

# THA/THAC Adjustable Truss Hangers



This product is preferable to similar connectors because of  
a) easier installation, b) higher loads, c) lower installed cost,  
or a combination of these features.

The THA series have extra long straps that can be field-formed to give height adjustability and top flange hanger convenience. THA hangers can be installed as top flange or face mount hangers.

THA4x and THA2x-2 models feature a dense nail pattern in the straps, which provides more installation options and allows for easy top flange installation.

**MATERIAL:** See table

**FINISH:** Galvanized. Some products available in ZMAX® coating; see Corrosion Information, page 10-11.

**INSTALLATION:** • Use all specified fasteners. See General Notes.

The following installation methods may be used:

• **Top Flange Installation**—The straps must be field formed over the header – see table for minimum top flange requirements. Install top and face nails according to the table. Top nails shall not be within 1/4" from the edge of the top flange members.

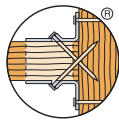
For the THA29, nails used for joist attachment must be driven at an angle so that they penetrate through the corner of the joist and into the header. For all other top flange installations, straighten the double shear nailing tabs and install the nails straight into the joist.

• **Face Mount Installation**—Install all face nails according to the table. Not all nail holes will be filled on all models. On models where there are more nail holes than required, the lowest 4 face holes must be filled. Nails used for the joist attachment must be driven at an angle so that they penetrate through the corner of the joist into the header.

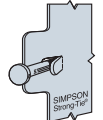
• **Alternate Installation**—The THA 4x hangers may be installed in a top flange configuration using the tabulated fasteners for face mount installation and achieve the face mount installation loads. Install the tabulated face nails into the face and top of the carrying member. Nails used for the joist attachment must be driven at an angle so that they penetrate through the corner of the joist into the header.

**OPTIONS:** • THA hangers available with the header flanges turned in for 3/8" (except THA413) and larger, with no load reduction – order THAC hanger.

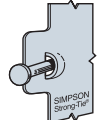
**CODES:** See page 12 for Code Reference Key Chart.



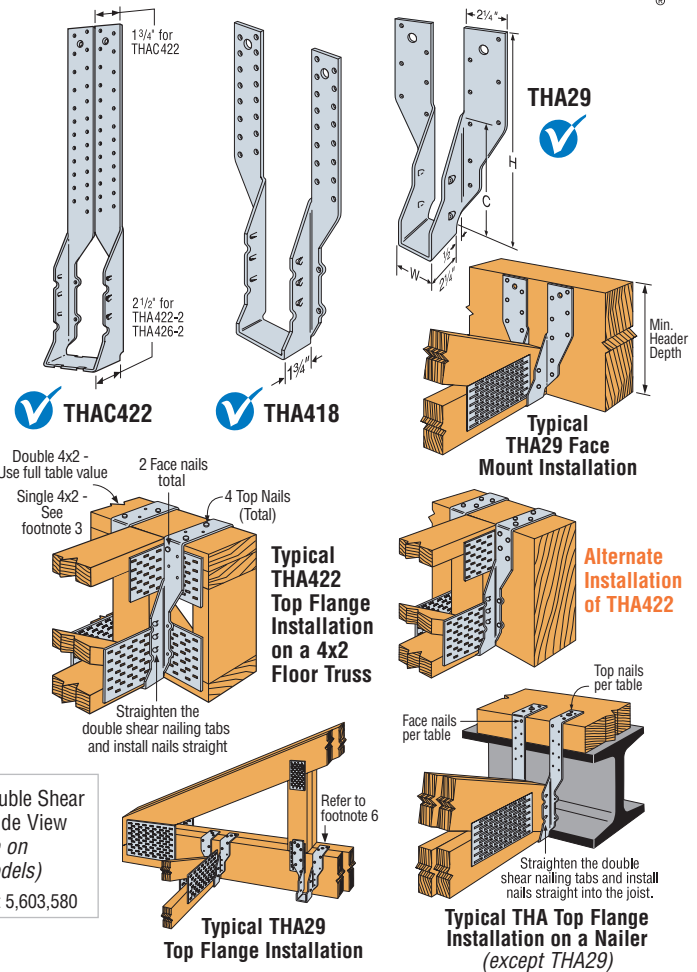
Double Shear Nailing Top View



Double Shear Nailing Side View  
Do not bend tab unless otherwise noted



Dome Double Shear Nailing Side View (available on some models)  
U.S. Patent 5,603,580



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.

