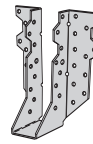
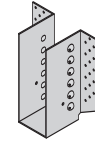


TRUSS HANGERSPAGES 166-172

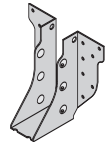
- **THD Series**
Medium-to-heavy capacity face mount hanger.
- **THDH Series**
Heavy capacity face mount hanger.
- **HUS Series**
Medium capacity face mount hanger with double shear nailing.
- **CLPBF Series**
Medium capacity 2 x 4 hanger.
- **MSH Series**
Field adjustable top or face mount strap hanger.



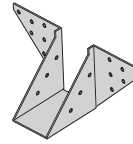
THD



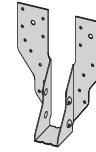
THDH



HUS



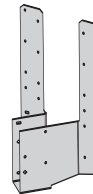
CLPBF



MSH

SKewed TRUSS HANGERS . . .PAGES 172-174

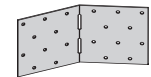
- **MSH213L/R**
Skewed 45° floor truss hanger.
- **MSSH217L/R**
Severely skewed strap hanger for angles 60° to 85°.
- **SNP3**
Adjustable nail plate for connecting square cut trusses at skews up to 60°.



MSH213L
left shown



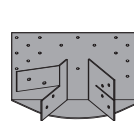
MSSH217R
right shown



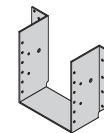
SNP3

HIP/JACK CONNECTORS . . .PAGES 175-176

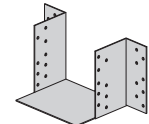
- **BN Series**
Face mount hanger for four mono trusses.
- **HJC Series**
Face mount hanger for one hip and one jack truss.
- **HTHJ Series**
Light capacity face mount hanger for one hip and one jack truss.
- **HHC Series**
Face mount hanger for two hip trusses.
- **HJHC Series**
Face mount hanger for two hip and one jack truss.



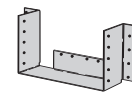
BN



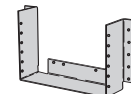
HJC



HTHJ



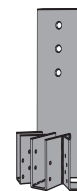
HHC



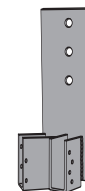
HJHC

GIRDER TRUSS HANGERS . . .PAGES 177-179

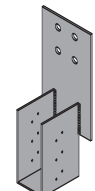
- **GT, GTD, & GTS Series**
Girder truss hanger bolts to a supporting truss.
- **GTU Series**
Girder truss hanger with high uplift capacity bolts to a supporting truss.
- **GTWS Series**
Girder truss hanger with high uplift capacity screws to a supporting truss.



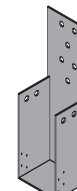
GTD



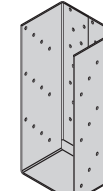
GTS



GT



GTU



GTWS

continued on next page

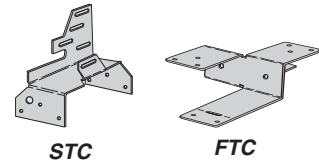
TRUSS CLIPSPAGE 180

- **STC Series**

A scissor truss clip with slotted nail holes for horizontal movement.

- **FTC Series**

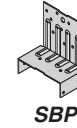
A floor truss clip to transfer loads between floor truss plies.



SUPPLEMENTAL BEARING PLATES ..PAGE 181

- **SBP Series**

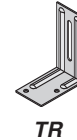
Connects to truss at bearing locations to distribute concentrated loads.



ROOF TRUSS TIESPAGE 182

- **TR Series**

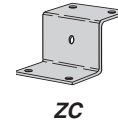
Provides lateral support for non-load bearing walls while allowing floor and roof trusses to deflect.



BLOCKING SUPPORTSPAGE 182

- **ZC Series**

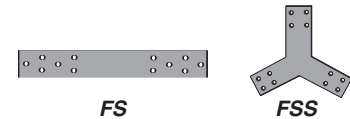
Supports blocking between trusses and joists.



FIELD SPLICE KITSPAGE 183

- **FS & FSS Series**

Field connectors for scissor truss splices.



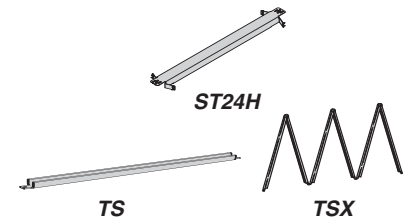
TRUSS SPACERSPAGES 184-185

- **ST24H The Stabilizer™**

Truss brace and spacer that connects with prongs.

- **TS & TSX Series**

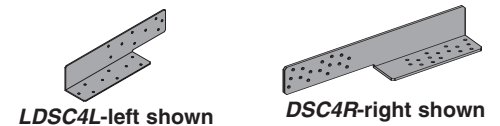
Truss spacer that connects with nails.



DRAG STRUT CONNECTORSPAGE 185

- **LDSC4/DSC4**

Transfers lateral load from a truss to a bearing wall.



ALTERNATE INSTALLATIONSPAGE 186

- **Backer block installations**
- **Panel point installations**
- **Filler block installations**

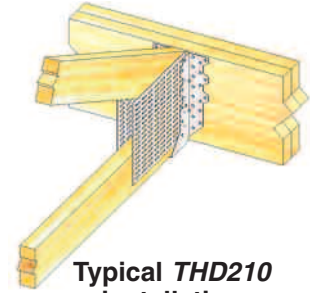
Materials: See chart

Finish: G90 galvanizing

Options: See Specialty Options Chart. Rough/Full sizes available.
THD hangers with widths greater than 3" can have one flange inverted with no load reduction.

