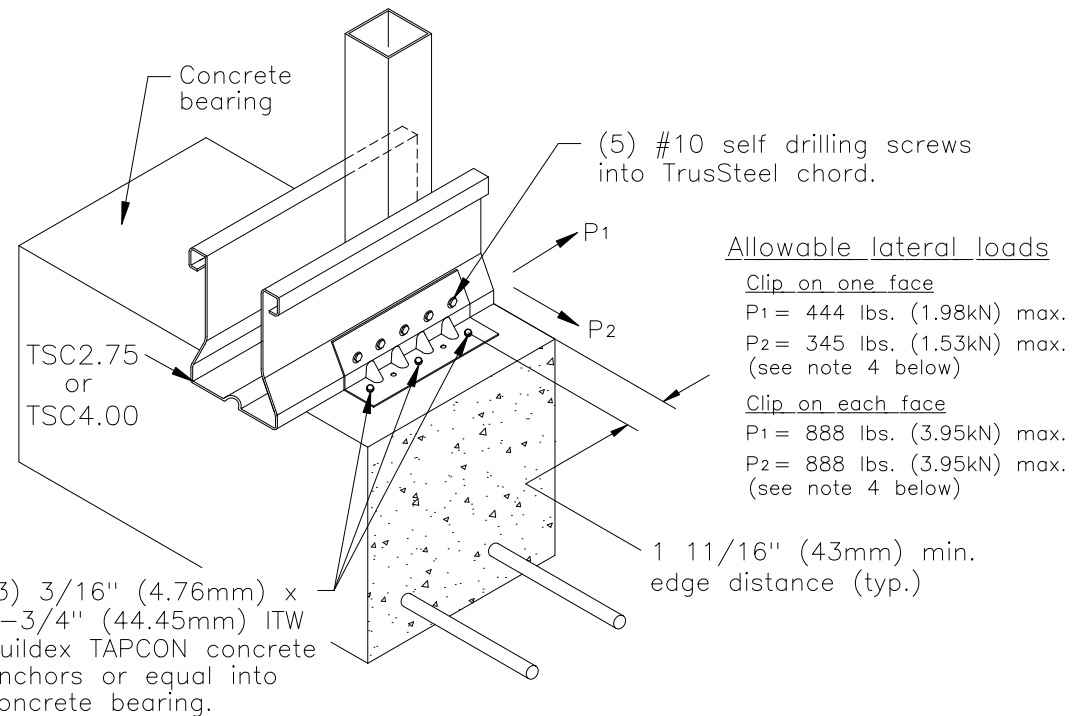


TSUC5 Uplift Attachment to Concrete

Total Uplift Capacity lbs. (kN)		
Concrete Strength psi (MPa)	Clip on one face	Clip on each face
2000 (13.79)	290 (1.29)	670 (2.98)
3000 (20.68)	390 (1.73)*	920 (4.09)
4000 (27.58)	420 (1.87)*	990 (4.40)
5000 (34.47)	460 (2.05)*	1100 (4.89)

- The uplift capacities outlined above may be doubled (except as shown with "*") provided a special inspection is performed regarding this connection. Refer to concrete anchors manufacturers code approval and appropriate building code for definition of a special inspection.
- * These uplift allowables are not to exceed 540 lbs. (2.40kN) under any circumstance.
- The uplift capacities shown above have been increased by 1.33 and may be used only for uplift resulting from wind or seismic loads. For uplift due to other loads, use 75% of tabulated values.



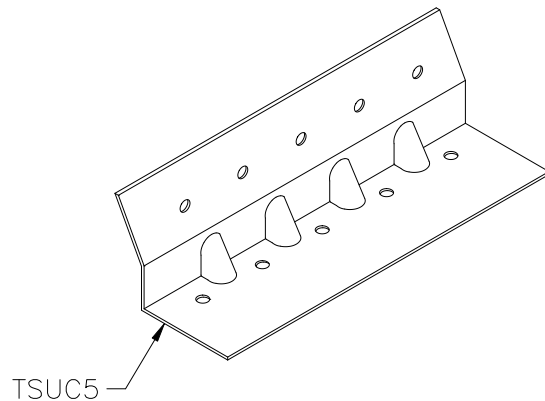
Allowable lateral loads

Clip on one face

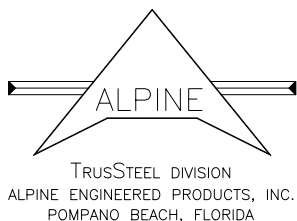
P1 = 444 lbs. (1.98kN) max.
 P2 = 345 lbs. (1.53kN) max.
 (see note 4 below)

Clip on each face

P1 = 888 lbs. (3.95kN) max.
 P2 = 888 lbs. (3.95kN) max.
 (see note 4 below)



1. Attachment of second clip on opposite face of chord is identical to what is detailed.
2. TAPCON concrete anchor spacing is 2" (51mm) minimum. Fill outside holes and middle hole of TSUC5 clip.
3. Refer to manufacturers specification regarding proper installation of anchor.
4. Lateral allowable loads (P1, P2) shown are maximum values. If these loads are in combination with an uplift load, contact an Alpine Engineered Products, Inc. engineer or refer to the concrete anchor manufacturers code approval.
5. Concrete anchor is not to be installed until concrete has reached the specified design strength.
6. Reference manufacturers code approval for other concrete anchors.



****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING INSTALLING AND BRACING. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. BRACING DEPICTED ON THIS DESIGN IS ONLY FOR LATERAL SUPPORT OF TRUSS MEMBERS TO REDUCE BUCKLING LENGTHS. ALL DESIGN, ATTACHMENT AND INSTALLATION OF TEMPORARY AND PERMANENT BRACING, TO RESIST LATERAL FORCES AND HOLD TRUSSES PLUMB, SHALL BE THE RESPONSIBILITY OF OTHERS. ALPINE ENGINEERED PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN OR HANDLING, SHIPPING, INSTALLING, AND BRACING OF TRUSSES. AN ENGINEER'S SEAL ON THIS DRAWING APPLIES ONLY TO DESIGN OF THE TRUSS DEPICTED HERE AND SHALL NOT BE RELIED UPON IN OTHER WAY.

TrusSteel DETAIL
 DATE 12/21/01
 DRWG TS031
 -ENG