C-C-2024 @ 2024 SIMPSON STRONG-TIE COMPANY INC.

THA/THAC

Strong-T

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 or HDG.

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 2" minimum (27/16" for the THA29). 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 top-flange (min.) installations (not applicable to the THA29), straighten the double-shear nailing tabs and install the nails straight into the joist. For top-flange (max.) installations, nails used for joist attachment must be driven at an angle so that they penetrate through the joist and into the header (requires full backing), and the lowest four face holes must be filled.
- Face-Mount (Min.) Installation Install face nails according to the table, with at least half of the required fasteners in the top half of the header. Not all nail holes in the straps will be filled. Nails must have a minimum 1/2" edge distance. Straighten the double-shear nailing tabs and install the joist nails straight into the joist. The face-mount (min.) installation option accommodates conditions where the supported member hangs either partially or entirely below the header.
- Face-Mount (Max.) Installation Install face nails according to the table. Not all nail holes in the straps will be filled except for the following models: THA29, THA213, THA218 and THA413. For all other models with more nail holes than required, the straps may be installed straight or wrapped over the header, with the tabulated quantity of face nails installed into the face and top of the header. The lowest four 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.
- \bullet $\mbox{\bf Uplift}$ Lowest face nails must be filled to achieve uplift loads.

• THA hangers available with the header flanges turned in for 3%" (except THA413) and wider, with no load reduction order THAC hanger.

Codes: See p. 13 for Code Reference Key Chart

Web Applications: Visit app.strongtie.com/hs to access our Hanger Selector web application.







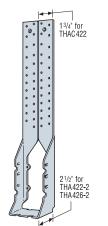
Double-Shear Nailing Top View

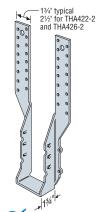


Double-Shear Nailing Side View: Do not bend tab

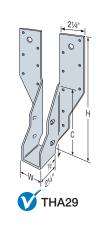


Dome Double-Shear Nailing Side View (Available on some models)



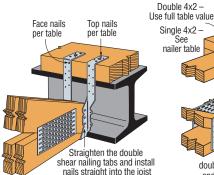


THA418

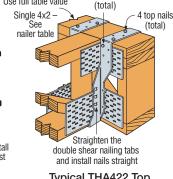


2 face nails

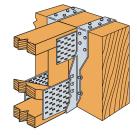






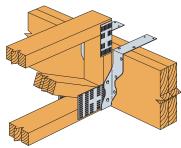


Typical THA422 Top Flange (Min.) Installation on a 4x2 Floor Truss

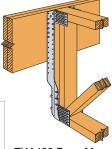


(except THA29)

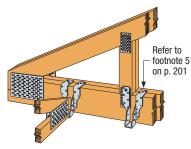
THA422 Face-Mount (Max.) Installation Straps may be installed straight or wrapped over with tabulated face nails installed into top and face of header.



THA413 Top Flange (Max.) Installation



THA422 Face-Mount (Min.) Installation



Typical THA29 Top Flange Installation

THA/THAC



Adjustable Truss Hangers (cont.)

These products are available with additional corrosion protection. For more information, see p. 16.