Model No.	Ga	Dimensions			Min. <sup>5</sup> Top Flange	Min. Header Depth	Fasteners				DF/SP Allowable Loads					SPF/HF Allowable Loads					Code Ref.
		W	H	C			Carrying Member		Carried Member		Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Wind (160)	Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Wind (160)	
							Top	Face	Straight	Slant											
<b>TOP FLANGE INSTALLATION<sup>3</sup></b>																					
THA29	18	1 5/8	9 1/16	5 1/2	2 1/16	—	4-10d	4-10d	—	4-10d	750	2260	2310	2350	2350	645	1740	1785	1815	1815	18, L1, F7
THA213	18	1 5/8	13 3/16	5 1/2	1 1/2	—	4-10d	2-10d	4-10dx1 1/2	—	—	1615	1615	1615	1615	—	1280	1280	1280	1280	
THA218	18	1 5/8	17 3/16	5 1/2	2	—	4-10d	2-10d	4-10dx1 1/2	—	—	1615	1615	1615	1615	—	1280	1280	1280	1280	
THA218-2	16	3/8	17 1/16	8	2	—	4-16d	2-16d	6-10d	—	—	2250	2250	2250	2250	—	1935	1935	1935	1935	
THA222-2	16	3/8	22 3/16	8	2	—	4-16d	2-16d	6-10d	—	—	2250	2250	2250	2250	—	1935	1935	1935	1935	
THA413	18	3/8	13 3/16	4 1/2	1 1/2	—	4-10d	2-10d	4-10d	—	—	1615	1615	1615	1615	—	1280	1280	1280	1280	
THA418	16	3/8	17 1/2	7 7/8	2	—	4-16d	2-16d	6-10d	—	—	2250	2250	2250	2250	—	1935	1935	1935	1935	
THA422	16	3/8	22	7 7/8	2	—	4-16d	2-16d	6-10d	—	—	2250	2250	2250	2250	—	1935	1935	1935	1935	
THA426	14	3/8	26	7 7/8	2	—	4-16d	4-16d	6-16d	—	—	2435	2435	2435	2435	—	2095	2095	2095	2095	
THA422-2	14	7/8	22 1/16	9 3/4	2	—	4-16d	4-16d	6-16d	—	—	3330	3330	3330	3330	—	2865	2865	2865	2865	
THA426-2	14	7/8	26 1/16	9 3/4	2	—	4-16d	4-16d	6-16d	—	—	3330	3330	3330	3330	—	2865	2865	2865	2865	
<b>FACE MOUNT INSTALLATION<sup>4</sup></b>																					
THA29	18	1 5/8	9 1/16	5 1/2	—	9 1/16	—	16-10d	—	4-10d	750	2125	2310	2350	2350	645	1740	1785	1815	1815	18, L1, F7
THA213	18	1 5/8	13 3/16	5 1/2	—	13 3/16	—	14-10d	—	4-10d	930	1795	1840	1870	1870	780	1385	1425	1450	1450	
THA218	18	1 5/8	17 3/16	5 1/2	—	17 3/16	—	18-10d	—	4-10d	930	1795	1840	1870	1870	780	1385	1425	1450	1450	
THA218-2	16	3/8	17 1/16	8	—	14 1/16	—	22-16d	—	6-16d	1855	3705	3705	3705	3705	1595	3185	3185	3185	3185	
THA222-2	16	3/8	22 3/16	8	—	14 1/16	—	22-16d	—	6-16d	1855	3705	3705	3705	3705	1595	3185	3185	3185	3185	
THA413	18	3/8	13 3/16	4 1/2	—	13 3/8	—	14-10d	—	4-10d	930	1940	2235	2400	2400	780	1660	1910	2075	2210	
THA418	16	3/8	17 1/2	7 7/8	—	14 1/16	—	22-16d	—	6-16d	1855	3705	3705	3705	3705	1595	3185	3185	3185	3185	
THA422	16	3/8	22	7 7/8	—	14 1/16	—	22-16d	—	6-16d	1855	3705	3705	3705	3705	1595	3185	3185	3185	3185	
THA426	14	3/8	26	7 7/8	—	16 1/16	—	30-16d	—	6-16d	1855	4550	4550	4550	4550	1595	3915	3915	3915	3915	
THA422-2	14	7/8	22 1/16	9 3/4	—	16 3/16	—	30-16d	—	6-16d	1855	5160	5520	5520	5520	1595	4435	4745	4745	4745	
THA426-2	14	7/8	26 1/16	9 3/4	—	18	—	38-16d	—	6-16d	1855	5520	5520	5520	5520	1595	4745	4745	4745	4745	

1. Uplift has been increased 60% for wind or earthquake loading with no further increase allowed; reduce where other loads govern.

2. Wind (160) is a download rating.

3. For single 4x2 top chord carrying members or single 2x nailers, the following THA hangers can be installed using 10dx1 1/2" top nails and 2-16d face nails with reduced allowable loads as noted: 1415 lbs. for THA418 and THA422, 2255 lbs. for THA426, and 2345 lbs. for THA422-2 and THA426-2. Loads are based on hanger installations at panel points.

4. Face mount installation loads are based on minimum of 2-ply 2x carrying member. For single 2x carrying members, use 10dx1 1/2" nails into the

carrying member and tabulated fasteners into the carried member, and use 0.80 of the table value for 18 gauge, and 0.68 of the table value for 16 gauge and 14 gauge.

5. Min. Top Flange refers to the minimum length of strap that must be field formed over the header.

6. For the THA2x models, one strap may be installed vertically according to the face mount nailing requirements and the other strap wrapped over the top chord according to the top flange nailing requirements (see drawing above) and achieve full tabulated top flange installation loads. The THA29 allowable uplift for this application is 575 lbs.

7. NAILS: 16d = 0.162" dia. x 3 1/2" long, 10d = 0.148" dia. x 3" long, 10dx1 1/2 = 0.148" dia. x 1 1/2" long. See page 16-17 for other nail sizes and information.