

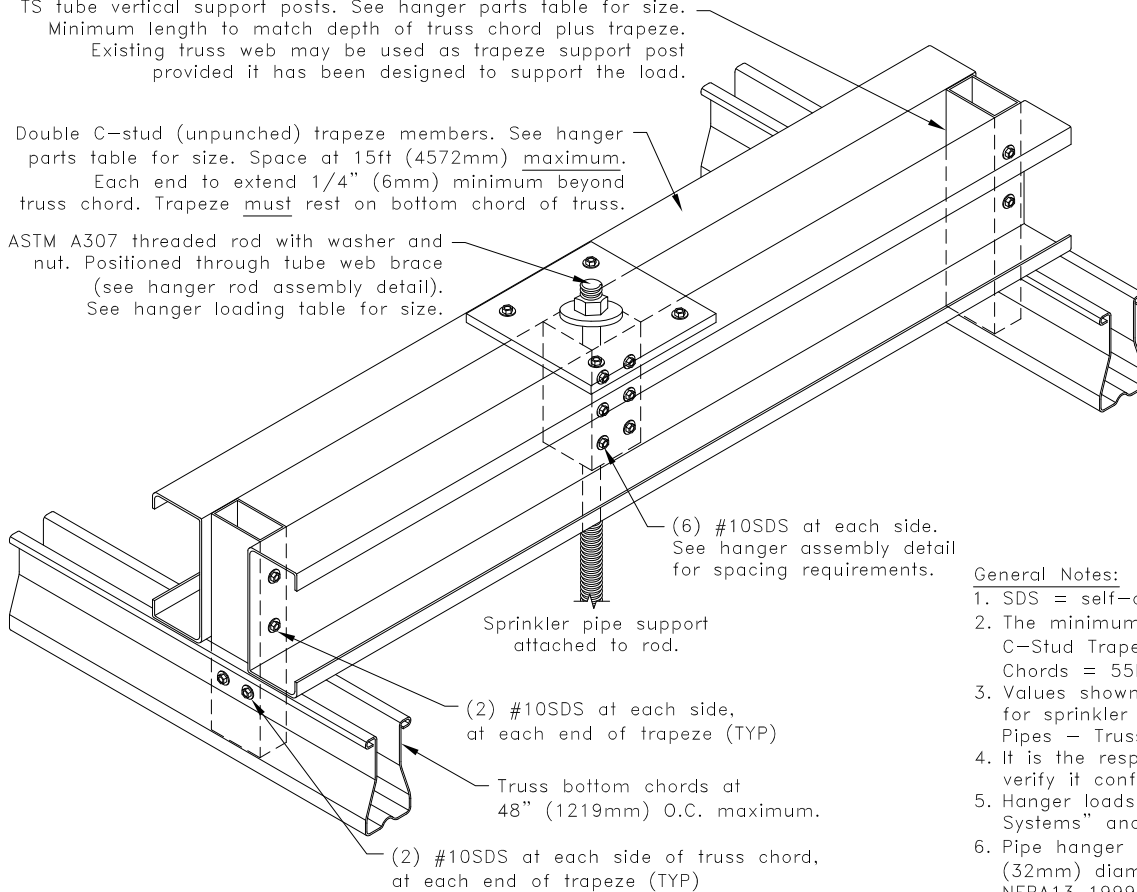
Hanger Parts Table			
Maximum Sprinkler Pipe Dia. 5 in. (127mm)			
Truss Chord Size	Trusses at 24" (610mm) O.C.	Trusses at 48" (1219mm) O.C.	Support Post
	Trapeze Member	Trapeze Member	
TSC2.75	(2) 362S162-43	(2) 362S162-68 ^A	33W.75x1.5
TSC2.75	(2) 600S162-33	(2) 600S162-43	33W.75x1.5
TSC3.00 or TSC4.00	(2) 362S162-43	(2) 362S162-68 ^A	33W1.5x1.5
TSC3.00 or TSC4.00	(2) 600S162-33	(2) 600S162-43	33W1.5x1.5

(A) Grade 50 steel required.

