

## PRODUCT APPLICATION

VertiClip® SL connects the exterior curtain wall studs at head of wall to the building frame while allowing for vertical deflection of the structure up to 1½" (¾" up and down). VertiClip's unique design provides both an anti-friction and anti-seizure connection between the clip and the stud web surface thereby preventing a transfer of vertical forces into curtain wall framing, which is not engineered to support axial loads. Use of VertiClip SL over friction-fit track assemblies helps protect liability through the utilization of positive mechanical attachments to the web of the stud. VertiClip SL is a component of VertiTrack® VTX, our pre-assembled deflection track (see page 14). Allowable loads are based on use of two #12 screws for attachment to stud (provided by TSN).

## MATERIAL COMPOSITION

ASTM A653/A653M, Grade 50 (340), 50ksi (340 MPa) minimum yield strength, 65ksi (450 MPa) minimum tensile strength, G-90 (Z275) hot-dipped galvanized coating. Material thickness = 68mil (14 gauge, 0.0713" design thickness).

The attachment of VertiClip to the primary structure may be made with PAF or weld and is dependent upon the base material (steel or concrete) and the design configuration.

**Allowable load tables incorporate eccentric loading of fasteners. Values with welded connection may increase.**

Note:

- ◆ Fasten within ¼" from the angle heel (centerline of the 1½" leg) to minimize eccentric load transfer.
- ◆ Guide holes for attachment to structure are .172" in diameter, and are standard for SL362, and SL600.
- ◆ **Deflection requirements greater than ¾" (up and down) are available.**

VertiClip SL series is designed to support horizontal loads and should not be used in axial-load-bearing wall construction.

## VERTICLIP SL NOMENCLATURE

To designate the proper clip on drawings, multiply stud depth by 100. VertiClip SL is sized to match stud depth.

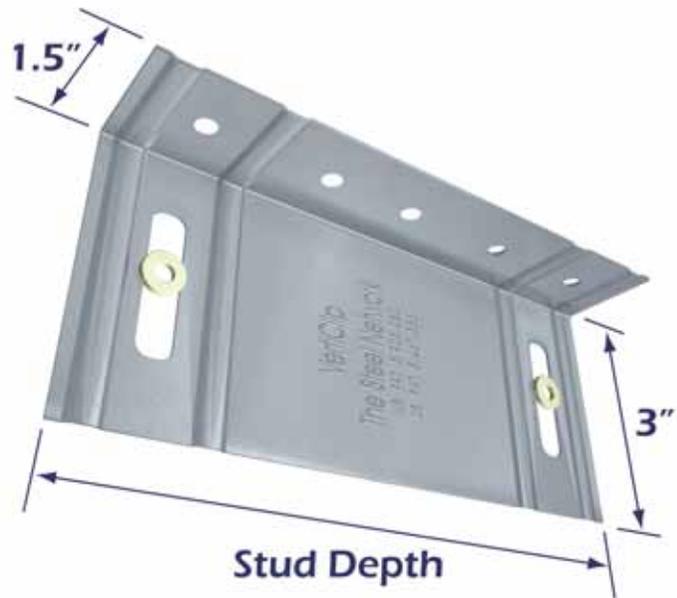
Example: 6" stud.  
Designate SL600.



An ICC-ES Evaluation Report for VertiClip SL362, 600, & 800 is available. Refer to ICC-ESR-1903 at [www.icc-es.org](http://www.icc-es.org) or at [www.steelnetwork.com](http://www.steelnetwork.com).



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



\* Strengthening ribs and guide holes are present in 3 5/8" and 6" sizes.

## VERTICLIP SL INSTALLATION



Attach 20ga standard leg track to structure. Track will allow for alignment and closure.



Fasten SL to top track at designed stud spacing with engineered fastener.



Attach SL to wall stud with provided screws through Step Bushings.

**QUALITY FEATURES**

- ◆ Load-rated positive mechanical attachment at each stud
- ◆ Eliminates friction-held assemblies
- ◆ Utilizes only mill-certified, 50ksi steel
- ◆ **Step Bushings pre-installed for accurate placement**
- ◆ **Load rated screws provided for each VertiClip**
- ◆ Meets all building code criteria
- ◆ Adaptable for multiple configurations

**LABOR BENEFITS**

- ◆ **Top of wall bridging or strapping is eliminated**
- ◆ **Top track lightweight for easy handling (not a structural element, may be 20ga standard leg - Deep-Leg Track is not required)**
- ◆ Utilize clips for wall layout
- ◆ Eliminates temporary screws

