

PRODUCT APPLICATION

VertiClip® SLB connects exterior curtain wall studs, bypassing the building structure, while allowing for vertical deflection of the structure up to 2" (1" up and 1" 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. VertiClip SLB eliminates flange-loaded, friction-fit clips, which do not address web-crippling. 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 a 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 ¾" from the angle heel (centerline of the 1½" leg) to minimize eccentric load transfer.
- ◆ Fasteners attaching clip to structure should be installed symmetrically around the center line of the clip. The allowable load of the clip may be reduced if fasteners are not installed symmetrically.
- ◆ Guide holes in the 1½" leg measure .172" in diameter
- ◆ **Deflection requirements greater than 1" up or down are available.**

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

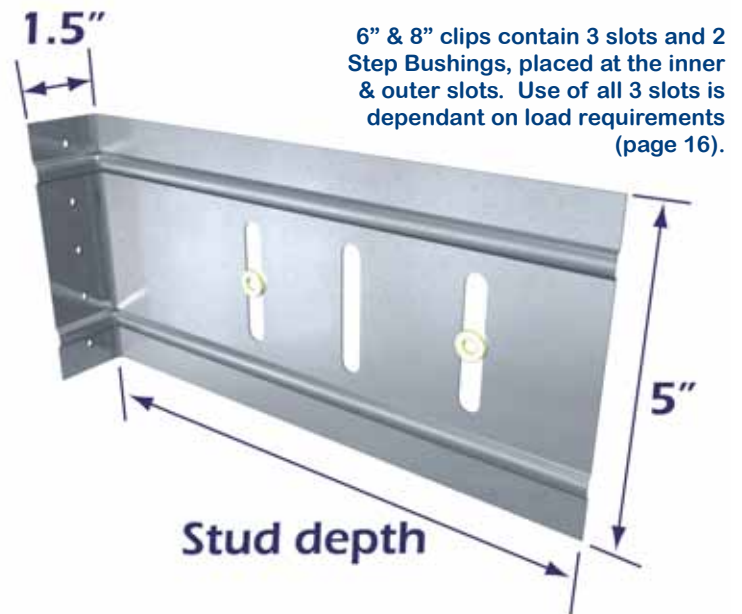


An ICC-ES Evaluation Report for VertiClip SLB600 is available. Refer to ICC-ESR-1903 at www.icc-es.org or at www.steelnetwork.com.

VERTICLIP® SLB



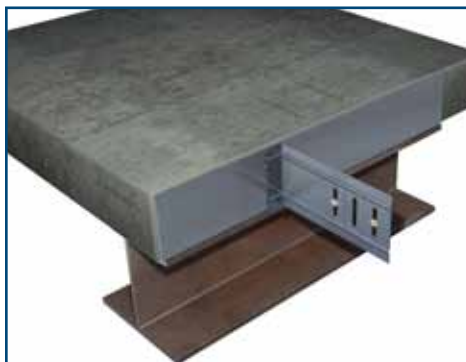
US Patents #5,467,566 & #5,906,080



6" & 8" clips contain 3 slots and 2 Step Bushings, placed at the inner & outer slots. Use of all 3 slots is dependant on load requirements (page 16).

* Use of strengthening ribs varies with each clip. Each VertiClip SLB contains stiffened ribs in the angle heel.

VERTICLIP SLB INSTALLATION



Place VertiClip angle against structural pour stop.



Attach SLB to structure with required fasteners.



Fasten SLB to stud with provided screws through Step Bushings.

QUALITY FEATURES

- ◆ Positive, mechanical attachment
- ◆ Only mill-certified, 50ksi steel is used
- ◆ Step Bushings pre-installed for accurate placement
- ◆ Rated screws provided
- ◆ Load transferred from stud web
- ◆ Elimination of friction-held assemblies
- ◆ Meets all building code criteria
- ◆ Adaptable for multiple configurations

VERTICLIP SLB NOMENCLATURE

VertiClip® SLB is classified by multiplying stud depth by 100.

Example: 6" stud = VertiClip SLB600.

