VertiClip® SLF
Bypass Top of Slab

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 A653/653M 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.

VertiClip SLF Allowable (Unfactored) Loads

<table>
<thead>
<tr>
<th>Stud Thickness Mils (ga)</th>
<th>Yield Strength (ksi)</th>
<th>w/2 #12 screws</th>
</tr>
</thead>
<tbody>
<tr>
<td>43 (18)</td>
<td>33</td>
<td>281</td>
</tr>
<tr>
<td>43 (18)</td>
<td>50</td>
<td>326</td>
</tr>
<tr>
<td>54 (16)</td>
<td>50</td>
<td>465</td>
</tr>
<tr>
<td>68 (14) and up</td>
<td>50</td>
<td>632</td>
</tr>
</tbody>
</table>

Max Allowable Clip Load: 632

Notes:
- Stud web crippling should be checked. Use 3½” bearing length and “Interior Reaction – one Flange”, Condition 2, for the web crippling calculations except at end of stud use “End Reaction – one Flange”, Condition 1.
- Align rows of wall bridging so that one row of bridging falls within 12” from VertiClip SLF OR use one flat strap bracing on outer flange of studs to resist torsional effects.
- Allowable loads have not been increased for wind, seismic, or other factors.
- #12 screws are provided with each Step Bushing.
- VertiClip SLF allows up to 1½” of vertical deflection (¾” up and ¾” down)

* For LRFD Design Strengths contact TSN technical services.

Nomenclature
VertiClip SLF is available in one size for all stud depths with 1 5/8” flanges and is designated VertiClip® SLF162

VertiClip® SLF for use with 2” stud flanges can be made as a custom part.

Example Details

VertiClip SLF used with TSN’s BridgeBar® & BridgeClip® installed within 12” from the clip.

VertiClip SLF used with one flat strap bracing on the outer flange of studs to resist torsional effects.