

Titen HD® Design Information — Masonry



Titen HD Allowable Tension Loads for 8" Lightweight, Medium-Weight and Normal-Weight CMU Chair Blocks Filled with Normal-Weight Concrete

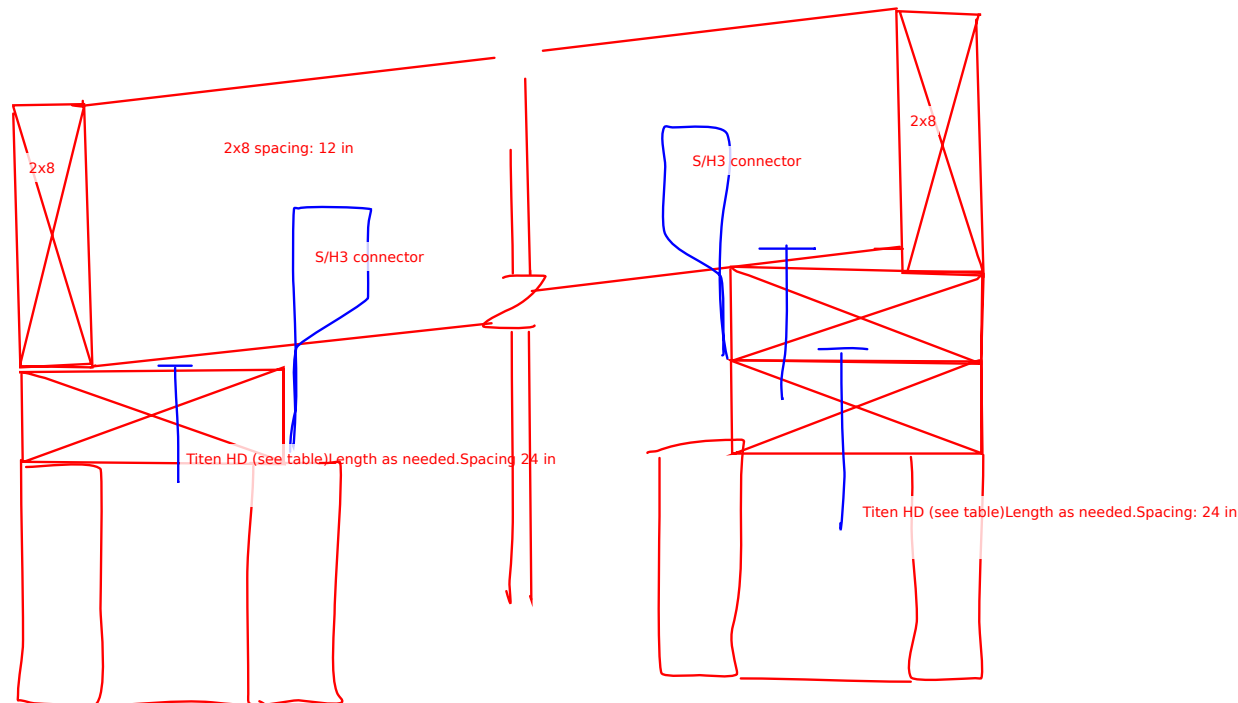


Size in. (mm)	Drill Bit Dia. (in.)	Min. Embed. Depth in. (mm)	Min. Edge Dist. in. (mm)	Critical Spacing in. (mm)	8" Concrete-Filled CMU Chair Block Allowable Tension Loads Based on CMU Strength	
					Ultimate lb. (kN)	Allowable lb. (kN)
3/8 (9.5)	3/8	2 3/8 (60)	1 3/4 (44)	9 1/2 (241)	3,175 (14.1)	635 (2.8)
		3 3/8 (86)	1 3/4 (44)	13 1/2 (343)	5,175 (23.0)	1,035 (4.6)
		5 (127)	2 1/4 (57)	20 (508)	10,584 (47.1)	2,115 (9.4)
1/2 (12.7)	1/2	8 (203)	2 1/4 (57)	32 (813)	13,722 (61.0)	2,754 (12.2)
		10 (254)	2 1/4 (57)	40 (1016)	16,630 (74.0)	3,325 (14.8)
5/8 (15.9)	5/8	5 1/2 (140)	1 3/4 (44)	22 (559)	9,025 (40.1)	1,805 (8.1)

- The tabulated allowable loads are based on a safety factor of 5.0.
- Values are for 8"-wide concrete masonry units (CMU) filled with concrete, with minimum compressive strength of 2,500 psi and poured monolithically with the floor slab.
- Center #5 rebar in CMU cell and concrete slab as shown in the illustration below.