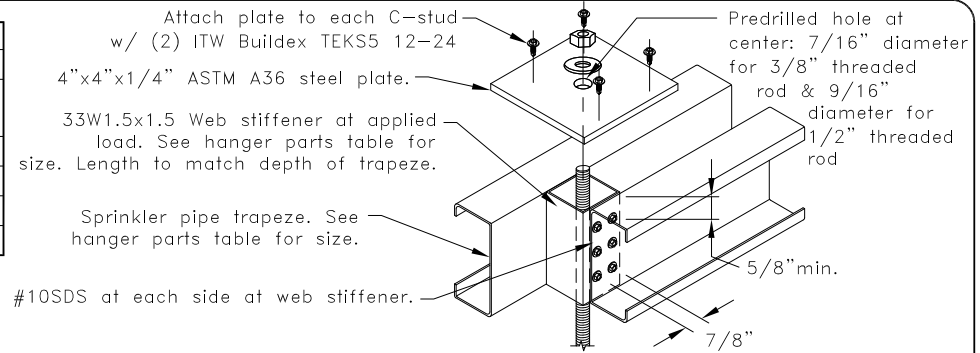
TS tube vertical support posts. See hanger parts table for size. Minimum length to match depth of truss chord plus trapeze. Existing truss web may be used as trapeze support post provided it has been designed to support the load.

Double C-stud (unpunched) trapeze members. See hanger parts table for size. Space at 15ft (4572mm) maximum. Each end to extend 1/4" (6mm) minimum beyond truss chord. Trapeze must rest on bottom chord of truss.

ASTM A307 threaded rod with washer and nut. Positioned through tube web brace (see hanger rod assembly detail). See hanger loading table for size.



Note: Hanger rod assembly may be placed anywhere along the trapeze.



Hanger Rod Assembly Detail

Note: Multiply above units by 25.4 for millimeters.

Sprinkler Pipe Diameter & Hanger Load		
Sprinkler Pipe Diameter in. (mm)	Maximum Hanger Load lbs. (kN) ^B	Threaded Rod Dia. in. (mm) ^C
2 1/2 (25)	840 (3.74)	3/8 (10)
3 (76)	1060 (4.71)	3/8 (10)
3 1/2 (89)	1260 (5.60)	3/8 (10)
4 (102)	1480 (6.58)	3/8 (10)
5 (127)	2010 (8.94)	1/2 (13)

(B) Values given are based on 15' (4572mm) maximum hanger spacing.
 (C) For 3/8" (10mm) diameter threaded rod / nut, washer inside diameter = 7/16" (11mm) and outside diameter = 13/16" (21mm). For 1/2" (13mm) diameter threaded rod / nut, washer inside diameter = 9/16" (14mm) and outside diameter = 1-1/16" (27mm).

General Notes:

1. SDS = self-drilling tapping screw. Screw spacing, end and edge distance is 9/16" (14mm) min.
2. The minimum yield strengths of materials are as follows (unless otherwise noted): C-Stud Trapeze = 33ksi (228 MPa), Tube steel support posts = 45ksi (310 MPa), TrusSteel Chords = 55ksi (379 MPa).
3. Values shown are for the sprinkler pipe hanger only. Truss must be properly loaded for sprinkler pipe load. Refer to TrusSteel Technical Bulletin TB00.09.01, "Sprinkler Pipes - Truss Loading & Connections".
4. It is the responsibility of the architect or engineer of record to review this hanger design to verify it conforms with the overall sprinkler system support design.
5. Hanger loads were determined per NFPA13 "Standard For The Installation Of Sprinkler Systems" and assume schedule 40 steel pipe.
6. Pipe hanger spacing shall not exceed 12' (3658mm) for pipes up to and including 1-1/4" (32mm) diameter and 15' (4572mm) for pipes greater than 1-1/4" (32mm) diameter per NFPA13 1999.
7. Nut shall be grade A, HEX conforming to ASTM A563 and Washer shall conform to ASTM F436.
8. Cold-Formed Steel Calculations are per the 2010 supplement to the AISI 2007 "North American Specifications for the Design of Cold-Formed Steel Structural Members" (S100-07/S2-10).

TrusSteel[®]

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**Double C-Stud Sprinkler
 Trapeze at Bottom Chord for
 5" (127mm) Max. Diameter Pipe**

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 ITW Building Components Group, Inc.

Standard Detail:

TS049G

Date:

07/16/12

TrusSteel Detail Category:

Bottom Chord Sprinkler Hanger