Specify right (R) or left (L).

Codes: ESR-1781, FL815, FL9835,
Dade County, FL 06-0921.05

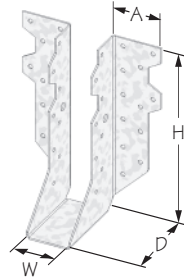


Typical THD210
installation

Installation:

- Use all specified fasteners. See Product Notes, page 10.

Some model designs
may vary from
illustration shown



THD28

See EWP applications pages 121-124.

Plated Truss

Joist / Truss Size	USP Stock No.	Ref. No.	Steel Gauge	Dimensions				Fastener Schedule ^{2,3}				Allowable Loads (Lbs.)				Code Ref.
				W	H	D	A	Header		Truss		DF-L / SP				
								Qty	Type	Qty	Type	Floor 100%	Roof		Uplift ¹ 160%	
													115%	125%		
2 x 6 - 8	THD26	---	16	1-5/8	5-1/16	3	1-7/8	18	16d	12	10d x 1-1/2	2485	2855	3060	2170	5, F18, F10, D2, R5
2 x 8 - 10	THD28	---	16	1-5/8	7	3	1-7/8	28	16d	16	10d x 1-1/2	3865	3965	3965	2330	5, F18, F10, D2, R5
2 x 10 - 12	THD210	---	16	1-5/8	9	3	1-7/8	38	16d	20	10d x 1-1/2	5075	5115	5115	3095	5, F18, F10, D2, R5
1-3/4 x 5-1/2 - 7-1/4	THD175	---	14	1-7/8	5	3	1-7/8	18	16d	12	10d x 1-1/2	2540	2920	3055	2190	5, F18, F10, D2, R5
1-3/4 x 7-1/4 - 11-1/4	THD177	---	14	1-7/8	6-7/8	3	1-7/8	28	16d	16	10d x 1-1/2	3950	4485	4485	2330	5, F18, F10, D2, R5
1-3/4 x 9-1/4 - 14	THD179	---	14	1-7/8	8-7/8	3	1-7/8	38	16d	20	10d x 1-1/2	5360	5800	5800	3095	5, F18, F10, D2, R5
(2) 2 x 6 - 8	THD26-2	HHUS26-2	14	3-7/16	5-3/8	3	2	18	16d	12	10d	2540	2920	3175	2285	5, F18, F10, D2, R5
(2) 2 x 8 - 10	THD28-2	HHUS28-2	14	3-7/16	7-1/8	3	2	28	16d	16	10d	3950	4540	4935	2595	5, F18, F10, D2, R5
(2) 2 x 10 - 12	THD210-2	HHUS210-2	14	3-7/16	9-1/8	3	2	38	16d	20	10d	5360	6160	6700	3810	5, F18, F10, D2, R5
4 x 6 - 8	THD46	HHUS46	14	3-5/8	5-5/16	3	2	18	16d	12	10d	2540	2920	3175	2285	5, F18, F10, D2, R5
4 x 8 - 10	THD48	HHUS48	14	3-5/8	7-1/16	3	2	28	16d	16	10d	3950	4540	4935	2595	5, F18, F10, D2, R5
4 x 10 - 12	THD410	HHUS410	14	3-5/8	9-1/16	3	2	38	16d	20	10d	5360	6160	6700	3810	5, F18, F10, D2, R5
4 x 12 - 14	THD412	---	14	3-5/8	11	3	3	48	16d	20	10d	6770	7045	7045	3810	5, F18, F10, D2, R5
4 x 14 - 16	THD414	---	14	3-5/8	12-7/8	3	3	58	16d	20	10d	7045	7045	7045	3810	5
(3) 2 x 10 - 12	THD210-3	HHUS210-3	12	5-1/8	9	3	3	38	16d	20	10d	5660	6510	7045	3850	5, F18, D2
6 x 10 - 12	THD610	HHUS5.50/10	12	5-1/2	9	3	3	38	16d	20	10d	5660	6510	7080	3410	5, F18, F10, D2, R5
6 x 12 - 14	THD612	---	12	5-1/2	11	3	3	48	16d	20	10d	7150	8225	8415	4065	5, F18, F10, D2, R5
6 x 14 - 16	THD614	---	12	5-1/2	12-7/8	3	3	58	16d	20	10d	8415	8415	8415	4065	5

1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

2) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.

3) Minimum nail penetration is 1-5/8" for 16d nails.

New products or updated product information are designated in red.

Specialty Options Chart – refer to Specialty Options pages 201 to 202 for additional details.

Option	Skewed ^{1,3}	Sloped Seat ^{2,3}	Sloped / Skewed ^{1,2,3}	Inverted Flange
Range	1° to 45°	1° to 45°	See Sloped Seat and Skewed	Not available in widths < 3". Widths ≥ 3 can have one flange inverted.
Allowable Loads	85% of table load	65% of table load	65% of table load	100% of table load. 65% of table load when nailing into the support members end grain.
Ordering	Add SK, angle required, and right (R) or left (L), to product number. Ex. THD410-SK45R	Add SL, slope required, and up (U) or down (D), to product number. Ex. THD410-SL30D	See Sloped Seat and Skewed. Ex. THD410-SK45RSL30D	Add IIF, one flange, right (R) and left (L), to product number. Ex. THD410IIFR

1) Skewed hangers with skews greater than 15° may have all joist nailing on outside flange.

2) Sloped or sloped / skewed hangers with slopes greater than 15° may have additional joist nails.

