

# DriftTrak® PTS w/ DTSLB-PTS

Slab Integrated Bypass - Post Tensioned Concrete Slabs

The Steel Network, Inc.

www.steelnetwork.com

1-888-474-4876



## Description

DriftTrak® PTS saves the time and expense of installing DriftTrak after the Post-Tensioned Concrete Slab (PTS) has been poured by integrating it directly into the slab before pouring. The headed studs come preinstalled to the DriftTrak PTS and function as the embedded anchorage to the post-tensioned slab instead of anchoring to a steel edge angle or post-installing concrete anchors. The DriftTrak PTS is sized to fit above or below the high-strength tendon reinforcing at edges of slabs. Once concrete is poured, the DriftTrak PTS is ready to support exterior steel framing using DTSLB-PTS bypass clips to accommodate vertical deflection and lateral drift requirements.



US Patent #7,503,150 & Patent Pending

## Material Composition

**Track Material:** 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 G60 (Z180) hot dipped galvanized coating.

**Headed Stud Material:** ASTM A29/A108, Grades 1010 through 1020 or equivalent, 49ksi (340MPa) minimum yield strength, 61ksi (420MPa) minimum tensile strength, 3/8" diam. x 3 1/8" length with 3/4" head diameter.

**DTSLB-PTS Clip Material:** 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.

## DriftTrak PTS & DTSLB-PTS Connector Nomenclature

DriftTrak® PTS is manufactured in 10' or 12' lengths, with headed studs welded in a single row (see drawing below). DTSLB-PTS clip connectors are inserted and rotated into place inside the DriftTrak PTS to better facilitate panel installation while accommodating vertical deflection and lateral drift requirements in floor slab bypass conditions. Connectors are sold separately, and paired with DriftTrak PTS to support 6" and 8" stud framing. The connectors are classified by multiplying the stud depth by 100, followed by "PTS", then "-L" for a Left version or "-R" for a Right version.

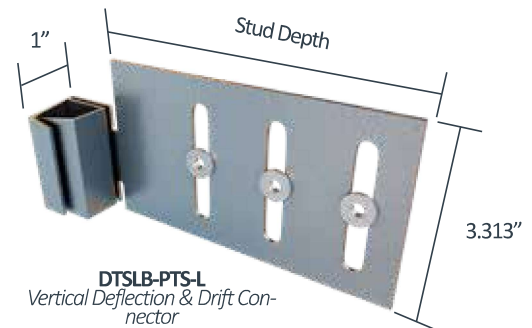
**Example:** Vertical Deflection required, left version required for installation with 6" stud

**Designate:** DriftTrak® PTS w/ DTSLB600-PTS-L

\* Clip shown is left version of DTSLB-PTS.

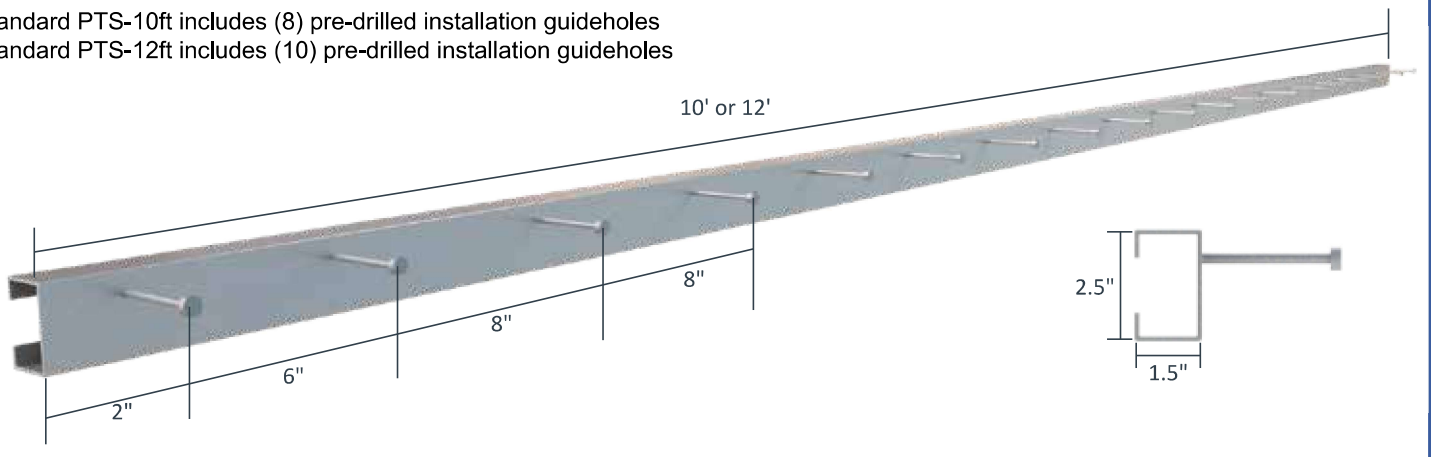
Right side version is available for order as standard parts.

