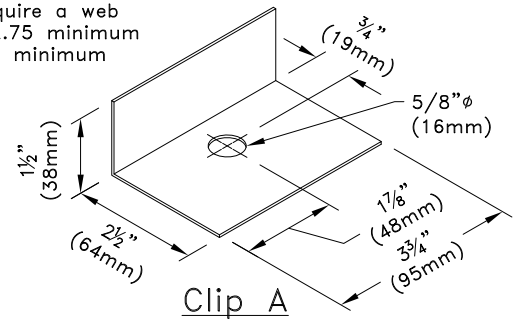
Allowable Loads – lbs (kN)[A,B]					
f'c of concrete psi (MPa)	Allowable Loads	12g Clip			
		TSC2.75 Chord		TSC3.00 or TSC4.00 Chord	
		Clip on One Face[C,D]	Clip on Both Faces	Clip on One Face[C,E]	Clip on Both Faces
2500 (17.24)	U	320 (1.42)	1170 (5.20)	630 (2.80)	1280 (5.69)
	P_1	590 (2.62)	840 (3.74)	590 (2.62)	920 (4.09)
3000 (20.68)	U	320 (1.42)	1300 (5.79)	630 (2.80)	1420 (6.32)
	P_1	660 (2.94)	920 (4.09)	660 (2.94)	1000 (4.45)
4000 (27.58)	U	320 (1.42)	1500 (6.67)	630 (2.80)	1640 (7.30)
	P_1	770 (3.43)	1060 (4.72)	770 (3.43)	1160 (5.16)
5000 (34.47)	U	320 (1.42)	1640 (7.30)	630 (2.80)	1640 (7.30)
	P_1	820 (3.65)	1190 (5.29)	820 (3.65)	1300 (5.78)

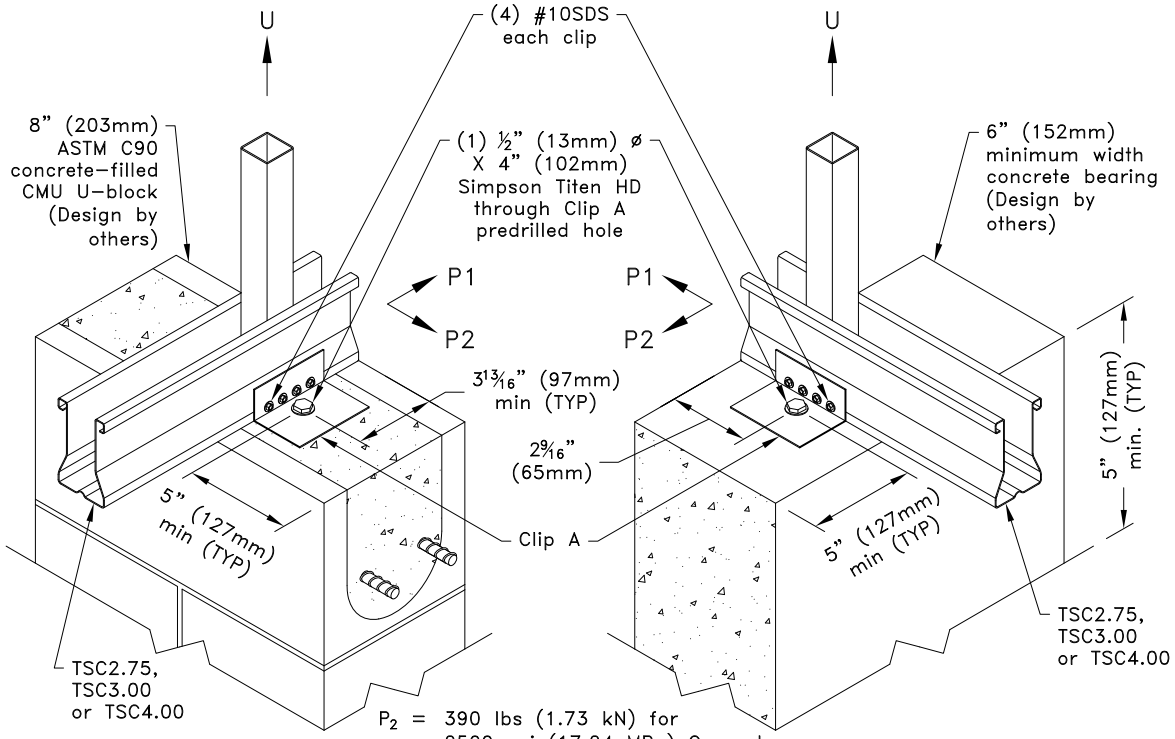
Allowable Loads – lbs (kN)[A,B]					
f'c of concrete psi (MPa)	Allowable Loads	16g Clip			
		TSC2.75 Chord		TSC3.00 or TSC4.00 Chord	
		Clip on One Face[C,D]	Clip on Both Faces	Clip on One Face[C]	Clip on Both Faces
2500 (17.24)	U	320 (1.42)	960 (4.27)	480 (2.14)	960 (4.27)
	P_1	590 (2.62)	840 (3.74)	590 (2.62)	840 (3.74)

A. Allowable loads shown on this detail are not in combination.
B. Design values are for cracked or uncracked concrete.
C. Uplift connections with clip on one face require a web above connection. For values in chart, TSC2.75 minimum web is 33W.75x.75 and TSC3.00 or TSC4.00 minimum web is 33W1.5x.75.
D. If web above connection is 33W.75x1.5, U = 480 lbs (2.14 kN) with 16g clip and U = 570 lbs (2.54 kN) with 12g clip.
E. If web above connection is 33C1.5x1.5, U = 820 lbs (3.65 kN)



Clip A

16 ga ASTM A653 SS Grade 33 G60
Bare metal thickness, t = 0.0538" (1.37mm)
or
12 ga ASTM A653 SS Grade 33 G60
Bare metal thickness, t = 0.0966" (2.45mm)



P_2 = 390 lbs (1.73 kN) for 2500 psi (17.24 MPa) Concrete
P_2 = 420 lbs (1.87 kN) for 3000 psi (20.68 MPa) Concrete

General Notes:

1. SDS = Self-Drilling Tapping Screw
2. #10SDS screw spacing, end distance, and edge distance is 9/16" (14mm) minimum.
3. Attachment of second clip on opposite face of chord is identical to what is detailed.
4. Multi-ply trusses require a clip on each face. Refer to TrusSteel detail drawing TS023A for ply-to-ply connections for 3-Ply trusses with a clip on each face.
5. Special inspection is required. For proper installation of Titen HD fasteners and requirements of special inspection, refer to ICC ESR-2713 (September, 2017).
6. It is the responsibility of the building designer to verify that the structural support members are designed for all applicable loads including (but not limited to) the loads given on this detail.
7. Allowable loads shown are for use with normal weight concrete.
8. Cold-Formed Steel Calculations are per the AISI 2016 "North American Specifications for the Design of Cold-Formed Steel Structural Members" (S100-16).

ALPINE TrusSteel™

www.TrusSteel.com

Florida: 6750 Forum Drive, Suite 305 / Orlando, FL 32821 / (800) 755-6001
Missouri: 13723 Riverport Drive, Suite 200 / Maryland Heights, MO 63043 / (800) 326-4102

Uplift Attachment To Concrete Bearing

Alpine, a division of ITW Building Components Group, Inc. shall not be responsible for any performance failure in a connection due to a deviation from this detail. Any variation from this detail shall be approved in advance by Alpine, a division of ITW Building Components Group, Inc.

Standard Detail: TS031B

Date: 10/11/18

TrusSteel Detail Category: Truss-To-Bearing: Concrete