Model No.	Ga.	Dimensions (in.) Min.			Min.	Fasteners (in.)			DF/SP Allowable Loads				SPF/HF Allowable Loads							
		W	Н	С	Header Depth	Carrying	Member	Carried	Uplift	Floor	Snow	Roof	Wind	Uplift	Floor	Snow	Roof	Wind	Coo Re	
				U	(in.)	Тор	Face	Member	(160)	(100)	(115)	(125)	(160)	(160)	(100)	(115)	(125)	(160)		
							Тор	-Flange Install	ation ³											
THA29 Max.	18	1%	911/16	51/8	5½	(4) 0.148 x 3	(6) 0.148 x 3	(4) 0.148 x 3	465	2,560	2,560	2,560	2,560	405	2,040	2,040	2,040	2,040		
THA213 Min.	18	15/8	135/16	5½	_	(4) 0.148 x 3	(2) 0.148 x 3	(4) 0.148 x 1½	_	1,430	1,430	1,430	1,430	_	1,170	1,170	1,170	1,170		
THA213 Max.	10	1 7/8	13716		71//8	(4) 0.148 x 3	(6) 0.148 x 3	(4) 0.148 x 3	855	2,090	2,090	2,090	2,090	750	1,620	1,620	1,620	1,620		
THA218 Min.	18	15/	173/16	173/16	51/2	_	(4) 0.148 x 3	(2) 0.148 x 3	(4) 0.148 x 1½		1,430	1,430	1,430	1,430		1,170	1,170	1,170	1,170	
THA218 Max.	10	1%			J 72	71/8	(4) 0.148 x 3	(6) 0.148 x 3	(4) 0.148 x 3	855	2,090	2,090	2,090	2,090	750	1,620	1,620	1,620	1,620	
THA218-2 Min.	16	21/	1711/16	0	_	(4) 0.162 x 3½	(2) 0.162 x 3½	(6) 0.148 x 3	_	2,245	2,245	2,245	2,245	_	1,835	1,835	1,835	1,835		
THA218-2 Max.	10	31/8		11/16 8	6 8	111/4	(4) 0.162 x 3½	(6) 0.162 x 3½	(6) 0.162 x 3½	1,855	3,670	3,670	3,670	3,670	1,670	2,790	2,790	2,790	2,790	
THA222-2 Min.	16	31/8	22¾6	23/16 8	_	(4) 0.162 x 3½	(2) 0.162 x 3½	(6) 0.148 x 3	_	2,245	2,245	2,245	2,245	_	1,835	1,835	1,835	1,835		
THA222-2 Max.	10	3 1/8			111/4	(4) 0.162 x 3½	(6) 0.162 x 3½	(6) 0.162 x 3½	1,855	3,670	3,670	3,670	3,670	1,615	2,790	2,790	2,790	2,790	1	
THA413 Min.	18	05/	135/16	41/	_	(4) 0.148 x 3	(2) 0.148 x 3	(4) 0.148 x 3	_	1,430	1,430	1,430	1,430	_	1,055	1,055	1,055	1,055	IBC	
THA413 Max.		3%		4½	71/4	(4) 0.148 x 3	(6) 0.148 x 3	(4) 0.148 x 3	855	2,090	2,090	2,090	2,090	750	1,620	1,620	1,620	1,620	FL	
THA418 Min.	10	05/	471/	7%	_	(4) 0.162 x 3½	(2) 0.162 x 3½	(6) 0.148 x 3	_	2,245	2,245	2,245	2,245	_	1,835	1,835	1,835	1,835	L	
THA418 Max.	16	3%	17½		111/4	(4) 0.162 x 3½	(6) 0.162 x 3½	(6) 0.162 x 3½	1,855	3,670	3,670	3,670	3,670	1,670	2,790	2,790	2,790	2,790	1	
THA422 Min.	40	05/	00	77/	_	(4) 0.162 x 31/2	(2) 0.162 x 3½	(6) 0.148 x 3	_	2,245	2,245	2,245	2,245	_	1,835	1,835	1,835	1,835		
THA422 Max.	16	3%	22 1	22	7%	111/4	(4) 0.162 x 3½	(6) 0.162 x 3½	(6) 0.162 x 3½	1,855	3,670	3,670	3,670	3,670	1,670	2,790	2,790	2,790	2,790	1
THA426 Min.		05/	00	77/	_	(4) 0.162 x 3½	(4) 0.162 x 3½	(6) 0.162 x 3½	_	2,870	2,870	2,870	2,870		2,270	2,270	2,270	2,270		
THA426 Max.	14	3%	26	71/8	111/4	(4) 0.162 x 3½	(6) 0.162 x 3½	(6) 0.162 x 3½	1,855	3,755	3,755	3,755	3,755	1,670	2,945	2,945	2,945	2,945		
THA422-2 Min.		71/	0011/	, , , , ,	_	(4) 0.162 x 3½	(4) 0.162 x 3½	(6) 0.162 x 3½	_	3,330	3,330	3,330	3,330	_	2,465	2,465	2,465	2,465		
THA422-2 Max.	14	71/4	221/16 93	2211/16	9¾	111/4	(4) 0.162 x 3½	(8) 0.162 x 3½	(6) 0.162 x 3½	1,855	4,210	4,210	4,210	4,210	1,670	3,285	3,285	3,285	3,285	İ
THA426-2 Min.		71/	001/	00/	_	(4) 0.162 x 3½	(4) 0.162 x 3½	(6) 0.162 x 3½	_	3,330	3,330	3,330	3,330	_	2,465	2,465	2,465	2,465	1	
THA426-2 Max.	14	71/4	261/16	9¾	111/4	(4) 0.162 x 3½	(8) 0.162 x 3½	(6) 0.162 x 3½	1,855	4,210	4,210	4,210	4,210	1,670	3,285	3,285	3,285	3,285		
							Face-M	ount (Max.) Ins	stallatio	n ⁴										
THA29	18	1%	911/16	51/8	911/16	_	(16) 0.148 x 3	(4) 0.148 x 3	465	2,295	2,305	2,305	2,305	405	1,965	2,250	2,250	2,250	Γ	
THA213	18	1%	135/16	5½	135/16	_	(14) 0.148 x 3	(4) 0.148 x 3	855	2,060	2,210	2,210	2,210	750	1,760	2,020	2,145	2,145		
THA218	18	1%	173/16	5½	173/16	_	(18) 0.148 x 3	(4) 0.148 x 3	855	2,210	2,210	2,210	2,210	750	2,145	2,145	2,145	2,145	İ	
THA218-2	16	31/8	1711/16	8	141/16	_	(22) 0.162 x 3½	(6) 0.162 x 3½	1,855	3,695	3,695	3,695	3,695	1,670	3,330	3,535	3,535	3,535		
THA222-2	16	31/8	223/16	8	141/16	_	(22) 0.162 x 3½	(6) 0.162 x 3½	1,855	3,695	3,695	3,695	3,695	1,670	3,330	3,535	3,535	3,535	 	
THA413	18	35/8	135/16	41/2	13%	_	(14) 0.148 x 3	(4) 0.148 x 3	855	2,060	2,210	2,210	2,210	750	1,760	2,020	2,145	2,145	IB FL	
THA418	16	35/8	17½	77/8	141/16	_	(22) 0.162 x 3½	(6) 0.162 x 3½	1,855	3,695	3,695	3,695	3,695	1,670	3,330	3,535	3,535	3,535	L/	
THA422	16	35/8	22	77/8	141/16	_	(22) 0.162 x 3½	(6) 0.162 x 3½	1,855	3,695	3,695	3,695	3,695	1,670	3,330	3,535	3,535	3,535		
THA426	14	3%	26	77/8	161/16	_	(30) 0.162 x 3½	(6) 0.162 x 3½	1,855	4,315	4,315	4,315	4,315	1,670	3,225	3,225	3,225	3,225	1	
THA422-2	14	71/4	2211/16	93/4	163/16	_	(30) 0.162 x 3½	(6) 0.162 x 3½	1,855	5,170	5,520	5,520	5,520	1,670	4,440	5,010	5,010	5,010		
THA426-2	14	71/4	261/16	9¾	18	_	(38) 0.162 x 3½	(6) 0.162 x 31/9	1,855	5,520	5,520	5,520	5,520	1,670	5,010	5,010	5,010	5,010	1	