\*\* Clips and track sold separately.



## DriftTrak® PTS: Dimensions, Layout and Stud Spacing

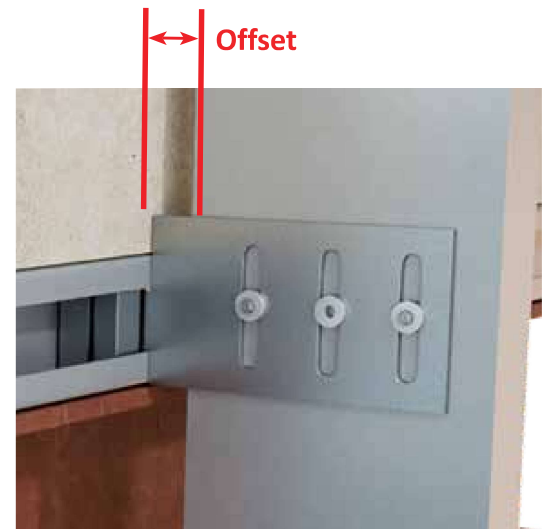
Standard PTS-10ft includes (8) pre-drilled installation guideholes  
 Standard PTS-12ft includes (10) pre-drilled installation guideholes



**DriftTrak® PTS w/ DTSLB-PTS Allowable Loads**

Screw Patterns with #12 Screws	F2 Load Direction			
	DTSLB600-PTS & DTSLB800-PTS Max. Offset = 1-7/8" for DTSLB600-PTS Max. Offset = 2-1/2" for DTSLB800-PTS			
	Bottom of Slab		Top of Slab	
	2 Screws	3 Screws	2 Screws	3 Screws
33mil (20ga), 33ksi stud	376	564	376	564
33mil (20ga), 50ksi stud	544	816	544	816
43mil (18ga), 33ksi stud	560	840	560	840
43mil (18ga), 50ksi stud	810	1,080	810	1,215
54mil (16ga), 33ksi stud	788	1,080	788	1,182
54mil (16ga), 50ksi stud	1,080	1,080	1,138	1,595
68mil (14ga), 50ksi stud	1,080	1,080	1,434	1,595
97mil (12ga), 50ksi stud	1,080	1,080	1,434	1,595
<b>Max Allowable Clip Load</b>	<b>1,080</b>		<b>1,595</b>	

