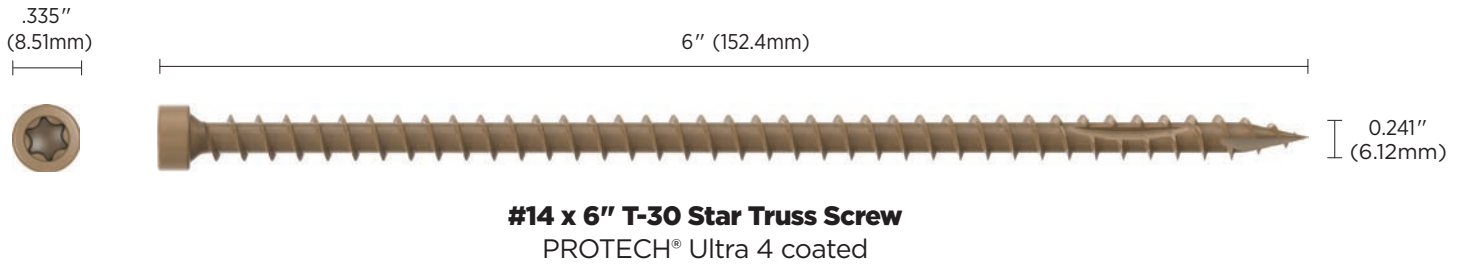


## 6 IN. Truss Structural Screws

**JOIST TO BEAM DECK CONNECTION  
TECHNICAL BULLETIN**

CAMO #14 x 6" Structural Truss Screws have been tested for use in the attachment of deck joists to minimum 2-ply deck beams. When installed following the instructions in this bulletin, our Truss Screws can be used for these connections according to IRC section R507, Exterior decks.

**CORROSION STATEMENT**

Our proprietary PROTECH Ultra 4 four-layer coating system applied to our Truss Screws has been tested in accordance with ASTM G198 and offers the same level of protection as code-approved hot-dip galvanized (ASTM A153, Class D) in ground contact general use pressure treated lumber (AWPA UC1-UC4A). Our Truss screws with PROTECH Ultra 4 coating are recognized for use in untreated lumber, ground contact general use pressure-treated lumber, and fire retardant treated (FRT) lumber. A statement of compliance can be found in our DrJ TER reports.

**PRODUCT FEATURES**

- Code listed per DrJ TER 2102-03 for truss screw used in beam and wall connections
- Code listed per DrJ TER 2102-01 for structural wood screw properties and State of Florida FL 41741
- Cylinder head with T-30 star drive
- No pre-drilling necessary
- Included Truss Guide for 22.5 degree installations



INSTALLATION INSTRUCTIONS

- 1) Use a ½" (12.7mm) low rpm/high torque electric drill (450 rpm) and the driver bit supplied with the screws.
- 2) Install the screws upward through the deck beam and into the center of the joist.

a. The screw should be installed at an upward angle from the vertical of 20 degrees to 30 degrees (FIGURE 1) and should penetrate the deck joist within ¼" of the centerline.

b. Install screws away from the end of the joist.

c. If the deck joist is located directly over a beam splice, offset the fastener to one side of the splice.
- 3) Minimum penetration for deck joist to deck beam connections is 2.5".
- 4) Drive the screws until the topside of the head is flush to the surface of the wood. Do not overdrive.

FIGURE 1

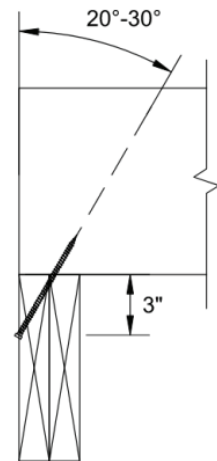
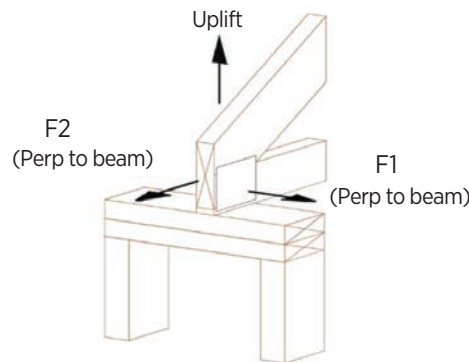


FIGURE 2



ALLOWABLE DESIGN LOADS

Allowable design loads for uplift and lateral loads for fasteners in joist to beam connections are provided in Table 1. These loads are applicable to Truss Screws installed in accordance with the instructions in this bulletin. Loads parallel to the beam are labeled F1 and loads perpendicular to the beam are labeled F2 (see FIGURE 2).

TABLE 1: ALLOWABLE UPLIFT & LATERAL LOADS FOR FASTENERS IN JOIST TO BEAM CONNECTIONS

FASTENER	MINIMUM PENETRATION INTO TRUSS/RAFTER/JOIST* (IN)	FASTENER ANGLE TO VERTICAL*	ALLOWABLE LOADS <sup>2,3,4,5,6</sup> (LB)								
			HF/SPF (0.42)			DF-L (0.50)			SP (0.55)		
			UPLIFT	F1	F2	UPLIFT	F1	F2	UPLIFT	F1	F2
#14 X 6"	2½	22.5°	555	180	180	825	215	215	825	230	230
<div>SI: 1 in = 25.4 mm, 1 lb = 4.45 N</div> <div>1. Joist members shall be a minimum of 2" nominal thickness. Design of joist is by others.</div> <div>2. Equivalent specific gravity of structural composite lumber (SCL) shall be equal to or greater than the specific gravities provided in this table. Refer to product information from SCL manufacturer.</div> <div>3. For wood species with an assigned specific gravity between 0.42 and 0.50, use the tabulated values for a specific gravity of 0.42. For wood species with an assigned specific gravity between 0.50 and 0.55, use the tabulated values for a specific gravity of 0.50. For wood species with an assigned specific gravity equal to or greater than 0.55, use the tabulated values for a specific gravity of 0.55.</div> <div>4. For applications involving members with different specific gravities, use the allowable load corresponding to the lowest specific gravity.</div> <div>5. Includes 1.6 duration of load increase for wind and seismic and 0.7 wet service factor. No further duration of load increases permitted. Reduce design values for other load durations as applicable.</div> <div>6. See Figure 2 for load directions. See Figure 1 for installation details.</div> <div>7. Install fastener at an upward angle from the vertical of 20° to 30° (22.5° is optimal). For installation between 20° and 30°, design values for 22.5° may be used.</div>											