3) All sloped, skewed, or combinations require bevel cut or square cut on joist in all applications.

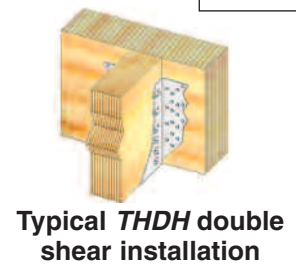
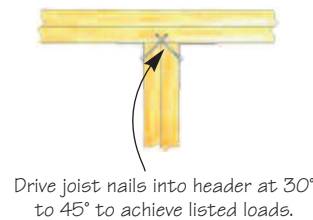
HEAVY-DUTY TRUSS HANGERS – THDH SERIES



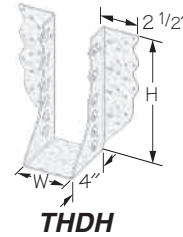
Materials: 12 gauge
Finish: G90 galvanizing
Options: See Specialty Options Chart.
Codes: ESR-1881, FL821, FL9835,
 Dade County, FL 06-0921.05

Installation:

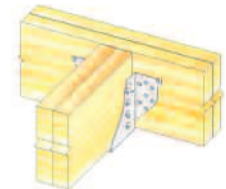
- Use all specified fasteners. See Product Notes, page 10.
- Joist nails must be driven in at a 30° to 45° angle through the joist or truss into the header to achieve listed loads. **Standard length “double shear” nails must be used to achieve listed load values.**



Typical THDH double shear installation



THDH



Typical THDH26-2 installation

See EWP applications pages 121-124.

Joist / Truss Size	USP Stock No.	Ref. No.	Dimensions			Fastener Schedule ^{2,3}				Allowable Loads (Lbs.)							Code Ref.	
			W	H	D	Header		Truss		DF-L / SP				S-P-F				
						Qty	Type	Qty	Type	Floor	Roof		Uplift ¹	Floor	Roof			Uplift ¹
											115%	125%			100%	115%		
2 x 6 - 8	THDH26	HGUS26	1-5/8	5-7/16	5	20	16d	8	16d	3915	4505	4895	2340	3370	3880	4200	1965	6, F18, D2
2 x 8 - 10	THDH28	HGUS28	1-5/8	7-3/16	5	36	16d	12	16d	6770	7395	7395	4370	5830	6210	6210	3670	6, F18, D2
2 x 10 - 12	THDH210	---	1-5/8	9-3/16	5	46	16d	16	16d	8725	9580	9600	5400	6835	7385	7750	4535	6
2-11/16 x 9-1/4 - 14	THDH27925	HGUS2.75/10	2-3/4	9-1/8	4	46	16d	12	16d	8260	8260	8260	3490	6935	6935	6935	2930	6, F18, D2
2-11/16 x 11-1/4 - 16	THDH27112	HGUS2.75/12	2-3/4	10-7/8	4	56	16d	14	16d	9845	9845	9845	5225	7655	8135	8270	4390	6
2-11/16 x 14 - 16	THDH2714	HGUS2.75/14	2-3/4	12-1/4	4	66	16d	16	16d	9845	9845	9845	5225	8110	8270	8270	5835	6
3-1/4 x 9-1/2	THDH3210	---	3-3/16	9-3/8	4	46	16d	12	16d	8260	8260	8260	3490	6935	6935	6935	2930	6, F18, D2
3-1/4 x 10-5/8	THDH3212	---	3-3/16	10-5/8	4	56	16d	14	16d	9845	9845	9845	5960	8270	8270	8270	5105	6
(2) 2 x 6 - 8	THDH26-2	HGUS26-2	3-7/16	5-3/8	4	20	16d	8	16d	3915	4505	4795	2235	3370	3880	4030	1880	6, F18, F15, D2
(2) 2 x 8 - 10	THDH28-2	HGUS28-2	3-7/16	7-1/8	4	36	16d	10	16d	6535	7515	8025	2665	5635	6480	6740	2240	6, F15
(2) 2 x 10 - 12	THDH210-2	HGUS210-2	3-7/16	9-1/8	4	46	16d	12	16d	8260	8260	8260	3490	6935	6935	6935	2930	6, F18, F15, D2
4 x 6 - 8	THDH46	HGUS46	3-9/16	5-3/8	4	20	16d	8	16d	3915	4505	4895	2605	3370	3880	4215	2190	6, F18, F15, D2
4 x 8 - 10	THDH48	HGUS48	3-9/16	7-1/8	4	36	16d	10	16d	6535	7515	7835	3185	5635	6480	6580	2675	6, F15
4 x 10 - 12	THDH410	HGUS410	3-9/16	9-1/8	4	46	16d	12	16d	8260	9010	9010	3970	7120	7570	7570	3335	6, F18, F15, D2
4 x 12 - 14	THDH412	HGUS412	3-9/16	10-1/2	4	56	16d	14	16d	9845	9845	9845	5225	8270	8270	8270	4390	6
4 x 14 - 16	THDH414	HGUS414	3-9/16	13-1/6	4	66	16d	16	16d	9845	9845	9845	6810	8270	8270	8270	5835	6
(3) 2 x 6 - 8	THDH26-3	HGUS26-3	5-1/8	5-7/16	4	20	16d	8	16d	3915	4505	4795	2235	3370	3880	4030	1880	6, F18, F15, D2
(3) 2 x 8 - 10	THDH28-3	HGUS28-3	5-1/8	7-3/16	4	36	16d	12	16d	6770	7785	8025	2665	5830	6705	6740	2240	6, F18, F15, D2
(3) 2 x 10 - 12	THDH210-3	HGUS210-3	5-1/8	9-3/16	4	46	16d	16	16d	8725	9855	9855	4565	7520	8275	8275	3835	6, F15, F18
(3) 2 x 12 - 14	THDH212-3	HGUS212-3	5-1/8	11-3/16	4	56	16d	20	16d	9935	9935	9935	5180	8345	8345	8345	4355	6
(3) 2 x 14 - 16	THDH214-3	HGUS214-3	5-1/8	13-3/16	4	66	16d	22	16d	11645	11645	11645	5795	9780	9780	9780	4865	6
5-1/4 x 9-1/8	THDH5210	---	5-3/8	9-1/8	4	46	16d	16	16d	8725	9855	9855	4565	7520	8275	8275	3835	6
5-1/4 x 10-3/4	THDH5212	---	5-3/8	11-1/8	4	56	16d	20	16d	9935	9935	9935	5180	8345	8345	8345	4355	6
6 x 10 - 12	THDH610	HGUS5.50/10	5-1/2	9	4	46	16d	16	16d	8725	9855	9855	4565	7520	8275	8275	3835	6
6 x 12 - 14	THDH612	HGUS5.50/12	5-1/2	11	4	56	16d	20	16d	9935	9935	9935	5180	8345	8345	8345	4355	6
6 x 14 - 16	THDH614	HGUS5.50/14	5-1/2	13	4	66	16d	22	16d	11645	11645	11645	5795	9780	9780	9780	4865	6
6-3/4 x 9 - 14-1/2	THDH6710	---	6-7/8	8-13/16	4	46	16d	12	16d	8260	8260	8260	3490	6935	6935	6935	2930	6, F18, D2
6-3/4 x 11 - 18	THDH6712	---	6-7/8	10-13/16	4	56	16d	14	16d	9845	9845	9845	5225	8270	8270	8270	4390	6
6-3/4 x 13 - 20-1/2	THDH6714	---	6-7/8	12-13/16	4	66	16d	16	16d	9845	9845	9845	6810	8270	8270	8270	5835	6
7-1/4 x 9-1/4 - 14	THDH7210	HGUS7.25/10	7-1/4	9	4	46	16d	12	16d	8260	9010	9010	3970	7120	7570	7570	3335	6, F18, D2
7-1/4 x 11-1/4 - 16	THDH7212	HGUS7.25/12	7-1/4	10-1/2	4	56	16d	14	16d	9845	9845	9845	5225	8270	8270	8270	4390	6
7-1/4 x 14 - 18	THDH7214	HGUS7.25/14	7-1/4	12-1/4	4	66	16d	16	16d	9845	9845	9845	6810	8270	8270	8270	5835	6

