Seismic and Hurricane Ties / Lateral Truss Anchor

The Hurricane Tie series features various configurations of wind and seismic ties for trusses and rafters.

The H10S provides a high-capacity connection from truss/rafter to wall. Also suitable for wood-to-wood applications (see pp. 276–278).

The HM9 is designed to retrofit roof truss/rafters for block construction. The HM9 hurricane tie provides high uplift and lateral capacity using Titen Turbo™ concrete and masonry screws.

The presloped 5/12 seat of the H16 provides for a tight fit and reduced deflection. The strap length provides for various truss heights up to a maximum of 13½". Minimum heel height for H16 series is 4".

The LTA2 is an embedded truss anchor for grout-filled CMU and concrete walls that develops high loads with shallow embedment. Designed for 2x4 minimum truss chords, the LTA2 resists uplift and lateral loads parallel and perpendicular to the wall with a minimum heel height requirement.

Material: H Ties — see table; LTA2 — 18 gauge

Finish: Galvanized; see Corrosion Information, pp. 12-15

Installation:

- Use all specified fasteners; see General Notes.
- Products shall be installed such that the Titen Turbo screws and Titen HD[®] screw anchors are not exposed to the exterior environment.

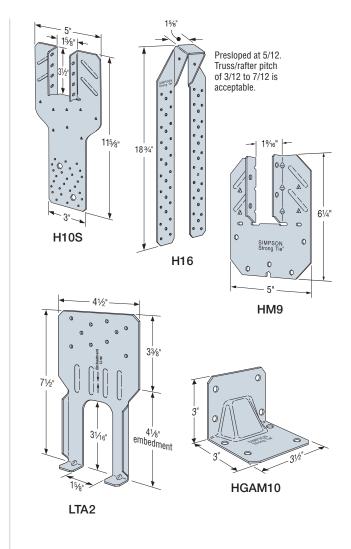
H Ties:

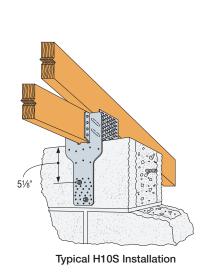
- Connectors attached using hex head Titen Turbo screws.
- Attach to grouted concrete block with a minimum one #5 rebar horizontal in the course.
- Hurricane ties do not replace solid blocking.

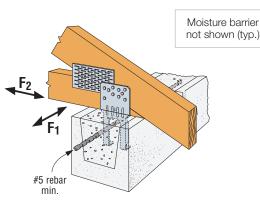
LTA2:

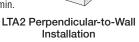
- Whether in grout-filled CMU or concrete, the LTA2 must be embedded to the depth of the embedment line stamped on the part.
- A minimum of one horizontal #5 rebar is required at top of concrete or in the top course of grout-filled CMU.
- For parallel-to-wall applications, install the LTA2 with flanges facing the center of the wall. Minimum edge distance of 1½" required.

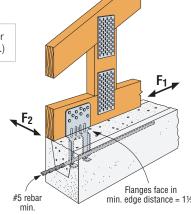
Codes: See p. 11 for Code Reference Key Chart











LTA2 Parallel-to-Wall Installation

H/LTA2



Seismic and Hurricane Ties / Lateral Truss Anchor (cont.)

Model No.	Ga.	W (in.)	L (in.)	Fasteners (in.)			DF/SP Allowable Loads			SPF/HF Allowable Loads			
				To Rafter/Truss	To GFCMU Titen Turbo™	To Concrete Titen Turbo	Uplift	ft Lateral (160)		Uplift	ft Lateral (160)		Code Ref.
							(160)	F ₁	F ₂	(160)	F ₁	F ₂	
HM9KT	18	1%6	61/4	(4) 1/4 x 1 1/2 SDS	(5) 1/4 x 2 1/4	(5) 1/4 x 1 3/4	760	670	190	760	670	190	
HGAM10KTA	14	_	_	(4) 1/4 x 1 1/2 SDS	(4) 1/4 x 23/4	(4) 1/4 x 1 3/4	810	875	1,105 ⁷	585	630	795 ⁷	
H10S	18	1%	115/8	(8) 0.131 x 1½	(2) 3/8 x 4 Titen HD®	(2) 3/8 x 4 Titen HD®	910	_	_	780	_	_	
LTA2 Perpendicular-to- Wall Installation	18	_	_	(10) 0.148 x 1½	Embed	Embed	1,180	415	875	990	415	735	FL
LTA2 Parallel-to-Wall Installation	18	_	_	(10) 0.148 x 1½	Embed	Embed	1,180	950	220	990	800	220	
H16	18	1%	18¾	(2) 0.148 x 1½	(6) 1/4 x 21/4	(6) 1/4 x 1 3/4	1,370	_	_	1,180	_	_	

- 1. Loads have been increased for wind or earthquake loading, with no further increase allowed. Reduce where other loads govern.
- 2. HGAM10KTA allowable loads are for one anchor. A minimum rafter thickness of 2½" must be used when framing anchors are installed on each side of the rafter or truss.
- 3. Concrete shall have a minimum compressive strength of $f'_{C} = 2,500$ psi.
- 4. Grout-filled CMU (GFCMU) shall have a minimum compressive strength of $f'_m = 1,500$ psi.
- 5. The HM9KT and HGAM10KTA are kits with (20) HM9 and (10) HGAM10 connectors packaged with Strong-Drive® SDS Heavy-Duty Connector screws and 21/4" and 23/4" Titen Turbo screws, respectively. (13/4" Titen Turbo screws for concrete installations sold separately.)
- 6. See p. 353 for Titen Turbo screw information.

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- 7. HGAM10 F2 loads are for forces into the connector. F2 loads away from the connector are 640 lb. (DF/SP) and 460 lb. (SPF/HF).
- 8. LTA2 allowable uplift on SP is 1,350 lb. for perpendicular-to-wall installation and parallel-to-wall installation.
- 9. Fasteners: Nail dimensions are listed diameter by length. SDS screws are Simpson Strong-Tie® Strong-Drive® SDS Heavy-Duty Connector screws. Titen Turbo screws are Simpson Strong-Tie concrete and masonry screws (hex-head model required). See pp. 21–22 for fastener information.

