The MiTek® Pro Series™ WSTS Truss Structural Wood Screw can be used to resist uplift and lateral loads for truss/rafter-to-plate and stud-to-plate connections. The WSTS is tested in accordance with ICC-ES AC233 and AC13 and meets 2018 IRC and IBC code requirements.

Features and Benefits:
- Reverse thread angle on opposite ends of screw creates increased withdrawal where it’s needed for higher capacity and greater uplift resistance. The shank is fully threaded along its length for installation flexibility.
- Head design countersinks out of the way of finishing materials like drywall and trim.
- Type-17 point engages the wood quickly for easier starting and driving the screw.
- Included 6" T30 Driver Bit and Angle Tool makes proper installations easier.
- WSTS can be installed on the inside eliminating difficult installations on the outside of wall.
- Included driver bit with installation guide holds screw firmly so screw may be installed with one hand.

Materials: 3/16" heat treated carbon steel
Finish: Exterior Coat
Codes: IBC, FL, LA
Patents: Pending

WSTS45 Installation:
- Position screw point approximately 2-3/4" from the end of the stud on the narrow or wide face. The screw point should be no closer than 1/2-in from the edge. Install the screw at an angle of 22° from vertical using the angle tool.
- Drive the WSTS screw head flush to the wood surface.
- Installation angle is 15° to 25°. Use the angle tool for optimal 22° angle.

WSTS6 Installation:
- The removable angle tool comes attached to the bit. Install bit onto drill.
- **Truss aligned directly over wall stud:** Position screw point where bottom of top plate and top of stud meet. Install screw at 22° angle using the angle tool.
- **Truss between two wall studs:** On the underside of the top plate, position screw in the center of the top plate and truss bottom chord. Install the screw perpendicular through the double top plate to the truss bottom chord. Drive WSTS screw head flush to the wood surface.

Both WSTS45 and WSTS6 products feature a reversing asymmetrical thread angle, adding withdrawal capacity.
Truss & Rafter

MiTek® USP® Product Catalog

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Truss & Rafter

Truss Structural Wood Screw

Typical WSTS6 truss aligned directly over wall stud installation

Figure 1A

Typical WSTS6 truss between wall studs installation

Figure 1B

Typical WSTS6 double top plate-to-stud installation

Figure 2

Typical WSTS6 top plate-to-end wall truss installation

Figure 3

Typical WSTS45 stud-to-single bottom plate installation

Figure 4

Typical WSTS45 stud-to-single bottom plate installation

Figure 5

Specification Table

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<td>493 -- 334</td>
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1) EXT = Exterior Coat.
2) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
3) Allowable loads are for WSTS screws installed in accordance with installation instructions.
4) When the screw is to be loaded in multiple directions simultaneously, refer to note 1 in Design Notes on page 18.
5) Double top plates should be independently fastened together as required by applicable code.
6) F1 loading is parallel to the top or bottom plate. F2 loading is perpendicular to the top or bottom plate.
7) Designer must ensure that a continuous load path transfers the uplift loads to the foundation.
8) Wood species shall have a minimum NDS referenced specific gravity of 0.50 for DF, 0.55 for SP, and 0.42 for SPF.
9) Table loads do not apply to installations in trusses with end grain bearing.

Refer to MiTek’s WSTS Truss and Wall Tiedown Installations technical bulletin at MiTek-US.com for additional design information.

New products or updated product information are designated in blue font.

Packaging Table

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<td>WSTS45-EXTBP 500 ea</td>
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<td>WSTS6-EXTRBP 500 ea</td>
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Included in each box:
- 6” T30 Impact- Driver Compatible Bit
- Angle Tool