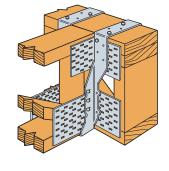
- 1. Uplift loads have been increased for earthquake or wind loading with no further increase allowed. Reduce where other loads govern.
- 2. Wind (160) is a download rating.
- 3. Top flange Installation loads are based on a minimum two-ply 2x carrying member. For top flange (min.) installation on 4x2 truss carrying members with double top chords, use the specified fasteners for full tabulated values; for single 4x2 top chord or nailer applications, refer to the Nailer Table.
- 4. Face-mount installation loads are based on a two-ply 2x carrying member minimum. For single 2x carrying members, use 0.148" x 1½" nails in the carrying member and tabulated fasteners in 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. For the THA 2x models, one strap may be installed vertically according to the face-mount nailing requirements and the other strap wrapped over the truss chord according to the top-flange (min.) nailing requirements (see drawing on p. 200) and achieve full tabulated top flange (min.) installation loads.
- 6. Refer to installation instructions regarding fastener installation into carried (joist) member. Based on the installation condition, nails will be installed either straight with straightened double-shear nailing tabs or slanted.
- 7. THA29 may be installed on a single 2x6 or 2x8 carrying member using (2) 0.148" x 3" top nails, (6) 0.148" x 3" face nails and (4) 0.148" x 3" slant nails with an allowable download of 2,020 lb. for DF/SP and 1,500 lb. for SPF/HF.
- 8. Fasteners: Nail dimensions are listed diameter by length. See pp. 23-24 for fastener information.

THA/THAC

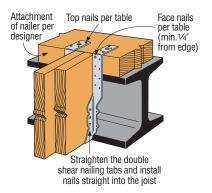
Adjustable Truss Hangers (cont.)