**ALLOWABLE (UNFACTORED) LOADS<sup>1</sup>**

VertiClip Series	Load Direction	Stud Thickness Mils (ga)	Fy (yield) Stud (ksi)	SL362	SL400	SL400	SL600	SL600
				F2 w/ 2 #12 screws (kips)	F2 w/ 2 #12 screws (kips)	F2 w/ 3 #12 screws (kips)	F2 w/ 2 #12 screws (kips)	F2 w/ 3 #12 screws (kips)
SL (Clip is 14ga, 68mils)	F2	33 (20)	33	0.377	0.377	0.565	0.377	0.565
		33 (20)	50	0.544	0.544	0.817	0.544	0.817
		43 (18)	33	0.561	0.561	0.841	0.561	0.841
		43 (18)	50	0.790	0.810	1.136	0.810	1.215
		54 (16)	33	0.789	0.789	1.136	0.789	1.183
		54 (16)	50	0.790	1.136	1.136	1.139	1.680
		68 (14)	50	0.790	1.136	1.136	1.610	1.680
97 (12)	50	0.790	1.136	1.136	1.680	1.680		

VertiClip Series	Load Direction	Stud Thickness Mils (ga)	Fy (yield) Stud (ksi)	SL362	SL400	SL600	SL600
				F1 w/ 2 #12 screws (kips)	F1 w/ 2 #12 screws (kips)	F1 w/ 2 #12 screws (kips)	F1 w/ 3 #12 screws (kips)
SL (Clip is 14ga, 68mils)	F1	33 (20)	33	0.190	0.190	0.190	0.285
		33 (20)	50	0.248	0.199	0.275	0.367
		43 (18)	33	0.248	0.199	0.248	0.367
		43 (18)	50	0.248	0.199	0.359	0.367
		54 (16)	33	0.248	0.199	0.312	0.367
		54 (16)	50	0.248	0.199	0.367	0.367
		68 (14)	50	0.248	0.199	0.367	0.367
97 (12)	50	0.248	0.199	0.367	0.367		

VertiClip Series	Load Direction	Stud Thickness Mils (ga)	Fy (yield) Stud (ksi)	SL800	SL800 F2	SL1000	SL1000 F2	SL1200	SL1200
				F2 w/ 2 #12 screws (kips)	w/ 3 #12 screws (kips)	F2 w/ 2 #12 screws (kips)	w/ 3 #12 screws (kips)	F2 w/ 2 #12 screws (kips)	F2 w/ 3 #12 screws (kips)
SL (Clip is 14ga, 68mils)	F2	33 (20)	33	0.377	0.565	0.377	0.565	0.377	0.565
		33 (20)	50	0.544	0.817	0.544	0.817	0.544	0.817
		43 (18)	33	0.561	0.841	0.561	0.841	0.561	0.841
		43 (18)	50	0.810	1.215	0.810	1.215	0.810	1.215
		54 (16)	33	0.789	1.183	0.789	1.183	0.789	1.183
		54 (16)	50	1.139	1.709	1.139	1.577	1.139	1.709
		68 (14)	50	1.610	1.870	1.577	1.577	1.610	1.791
97 (12)	50	1.698	1.870	1.577	1.577	1.698	1.791		

VertiClip Series	Load Direction	Stud Thickness Mils (ga)	Fy (yield) Stud (ksi)	SL800	SL800	SL1000	SL1000	SL1200	SL1200
				F1 w/ 2 #12 screws (kips)	F1 w/ 3 #12 screws (kips)	F1 w/ 2 #12 screws (kips)	F1 w/ 3 #12 screws (kips)	F1 w/ 2 #12 screws (kips)	F1 w/ 3 #12 screws (kips)
SL (Clip is 14ga, 68mils)	F1	33 (20)	33	0.190	0.285	0.190	0.285	0.190	0.285
		33 (20)	50	0.275	0.362	0.275	0.413	0.275	0.381
		43 (18)	33	0.248	0.362	0.248	0.372	0.248	0.372
		43 (18)	50	0.359	0.362	0.359	0.414	0.359	0.381
		54 (16)	33	0.312	0.362	0.312	0.414	0.312	0.381
		54 (16)	50	0.362	0.362	0.414	0.414	0.381	0.381
		68 (14)	50	0.362	0.362	0.414	0.414	0.381	0.381
97 (12)	50	0.362	0.362	0.414	0.414	0.381	0.381		



**QUANTITY / ORDER INFORMATION**

Designation	Qty/Box	Lbs/Box	Pcs/Skid	Lbs/Skid
SL362	100	37	4500	1665
SL400	100	38	4500	1710
SL600	100	55	4500	2475
SL800	50	41	2250	1845
SL1000	50	40	2250	1800
SL1200	50	57	2250	2565



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- ◆ Allowable loads have not been increased for wind, seismic, or other factors.
  - ◆ Two #12 screws are provided with each VertiClip SL.
  - ◆ If loads justify use of a third screw, TSN will provide 3 slots and 3 screws with each clip.
- <sup>1</sup> For LRFD Design Strengths refer to ICC-ESR-1903 (p23).