (18ga), 33ksi Stud	248	248	564	564
43mil (18ga), 50ksi Stud	330	282	816	816
54mil (16ga), 33ksi Stud	312	282	794	794
54mil (16ga), 50ksi Stud	330	282	890	917
68mil (14ga), 50ksi Stud	330	282	890	917
97mil (12ga), 50ksi Stud	330	282	890	917
<b>Max Allowable Clip Load</b>	<b>330</b>	<b>282</b>	<b>890</b>	<b>917</b>



**\*\*Important notes for VertiClip SLT Allowable Load tables continued on next page.**

**Table Notes:**

1. VertiClip SLT 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.
4. VertiClip SLT9.5 and SLT(S) allow up to 2" of vertical deflection (1" up and 1" down).
5. VertiClip SLT(L) allows up to 1-7/8" of vertical deflection (15/16" up and 15/16" down).
6. VertiClip SLT(S) Recommended Allowable Loads are based on (4) #12 screws at the stud attachment and either front or rear fastener attachment to the structure, respectively.
7. Torsional effects are considered on the screw group for F2 Allowable Loads. All torsion is attributed to the screws, none is attributed to the clip connection to the structure.
8. For attachment of VertiClip SLT to structure, it is recommended that fasteners to steel have a 1/2" minimum edge distance and that fasteners to concrete have a 2-1/4" minimum edge distance.
9. For LRFD strengths contact TSN technical services.

**Nomenclature**

VertiClip SLT9.5 is available in a length of 9 1/2". VertiClip SLT(S) is available in a length of 12". VertiClip SLT(L) is available in lengths of 12", 15", and 18". Determine length by adding stud + offset + 3" for steel (5.5" for concrete) and selecting the next largest size.

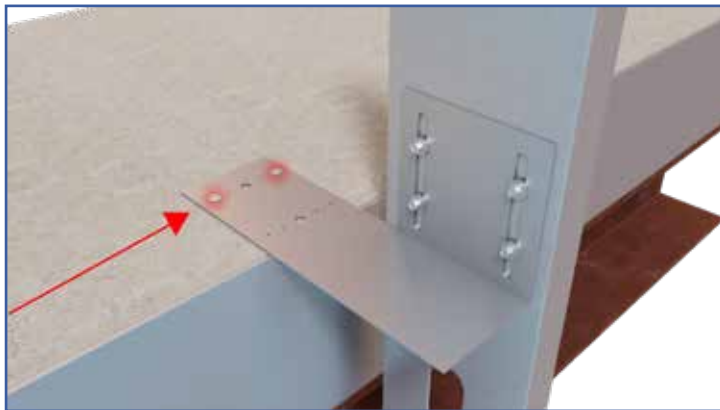
**Example:** 6" stud, 4" offset + 3"  
**Designate:** VertiClip® SLT(L)15

**Example Details**

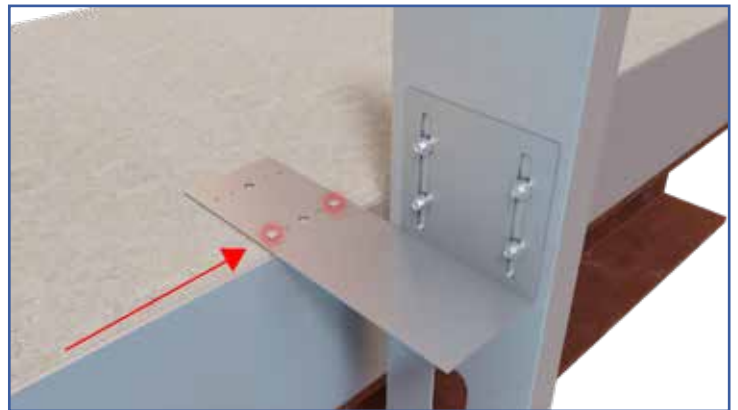


**VertiClip SLT9.5 attached to the underside of wide flange beam.**

**VertiClip SLT(S) Fastener Patterns**



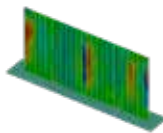
**Back Fasteners Attachment to Structure**



**Front Fasteners Attachment to Structure**



VertiClip SLT 9.5 & SLT(L)-18  
 ICC-ESR-2049  
 www.icc-es.org



VertiClip SLT 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/light-steel-framing-design-resources>**