Nailer Table

Model No.	Nailer	Top Nailing	Face Nailing	Joist Nailing	Allowable Loads (100/115/125)			
NO.		(in.)	(in.)	(in.)	DF/SP	SPF/HF		
THA218-2/ THA222-2	2x	(4) 0.148 x 1½	(2) 0.148 x 1½	(6) 0.148 x 1½	1,335	1,245		
	ZX	(4) 0.148 x 1½	(2) 0.162 x 3½	(6) 0.162 x 3½	1,415	1,245		
	(2) 2x	(4) 0.148 x 3	(2) 0.148 x 3	(6) 0.148 x 3	1,835	1,680		
	4x	(4) 0.162 x 3½	(2) 0.162 x 3½	(6) 0.148 x 3	2,245	1,930		
	2x	(4) 0.148 x 1½	(2) 0.148 x 1½	(6) 0.148 x 1½	1,335	1,245		
THA418/ THA422	ZX	(4) 0.148 x 1½	(2) 0.162 x 3½	(6) 0.162 x 3½	1,415	1,245		
	(2) 2x	(4) 0.148 x 3	(2) 0.148 x 3	(6) 0.148 x 3	1,735	1,680		
	4x	(4) 0.162 x 3½ (2) 0.162 x 3½ (6) 0.148		(6) 0.148 x 3	2,245	1,930		
THA426	2x	(4) 0.148 x 1½	(2) 0.148 x 1½	(6) 0.148 x 1½	1,785	1,360		
	ZX	(4) 0.148 x 1½	(2) 0.162 x 3½	(6) 0.162 x 3½	2,255	1,940		
	(2) 2x	(4) 0.148 x 3	(2) 0.148 x 3	(6) 0.148 x 3	1,735	1,680		
	4x	(4) 0.162 x 3½ (4) 0.162 x 3½		(6) 0.162 x 3½	2,435	2,095		
	0,4	(4) 0.148 x 1½	(2) 0.148 x 1½	(6) 0.148 x 1½	1,375	1,325		
THA422-2/	2x	(8) 0.148 x 1½	(2) 0.162 x 3½	(6) 0.162 x 3½	2,345	2,015		
THA426-2	(2) 2x	(4) 0.148 x 3	(4) 0.148 x 3	(6) 0.148 x 3	1,970	1,970		
	4x	(4) 0.162 x 3½	(4) 0.162 x 3½	(6) 0.162 x 3½	3,330	2,865		



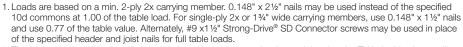
Strong-Tie



- 1. Loads for 2x Nailers are applicable to single 4x2 top chord carrying members provided:
 - 1) the hanger is located at a top chord panel point; 2) there is no splice at that panel point location;
 - 3) the floor truss girder must have adequate lateral bracing to prevent excessive displacement due to secondary torsional stresses (refer to ANSI/TPI 1-2014, Section 7.5.3.5).
- 2. Attachment of nailer to supporting member is the responsibility of the designer.
- 3. Refer to table on p. 201 for hanger dimensions, minimum top flange requirements and additional footnotes.

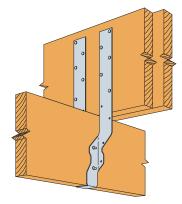
Allowable Loads for Face-Mount (Min.) Nailing Installation

Model No.	Ga.		nsions n.)	Faste (ii	Allowable Loads (lb.)						
		W H		Header	Joist	DF/SP			SPF/HF		
			Н	(Face) ³		Floor (100)	Snow (115)	Roof (125)	Floor (100)	Snow (115)	Roof (125)
THA213	18	1%	135/16	(10) 0.148 x 3	(4) 0.148 x 1½	1,180	1,200	1,200	1,020	1,160	1,200
THA218	18	1%	173/16	(10) 0.148 x 3	(4) 0.148 x 1½	1,180	1,200	1,200	1,020	1,160	1,200
THA218-2	16	31/8	1711/16	(20) 0.148 x 3	(6) 0.148 x 1½	2,440	2,485	2,485	2,100	2,140	2,140
THA222-2	16	31/8	223/16	(20) 0.148 x 3	(6) 0.148 x 1½	2,440	2,485	2,485	2,100	2,140	2,140
THA413	18	3%	135/16	(10) 0.148 x 3	(4) 0.148 x 1½	1,180	1,200	1,200	1,020	1,160	1,200
THA418	16	3%	17½	(20) 0.148 x 3	(6) 0.148 x 1½	2,440	2,485	2,485	2,100	2,140	2,140
THA422	16	3%	22	(20) 0.148 x 3	(6) 0.148 x 1½	2,440	2,485	2,485	2,100	2,140	2,140
THA426	14	3%	26	(30) 0.148 x 3	(6) 0.148 x 1½	3,225	3,225	3,225	2,770	2,770	2,770



^{2.} The joist nails should be installed straight into the carried member by straightening the THA double shear nailing tabs. When used to support 2x4 joists, the THA213 or THA218 may be installed with (2) 0.148" x 11/2" nails into the joist (one each side).

- 3. At least half of the face fasteners must be installed into the upper half of the header, unless some other means of mechanical reinforcement is used to resist the tension perpendicular to grain stresses. Nails must have a minimum 1/2" edge distance.
- 4. For installations with fewer face fasteners than specified, reduce the allowable load as follows: Allowable load = No. of Face Nails Used/No. Face Nails in Table x Table Load.
- 5. Fasteners: Nail dimensions are listed diameter by length. SD screws are Simpson Strong-Tie Strong-Drive SD Connector screws. See pp. 23-24 for fastener information.



Typical THA Face-Mount Min. Nailing Installation for Supporting a Suspended Joist



Visit app.strongtie.com/hs to access our Hanger Selector web application.