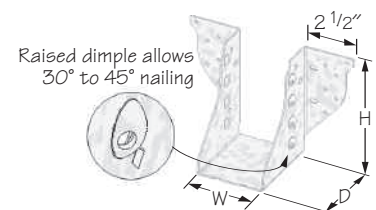
- 1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
 - 2) Joist nails need to be toe nailed at a 30° to 45° angle to achieve allowable loads shown.
 - 3) Minimum nail penetration shall be 1-5/8" for 16d nails.
- New products or updated product information are designated in red.

Some model designs may vary from illustration shown

Specialty Options Chart – refer to Specialty Options pages 201 to 202 for additional details.

Option	Skewed ^{1,3}	Sloped Seat ^{2,3}	Sloped / Skewed ^{1,2,3}
Range	1° to 45°	1° to 45°	See Sloped Seat and Skewed
Allowable Loads	85% of table allowable load. 50% of table uplift load.	85% of table allowable load	52% of table allowable load. 50% of table uplift load.
Ordering	Add SK, angle required, and right (R) or left (L), to product number. Ex. THDH410-SK45R	Add SL, slope required, and up (U) or down (D), to product number. Ex. THDH410-SL30D	See Sloped Seat and Skewed. Ex. THDH410-SK45RSL30D

- 1) Skewed THDH hangers with skews greater than 15° always have all joist nailing on one side of the outside flange.
- 2) Sloped or sloped / skewed hangers with slopes greater than 15° may have additional joist nails.
- 3) All sloped, skewed, or combinations require bevel cut on joist in all applications. Inverted flange option is not available for THDH models.



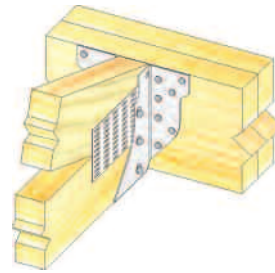
THDH26-2

The HUS hanger series offers double shear nailing. USP's patented dimple allows for 30° to 45° nailing through the joist into header, resulting in higher loads and less nailing. Extended 3" deep seat provides extra truss bearing.

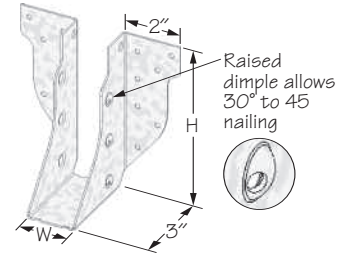
Materials: 16 gauge
Finish: G90 galvanizing
Codes: ESR-1881, FL9835,
 Dade County, FL 06-0921.05

Installation:

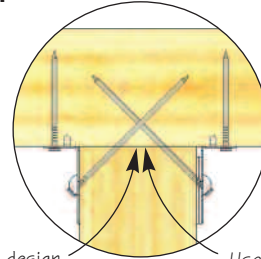
- Use all specified fasteners. See Product Notes, page 10.
 - Joist nails must be driven in at a 30° to 45° angle through the joist or truss into the header to achieve listed loads.
- Standard length "double shear" nails must be used to achieve listed load values.**



Typical HUS installation



HUS



Double shear nail design features fewer nails and faster installation

Uses standard length nails

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See EWP applications pages 121-124.