Spacing = 24 in

Technical Anchors



Designed to provide seismic and wind ties for trusses or joists, this versatile line may be used for general tie purposes, strongback attachments, and as all-purpose ties where one member crosses another.

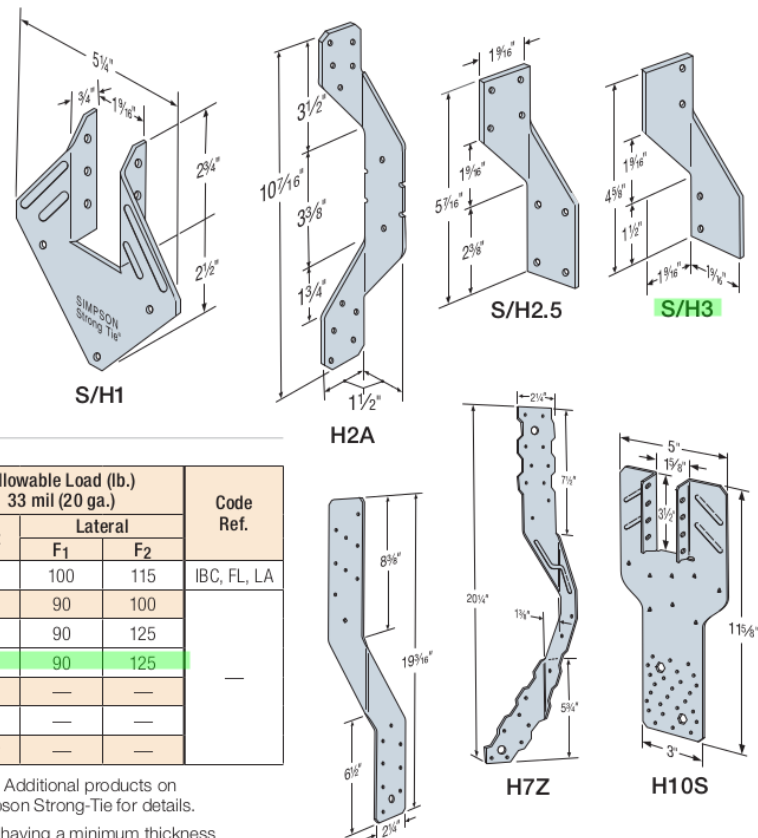
Material: See table

Finish: Galvanized (G90). Available with ZMAX® coating; see Corrosion Information, pp. 17–19.

Installation: • Use all specified fasteners

- The S/H1 can be installed with flanges facing outwards (reverse of illustration 1) when installed inside a wall for truss applications
- Hurricane ties do not replace solid blocking
- S/H2.5, S/H3 and H6 ties are only shipped in equal quantities of rights and lefts

Codes: See p. 11 for Code Reference Key Chart



Model No.	Connector Material Thickness mil (ga.)	Fasteners ⁵			Allowable Load (lb.) 33 mil (20 ga.)			Code Ref.
		To Rafters /Truss	To Top Track	To Stud	Uplift	Lateral F ₁	F ₂	
S/H1	43 (18)	(3) #10	(2) #10	(1) #10	305	100	115	IBC, FL, LA
H2A	43 (18)	(5) #10	(1) #10	(5) #10	450	90	100	
S/H2.5	43 (18)	(4) #10	—	(4) #10	390	90	125	
S/H3	43 (18)	(2) #10	(2) #10	—	375	90	125	
H6	54 (16)	—	(8) #10	(8) #10	950	—	—	
H7Z	54 (16)	(4) #10	(2) #10	(8) #10	985	—	—	
H10S ⁴	43 (18)	(8) #10	—	(8) #10	930 ³	—	—	

These products are available with additional corrosion protection. Additional products on this page may also be available with this option. Check with Simpson Strong-Tie for details.

1. Loads are based on attachment of cold-formed steel members having a minimum thickness



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CANNERY TRAIL RESIDENCES

1750 N OXFORD AVE. - EAU CLAIRE, WI
Z-12 - 20200514 - FRAMING AT ELEVATOR

Date	Description
05.14.2020	FRAMING AT ELEVATOR ROOF