DriftClip® DSLS

Bypass Structure

The Steel Network, Inc.
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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.

US Patents #6,612,087 & #7,104,024

The attachment of DriftClip DSLS to the primary structure may be made with PAFs, screws, or bolt anchors depending on the base material (steel or concrete) and the design configuration. The step bushings used for attachment to structure are designed for use with ¼" maximum diameter fasteners. Designing this connection is the responsibility of the Structural Engineer of Record, and a minimum of two fasteners must be used. A minimum of 3.5" of DSLS is required for attachment to steel structure and a minimum of 6" is required for attachment to concrete structure.

DriftClip DSLS Allowable (Unfactored) Loads[1]

DriftClip® DSLS, Recommended Allowable Load (lbs): F2 - Fastener Pattern 1					
Stud		DSLS600-12		DSLS600-15	
Thickness Mils (ga)	Yield Strength (ksi)	w/2 #12 Screws	w/3 #12 Screws	w/2 #12 Screws	w/3 #12 Screws
33 (20)	33	377	565	377	565
33 (20)	50	544	817	544	817
43 (18)	33	561	841	561	841
43 (18)	50	810	1,215	810	1,215
54 (16)	33	789	1,183	789	1,183
54 (16)	50	1,139	1,709	1,138	1,709
68 (14)	50	1,610	1,862	1,610	1,903
97 (12)	50	1,698	1,862	1,698	1,903
Maximum Allowable Clip Load		**1,862**	**1,862**	**1,903**	**1,903**

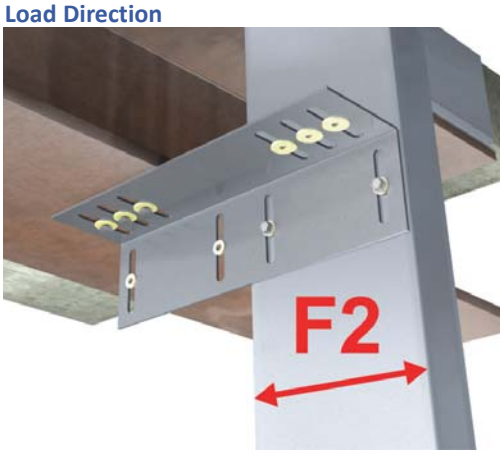
DriftClip® DSLS, Recommended Allowable Load (lbs): F2 - Fastener Pattern 2					
Stud		DSLS600-12		DSLS600-15	
Thickness Mils (ga)	Yield Strength (ksi)	w/2 #12 Screws	w/3 #12 Screws	w/2 #12 Screws	w/3 #12 Screws
33 (20)	33	377	565	377	565
33 (20)	50	544	817	544	817
43 (18)	33	561	841	561	841
43 (18)	50	810	1,215	810	1,215
54 (16)	33	789	1,183	789	1,183
54 (16)	50	1,139	1,709	1,139	1,709
68 (14)	50	1,610	1,742	1,610	1,903
97 (12)	50	1,698	1,742	1,698	1,903
Maximum Allowable Clip Load		**1,742**	**1,742**	**1,903**	**1,903**

Notes:

- Design loads are for attachment of DriftClip DSLS to stud only. Load tables reflect horizontal loads (F2)
- Attachment to structure engineered by others. As a design reference, follow ICC-ESR-3332 for allowable loads for screw fasteners of ¼"- 20 size with various plate thickness.
- Allowable loads have not been increased for wind, seismic, or other factors.
- #12 screws are provided with each step bushing for attachment to stud. Load requirements don't always justify use of a third screw.
- One row of bridging is recommended at a maximum distance of 12" from DriftClip to resist torsional effects.
- Return lip added for clips longer than 20".
- DriftClip DSLS allows up to 2" of vertical deflection (1"up and 1" down), and 2" lateral drift (1" left and 1" right in plane). Deflection requirements greater than 2" lateral drift are available.

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

Load Direction



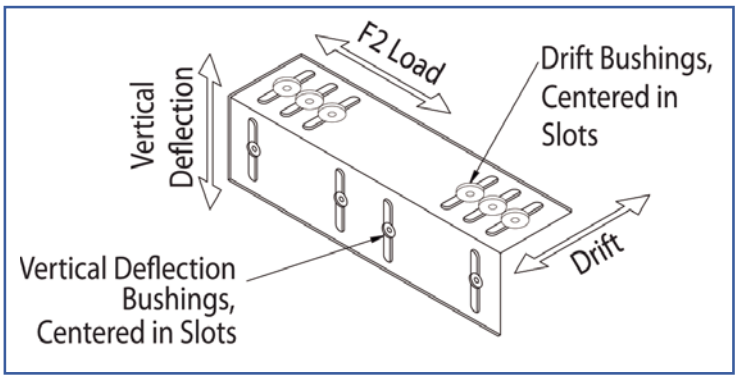
Nomenclature

DriftClip DSLS is classified by multiplying stud depth by 100, followed by length.

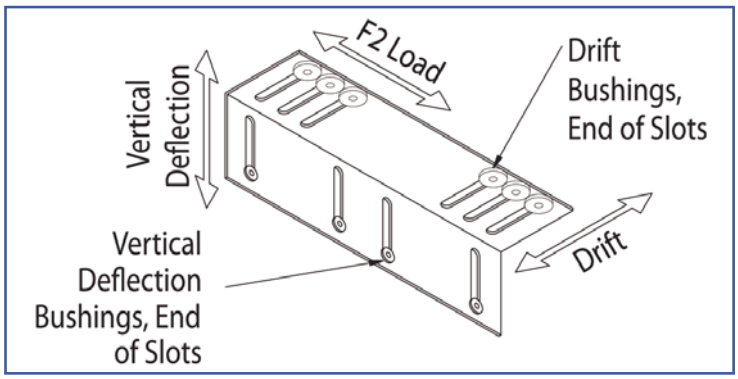
Example: *6" stud depth, 15" length*
Designate: *DriftClip® DSLS600-15*

** If more than 2" lateral drift is required, contact TSN engineering.*
*** One row of bridging is recommended at a maximum distance of 12" from DriftClip to resist torsional effects.*
**** Three screws & step bushings are available for attachment to stud in 6" sizes and higher. Specify that 3 slots are needed when placing order.*

Fastener Patterns



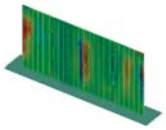
Fastener Pattern 1 replicates a condition of out-of-plane wind or seismic force with no vertical live load deflection or in-plane drift.



Fastener Pattern 2 replicates a condition of out-of-plane wind or seismic force with full vertical live load deflection and full in-plane drift.

DriftClip DSLS
ICC-ESR-2049
www.icc-es.org

DriftClip DSLS Series
LARR #25781
www.ladbs.org



DriftClip DSLS 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/Site/TechnicalData