Joist / Truss Size	USP Stock No.	Ref. No.	Steel Gauge	Dimensions		Fastener Schedule ²				Allowable Loads (Lbs.) ⁴						Code Ref.		
				W	H	Header		Truss ³		DF-L / SP			S-P-F					
						Qty	Type	Qty	Type	Floor	Roof	Uplift ¹	Floor	Roof	Uplift ¹			
				100%	115%	125%	160%	100%	115%	125%	160%							
2 x 6 - 8	HUS26	HUS26	16	1-5/8	5-7/16	14	16d	6	16d	2635	3030	3295	1925	2260	2600	2810	1615	6, F18, D2
2 x 8 - 10	HUS28	HUS28	16	1-5/8	7-3/16	22	16d	8	16d	3970	4345	4345	2570	3410	3650	3650	2160	
2 x 10 - 12	HUS210	HUS210	16	1-5/8	9-3/16	30	16d	10	16d	5310	5510	5510	3205	4095	4420	4630	2690	
1-3/4 x 5-1/2 - 7-1/4	HUS175	---	16	1-13/16	5-3/8	14	16d	6	16d	2635	3030	3295	1925	2260	2600	2810	1615	
1-3/4 x 7-1/4 - 11-1/4	HUS177	---	16	1-13/16	7-1/8	22	16d	8	16d	3975	4345	4345	2570	3410	3650	3650	2160	
1-3/4 x 9-1/4 - 14	HUS179	HUS1.81/10	16	1-13/16	9-1/8	30	16d	10	16d	5310	5510	5510	3205	4410	4630	4630	2690	

1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
 2) Minimum nail penetration is 1-5/8" for 16d nails.
 3) Nails must be driven at a 30° to 45° angle through joist or truss into header to achieve the table loads.
 4) HUS175, HUS177, and HUS179 load values assume the joist is 1-3/4" wide and has a bearing strength of not less than 675 psi.
 New products or updated product information are designated in red.

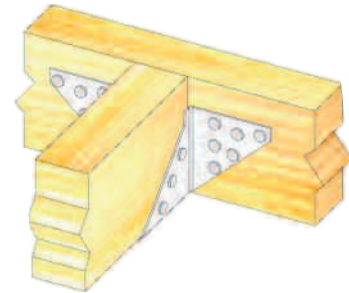
BUTTERFLY HANGER – CLPBF

The butterfly hanger's flared header flange design allows for added nailing. Excellent truss-to-truss hanger for 2x4 purlin or truss bottom chords.

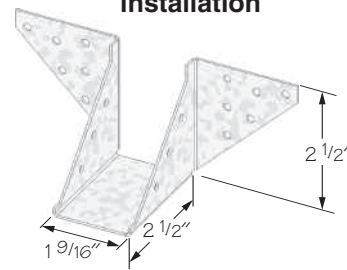
Materials: 18 gauge
Finish: G90 galvanizing
Codes: ESR-1881, FL574, Dade County, FL 08-0206.07

Installation:

- Use all specified fasteners. See Product Notes, page 10.



Typical CLPBF installation



CLPBF

Joist Size	USP Stock No.	Ref. No.	Steel Gauge	Fastener Schedule ²				Allowable Loads (Lbs.)				Code Ref.
				Header		Joist		DF-L / SP				
				Qty	Type	Qty	Type	Floor	Roof	Uplift ¹		
				100%	115%	125%	160%					
2 x 4	CLPBF	---	18	12	10d	6	10d x 1-1/2	815	815	815	215	6, F7, D11

1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
 2) Minimum nail embedment shall be 1-1/2" for 10d nails.

The MSH is field adjustable. The flanges can be used in top mount, face mount, or combination installations. An open back design allows installation after a member is placed in position.

Materials: See chart

Finish: G90 galvanizing

Codes: ESR-1831, FL567, FL822, Dade County, FL 08-0303.06 & 07-1114.11

Installation:

- Use all specified fasteners. See Product Notes, page 10.
- Web stiffeners are required for I-Joist installations.

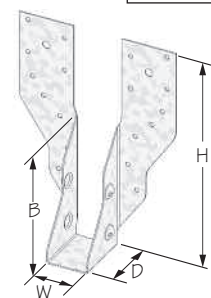
Mounting condition:

Face-Max – **Figure 1.** All header nails used should be driven into the wide face of the header.

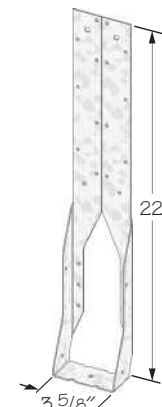
Top-Max – **Figure 2.** The hanger is installed in a top mount condition with at least six lower header face nail holes filled, and four top flange nails filled. The strap must wrap over the top at least 2”.

Top-Min – **Figure 3.** The hanger is installed in a top mount condition with at least the top two header face nail holes filled, and four top flange nail holes filled. The strap must wrap over the top at least 2” and the joist nails shall be installed straight into the joist for all models.

