

# MTW45-8

## Mass-Timber Angled Washer

Angled screws greatly increase the strength and stiffness of mass timber connections. The Simpson Strong-Tie® MTW45-8 is designed for use with a wide variety of 10 gauge–33 ksi connection plates and 8 mm-diameter Simpson Strong-Tie Strong-Drive® SDCF Timber-CF screws driven at a 45° angle.

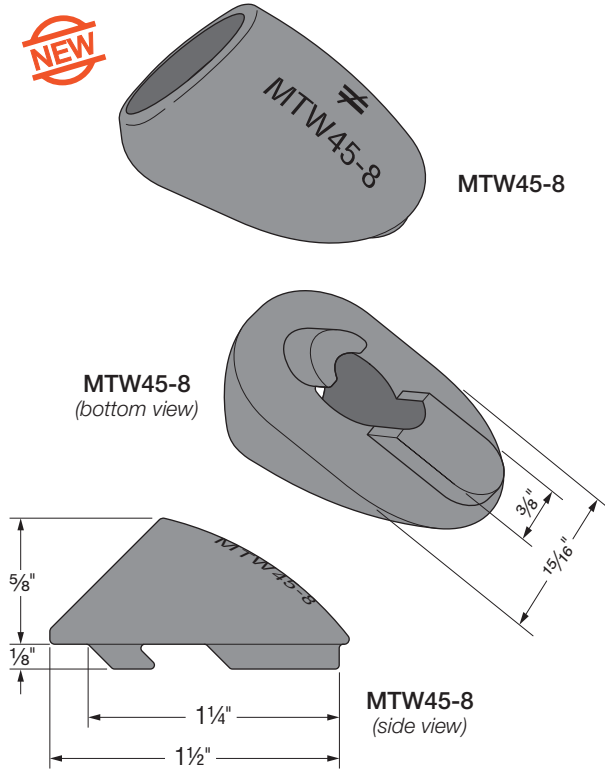
**Material:** ASTM A27, Grade 70–40

**Finish:** Zinc plated electro-galvanized

**Installation:**

- Use all specified MTW45-8 washers and Strong-Drive SDCF Timber-CF screws.
- Minimum connector plate is 10 gauge (0.126" minimum thickness), with ASTM A653 SS Grade 33, or ASTM A1011 Grade 36, Type 2.
- Fabricate plates with obround holes as given below. If plates are galvanized after holes are punched, oversize holes to account for galvanized thickness.
- Insert MTW45-8 into obround holes and drive Strong-Drive SDCF Timber-CF screws at a 45° angle in the direction specified by the designer. Countersunk screw heads shall be fully seated into MTW45-8 screw hole.

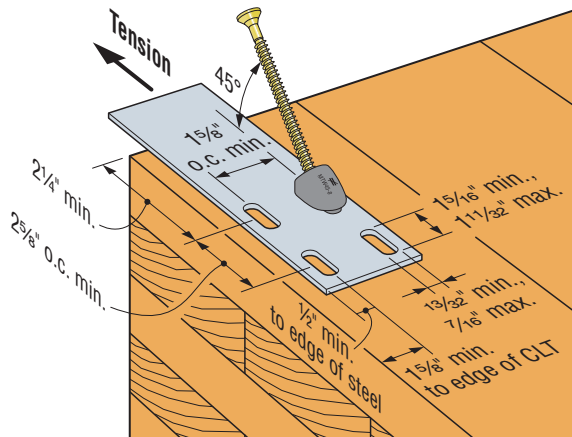
**Loads:** Contact Simpson Strong-Tie for the latest single fastener loads. Allowable loads for straps using the MTW45-8 are the responsibility of the designer.



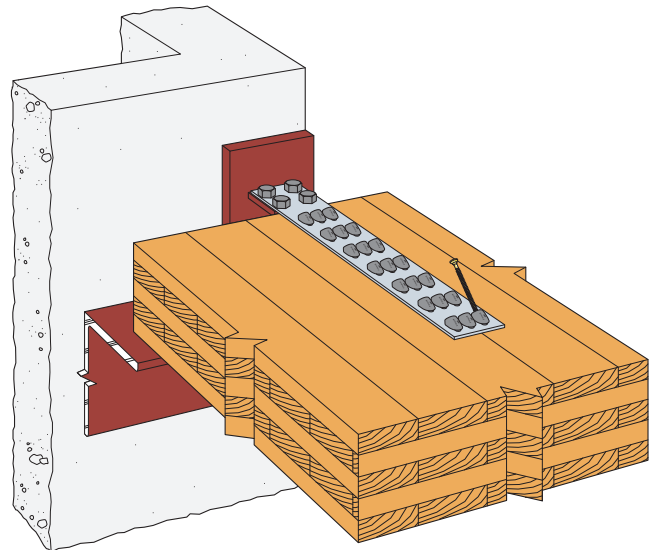
Strap Ties

**Notes:**

1. If using hot-dipped galvanized plates, increase slot dimensions by 1/32". This assumes that galvanized thickness is no thicker than 10 mils on any edge and must be verified with the galvanizer.
2. Min. plate thickness is 10 gauge (0.124" min.).



Recommended Plate Dimensions and Placement Relative to CLT End/Edge



Typical MTW45-8 Installation for CLT Floor Diaphragm Drag Strap at Concrete Core