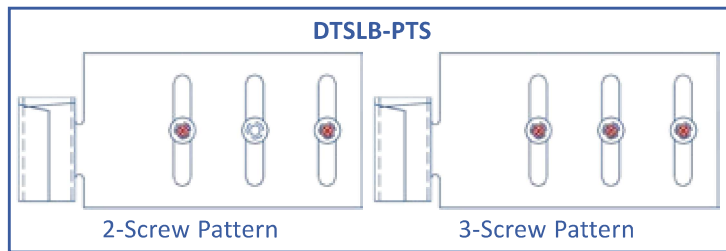
Load Direction



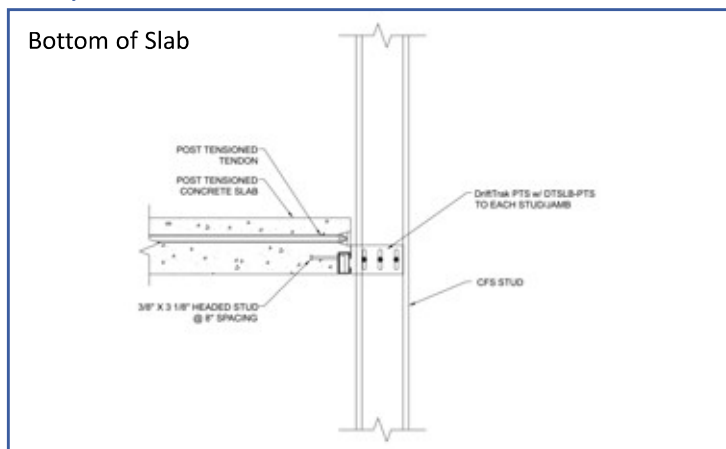
**Notes:**

1. Design loads are for attachment of DriftTrak PTS w/ DTSLB-PTS to stud and stud weld to track only.
2. Allowable loads have not been increased for wind, seismic, or other factors.
3. Clips are manufactured to fit into DriftTrak PTS. DriftTrak PTS w/ DTSLB-PTS allows up to 2" of vertical deflection (1" up and 1" down), and free lateral movement of the structure.
4. #12 screws are provided for each step bushing attachment to studs. Load requirements don't always justify use of a third screw.
5. Maximum tension on a single anchor should not exceed 1,600 lbs ASD. In tension, the strength of the anchor itself should be considered. The weld does not need to be considered in tension as the load table and 1,600 lbs ASD maximum tension value are inclusive of the strength of the welds.
6. Designers must check headed stud tension anchorage capacity into concrete per ACI 318 based on the actual headed stud edge distance an concrete compressive strength. For more information, call TSN Technical Support.
7. One row of bridging is recommended at a maximum distance of 18" from DriftTrak PTS w/ DTSLB-PTS to resist torsional effects.
8. Standard offset of stud from the open face of the track should not exceed 1-7/8" for DriftTrak PTS w/ DTSLB600-PTS clips.
9. Standard offset of stud from the open face of the track should not exceed 2-1/2" for DriftTrak PTS w/ DTSLB800-PTS clips.
10. Offset is measured from the open face of the track to the inside face of the stud.
11. For LRFD strengths contact TSN technical services.

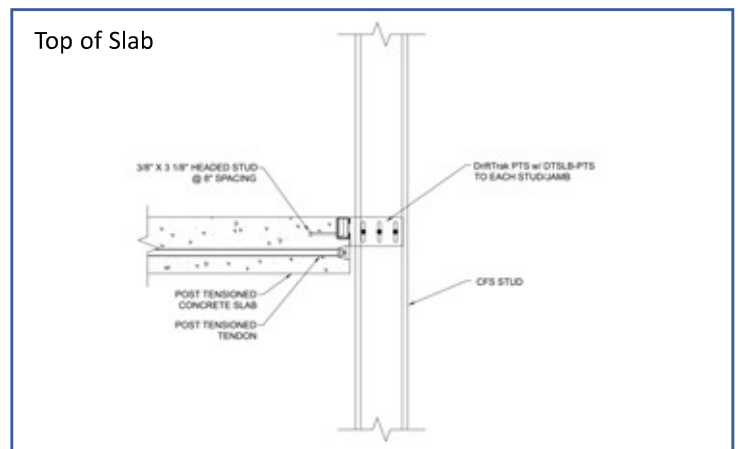
**Fastener Patterns**



**Example Details**



**DriftTrak® PTS w/ DTSLB-PTS:  
Attachment to Post-Tensioned Concrete Slab**



**DriftTrak® PTS w/ DTSLB-PTS:  
Attachment to Post-Tensioned Concrete Slab**