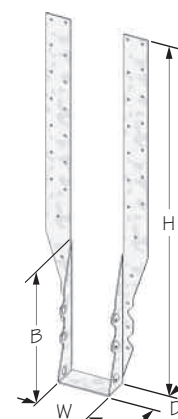
Combination – **Figure 4.** Face-Max values apply for the entire connection. Follow fastening directions above for the applicable mounting condition for each individual flange strap.



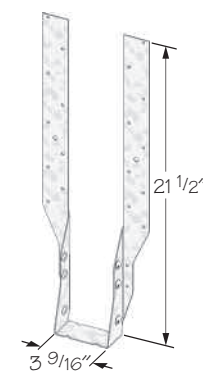
MSH



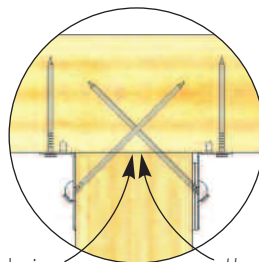
MSH422IF



MSH426



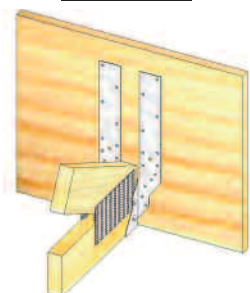
MSH422



Double shear nail design features fewer nails and faster installation

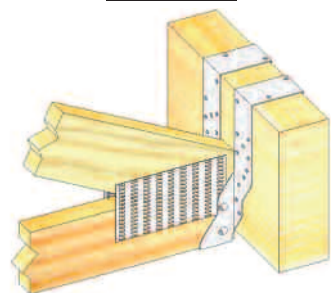
Uses standard length nails

Figure 1



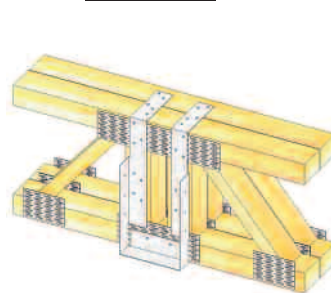
Typical MSH installation Face Mount Maximum

Figure 2



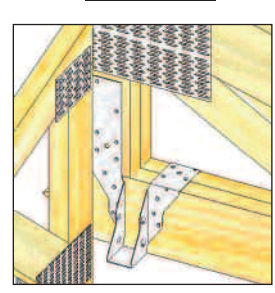
Typical MSH installation Top Mount Maximum