VertiClip SLB600 and SLB800 have 3 slots for greater efficiency with construction tolerances and the third screw and step bushing are not required unless specified.

EXAMPLE DETAILS



Step Bushings may be moved from the first (inner) to the second (middle) slot of the SLB600 or 800 to accommodate greater building tolerances.

LABOR BENEFITS

- ◆ Eliminates shims and scabs
- ◆ Aligns wall studs quickly and easily by accounting for construction tolerances
- ◆ Eliminates bridging or strapping within 12" of connection
- ◆ Attaches to structure with PAF or welds

QUANTITY / ORDER INFORMATION

Designation	Qty/Box	Lbs/Box	Pcs/Skid	Lbs/Skid
SLB362 (2 slot / 2 bushing)	50	28	2250	1260
SLB600 (3 slot / 2 bushing)	50	40	2250	1800
SLB600 (3 slot / 3 bushing)	50	42	2250	1890
SLB800 (3 slot / 2 bushing)	50	48	1600	1536
SLB800 (3 slot / 3 bushing)	50	50	1600	1600
SLB600-10 (3 slot / 3 bushing)	25	40	1125	1800
SLB600-12 (3 slot / 3 bushing)	25	44	800	1408

The VertiClip SLB600-10 and 600-12 accommodate an even greater construction tolerance of studs from structure and are now standard products. The VertiClip SLB600-10 is 10" in depth with slot spacing designed for a 6" stud, and the VertiClip SLB600-12 is 12" in depth with slot spacing designed for a 6" stud.



An ICC-ES Evaluation Report for VertiClip SLB600 is available. Refer to ICC-ESR-1903 at www.icc-es.org or at www.steelnetwork.com.

ALLOWABLE (UNFACTORED) LOADS¹

VertiClip Series	Load Direction	Stud Thickness Mils (ga)	Fy (yield) Stud (ksi)	F2 w/2 screws (kips)	F2 w/3 screws (kips)	Load Direction	Stud Thickness Mils (ga)	Fy (yield) Stud (ksi)	SLB362 F1 w/2 screws (kips)	SLB600 F1 w/2-3 screws (kips)	SLB800 F1 w/2-3 screws (kips)
SLB 250, 362/400, 600, 800 (Clip is 14ga, 68mils)	F2	33 (20)	33	0.376	0.564	F1	33 (20)	33	0.095	0.095	0.095
		33 (20)	50	0.544	0.817		33 (20)	50	0.138	0.138	0.118
		43 (18)	33	0.560	0.840		43 (18)	33	0.124	0.124	0.118
		43 (18)	50	0.810	1.215		43 (18)	50	0.179	0.179	0.118
		54 (16)	33	0.788	1.182		54 (16)	33	0.156	0.156	0.118
		54 (16)	50	1.140	1.600		54 (16)	50	0.225	0.225	0.118
		68 (14)	50	1.600	1.600		68 (14)	50	0.227	0.227	0.118
		97 (12)	50	1.600	1.600		97 (12)	50	0.227	0.227	0.118
VertiClip Series	Load Direction	Stud Thickness Mils (ga)	Fy (yield) Stud (ksi)	F2 w/2 screws (kips)	F2 w/3 screws (kips)						
SLBxxx-10 and SLBxxx-12 Series (Clip is 14ga, 68mils)	F2	33 (20)	33	0.376	0.564						
		33 (20)	50	0.544	0.817						
		43 (18)	33	0.560	0.840						
		43 (18)	50	0.810	0.933						
		54 (16)	33	0.788	0.933						
		54 (16)	50	0.933	0.933						
		68 (14)	50	0.933	0.933						
		97 (12)	50	0.933	0.933						

- ◆ Allowable loads have not been increased for wind, seismic, or other factors.
- ◆ Two #12 screws are provided with each VertiClip SLB. If loads justify use of a third screw, TSN will provide 3 slots and 3 screws with each clip.
- ◆ Three slots are standard in 6" and higher web depths to accommodate construction tolerances. Use of a 3rd screw and bushing is dependant upon load configuration.

¹ For LRFD Design Strengths refer to ICC-ESR-1903 (p23).



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