Figure 3



Typical MSH422-2IF installation Top Mount Minimum

Figure 4



Typical combination MSH installation

continued on next page

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Plated Truss

Plated Truss chart

Joist Material & Width	USP Stock No.	Ref. No.	Steel Gauge	Dimensions				Mounting Condition	Fastener Schedule ^{2,3}					Allowable Loads (Lbs.)						Code Ref.		
				W	D	H	B		Header		Joist			DF-L / SP			S-P-F					
									Top Qty	Face Qty	Type	Qty	Type	Floor	Roof	Uplift ¹	Floor	Roof	Uplift ¹			
2x Lumber or Trusses	MSH29	THA29	18	1-5/8	2-1/4	8-3/4	5	face-max	---	18	10d	4	10d	2445	2635	2680	785	1825	1885	1925	660	10, F2, F16, D12
								top-max	4	6	10d	4	10d	2565	2635	2680	785	1825	1885	1925	660	
								top-min	4	2	10d	4	10d x 1-1/2	2425	2425	2425	---	1820	1880	1920	---	
2x Lumber or Trusses	MSH213	THA213	18	1-5/8	2-1/4	12-3/4	5	face-max	---	20	10d	4	10d	2565	2635	2680	785	1825	1885	1925	660	10, F2, F16, D12
								top-max	4	6	10d	4	10d	2565	2635	2680	785	1825	1885	1925	660	
								top-min	4	2	10d	4	10d x 1-1/2	2425	2425	2425	---	1820	1880	1920	---	
2x Lumber or Trusses	MSH218	THA218	18	1-5/8	2-1/4	16-3/4	5	face-max	---	26	10d	4	10d	2565	2635	2680	785	1825	1885	1925	660	10, F2, F16, D12
								top-max	4	6	10d	4	10d	2565	2635	2680	785	1825	1885	1925	660	
								top-min	4	2	10d	4	10d x 1-1/2	2425	2425	2425	---	1820	1880	1920	---	
2x Lumber or Trusses	MSH222	THA222	18	1-5/8	1-3/4	23	10-13/16	face-max	---	22	10d	4	10d x 1-1/2	2090	2155	2200	595	1505	1560	1600	500	10, F2, F16, D12
								top-max	4	6	10d	4	10d x 1-1/2	2090	2155	2200	595	1505	1560	1600	500	
								top-min	4	2	10d	4	10d x 1-1/2	2090	2155	2165	---	1505	1560	1600	---	
2-1/2" wide Floor Trusses	MSH318	---	18	2-9/16	1-3/4	18	10-3/8	face-max	---	16	10d	4	10d x 1-1/2	1825	2100	2200	595	1570	1805	1850	500	10, F2, F16, D12
								top-max	4	6	10d	4	10d x 1-1/2	2600	2600	2600	595	2185	2185	2185	500	
								top-min	4	2	10d	4	10d x 1-1/2	2165	2165	2165	---	1820	1820	1820	---	
2-1/2" wide Floor Trusses	MSH322	THA322	18	2-9/16	1-3/4	22-1/2	10-3/8	face-max	---	22	10d	4	10d x 1-1/2	2200	2200	2200	595	1850	1850	1850	500	10, F2, F16, D12
								top-max	4	6	10d	4	10d x 1-1/2	2600	2600	2600	595	2185	2185	2185	500	
								top-min	4	2	10d	4	10d x 1-1/2	2165	2165	2165	---	1820	1820	1820	---	
(2) 2x Lumber or Trusses	MSH213-2	---	16	3-1/8	1-3/4	14-3/16	7-13/16	face-max	---	14	10d	6	10d	2210	2545	2765	1570	1900	2185	2375	1320	10, F2, F16, D12
								top-max	4	6	10d	6	10d	3525	3525	3525	1570	2830	2920	2960	1320	
								top-min	4	2	10d	6	10d	2025	2025	2025	---	1700	1700	1700	---	
(2) 2x Lumber or Trusses	MSH218-2	THA218-2	16	3-1/8	1-3/4	17-3/4	10-1/16	face-max	---	16	10d	4	10d	1855	2135	2320	605	1600	1840	2000	510	10, F2, F16, D12
								top-max	4	6	10d	4	10d	3430	3485	3485	605	2460	2550	2610	510	
								top-min	4	2	10d	4	10d	2210	2210	2210	---	1855	1855	1855	---	
(2) 2x Lumber or Trusses	MSH222-2	THA222-2	16	3-1/8	1-3/4	22-1/4	10-1/16	face-max	---	22	10d	4	10d	2550	2935	3190	605	2200	2530	2730	510	10, F2, F16, D12
								top-max	4	6	10d	4	10d	3430	3485	3485	605	2460	2550	2610	510	
								top-min	4	2	10d	4	10d	2210	2210	2210	---	1855	1855	1855	---	
3-1/2" wide Floor Trusses	MSH413	THA413	16	3-9/16	1-3/4	14	7-5/8	face-max	---	14	10d	6	10d	2210	2545	2765	1570	1900	2185	2375	1320	10, F2, F16, D12
								top-max	4	6	10d	6	10d	3525	3525	3525	1570	2955	2960	2960	1320	
								top-min	4	2	10d	6	10d	2025	2025	2025	---	1700	1700	1700	---	
3-1/2" wide Floor Trusses	MSH418	THA418	16	3-9/16	1-3/4	17-1/2	7-5/8	face-max	---	18	10d	6	10d	2675	3075	3345	1570	2300	2645	2875	1320	10, F2, F16, D12
								top-max	4	6	10d	6	10d	3525	3525	3525	1570	2955	2960	2960	1320	
								top-min	4	2	10d	6	10d	2025	2025	2025	---	1700	1700	1700	---	
3-1/2" wide Floor Trusses	MSH422	THA422	16	3-9/16	1-3/4	21-1/2	7-5/8	face-max	---	22	10d	6	10d	3140	3470	3470	1570	2700	2915	2915	1320	10, F2, F16, D12
								top-max	4	6	10d	6	10d	3525	3525	3525	1570	2955	2960	2960	1320	
								top-min	4	2	10d	6	10d	2025	2025	2025	---	1700	1700	1700	---	
3-1/2" wide Floor Trusses	MSH422IF	THAC422	16	3-5/8	1-3/4	22	9-13/16	face-max	---	22	10d	4	10d	2550	2935	3190	605	2200	2530	2750	510	10, F16
								top-max	4	6	10d	4	10d	3430	3485	3485	605	2460	2550	2610	510	
								top-min	4	2	10d	4	10d	2210	2210	2210	---	1855	1855	1855	---	
3-1/2" wide Floor Trusses	MSH424	---	16	3-5/8	2	22	5-3/16	face-max	---	36	10d	6	10d	3960	3960	3960	1285	3325	3325	3325	1080	D9
								top-max	4	6	10d	6	10d	2965	2965	2965	1285	2490	2490	2490	1080	
								top-min	4	2	10d	6	10d	1550	1550	1550	---	1300	1300	1300	---	
3-1/2" wide Floor Trusses	MSH426 MSH426IF	THA426 THAC426	14	3-5/8	1-3/4	26	8	top-max	4	8	16d	6	16d	3855	3855	3855	1715	3050	3235	3235	1440	10, F16
								top-min	4	2	16d	6	16d	2735	2735	2735	---	2295	2295	2295	---	
								face-max	---	26	16d	6	16d	3665	4215	4585	1175	3145	3620	3935	985	
(2) 3-1/2" wide Floor Trusses	MSH422-2 MSH422-2IF	THA422-2 THAC422-2	14	7-1/4	2	22-1/8	11	top-max	4	10	16d	6	16d	4535	4585	4585	1175	3335	3515	3640	985	10, F16
								top-min	4	4	16d	6	16d	3690	3775	3830	---	2610	2680	2730	---	
								face-max	---	26	16d	6	16d	3665	4215	4585	1175	3145	3620	3935	985	

1) Uplift loads have been increased 33-1/3% or 60% for wind or seismic loads; no further increase shall be permitted.

2) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.

3) Minimum nail penetration shall be 1-1/2" for 10d nails and 1-5/8" for 16d nails.

New products or updated product information are designated in red.

continued on next page

ADJUSTABLE STRAP HANGERS – MSH SERIES CONTINUED



I-Joist, LVL, LSL, & PSL chart

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Joist Material & Width	USP Stock No.	Ref. No.	Steel Gauge	Dimensions				Mounting Condition	Fastener Schedule ^{2,3}					Allowable Loads (Lbs.)							Code Ref.	
				W	D	H	B		Header			Joist		DF-L / SP			S-P-F					
									Top Qty	Face Qty	Type	Qty	Type	Floor	Roof	Uplift	Floor	Roof	Uplift			
																				100%		115%
1-1/2" wide I-Joist	MSH222	THAI222	18	1-5/8	1-3/4	23	10-13/16	face-max	---	22	10d	4	10d x 1-1/2	2090	2155	2200	595	1505	1560	1600	500	10, F2, F16, D12
								top-max	4	6	10d	4	10d x 1-1/2	2090	2155	2200	595	1505	1560	1600	500	
								top-min	4	2	10d	4	10d x 1-1/2	2090	2155	2165	---	1505	1560	1600	---	
1-3/4" LVL or I-Joist	MSH179	---	18	1-13/16	2-1/4	8-11/16	4-15/16	face-max	---	18	10d	4	10d	2445	2700	2700	785	2065	2125	2165	660	10, F2, F16, D12
								top-max	4	6	10d	4	10d	2915	2985	3015	785	2065	2125	2165	660	
								top-min	4	2	10d	4	10d x 1-1/2	2425	2425	2425	---	2035	2035	2035	---	
1-3/4" LVL or I-Joist	MSH1713	---	18	1-13/16	1-3/4	12-11/16	4-15/16	face-max	---	12	10d	4	10d	1370	1575	1710	595	1175	1350	1470	500	10, F16
								top-max	4	6	10d	4	10d	2370	2440	2485	595	1695	1750	1790	500	
								top-min	4	2	10d	4	10d x 1-1/2	2165	2165	2165	---	1690	1750	1785	---	
1-3/4" LVL or I-Joist	MSH1718	---	18	1-13/16	1-3/4	16-11/16	4-15/16	face-max	---	16	10d	4	10d	1825	2100	2200	595	1570	1750	1790	500	10, F16
								top-max	4	6	10d	4	10d	2370	2440	2485	595	1695	1750	1790	500	
								top-min	4	2	10d	4	10d x 1-1/2	2165	2165	2165	---	1690	1750	1785	---	
1-3/4" LVL or I-Joist	MSH1722	THAI1.81/22	18	1-13/16	1-3/4	22-7/8	10-3/4	face-max	---	22	10d	4	10d x 1-1/2	2200	2200	2200	595	1690	1750	1785	500	10, F16
								top-max	4	6	10d	4	10d x 1-1/2	2360	2430	2475	595	1690	1750	1785	500	
								top-min	4	2	10d	4	10d x 1-1/2	2165	2165	2165	---	1690	1750	1785	---	
2-5/16" wide I-Joist	MSH2318	---	18	2-3/8	1-3/4	18-1/8	10-7/16	face-max	---	16	10d	4	10d x 1-1/2	1825	2100	2200	595	1570	1805	1850	500	10, F16
								top-max	4	6	10d	4	10d x 1-1/2	2600	2600	2600	595	2110	2165	2185	500	
								top-min	4	2	10d	4	10d x 1-1/2	2165	2165	2165	---	1820	1820	1820	---	
2-5/16" wide I-Joist	MSH2322	THAI3522	18	2-3/8	1-3/4	22-5/8	10-7/16	face-max	---	22	10d	4	10d x 1-1/2	2200	2200	2200	595	1850	1850	1850	500	10, F16
								top-max	4	6	10d	4	10d x 1-1/2	2600	2600	2600	595	2110	2165	2185	500	
								top-min	4	2	10d	4	10d x 1-1/2	2165	2165	2165	---	1820	1820	1820	---	
2-1/2" wide I-Joist	MSH318	---	18	2-9/16	1-3/4	18	10-3/8	face-max	---	16	10d	4	10d x 1-1/2	1825	2100	2200	595	1570	1805	1850	500	10, F2, F16, D12
								top-max	4	6	10d	4	10d x 1-1/2	2600	2600	2600	595	2185	2185	2185	500	
								top-min	4	2	10d	4	10d x 1-1/2	2165	2165	2165	---	1820	1820	1820	---	
2-1/2" wide I-Joist	MSH322	THAI322	18	2-9/16	1-3/4	22-1/2	10-3/8	face-max	---	22	10d	4	10d x 1-1/2	2200	2200	2200	595	1850	1850	1850	500	10, F2, F16, D12
								top-max	4	6	10d	4	10d x 1-1/2	2600	2600	2600	595	2185	2185	2185	500	
								top-min	4	2	10d	4	10d x 1-1/2	2165	2165	2165	---	1820	1820	1820	---	
3-1/2" LVL or I-Joist	MSH413	THA413	16	3-9/16	1-3/4	14	7-5/8	face-max	---	14	10d	6	10d	2210	2545	2765	1570	1900	2185	2375	1320	10, F2, F16, D12
								top-max	4	6	10d	6	10d	3525	3525	3525	1570	2955	2960	2960	1320	
								top-min	4	2	10d	6	10d	2025	2025	2025	---	1700	1700	1700	---	
3-1/2" LVL or I-Joist	MSH418	THA418	16	3-9/16	1-3/4	17-1/2	7-5/8	face-max	---	18	10d	6	10d	2675	3075	3345	1570	2300	2645	2875	1320	10, F2, F16, D12
								top-max	4	6	10d	6	10d	3525	3525	3525	1570	2955	2960	2960	1320	
								top-min	4	2	10d	6	10d	2025	2025	2025	---	1700	1700	1700	---	
3-1/2" LVL or I-Joist	MSH422	THA422	16	3-9/16	1-3/4	21-1/2	7-5/8	face-max	---	22	10d	6	10d	3140	3470	3470	1570	2700	2915	2915	1320	10, F2, F16, D12
								top-max	4	6	10d	6	10d	3525	3525	3525	1570	2955	2960	2960	1320	
								top-min	4	2	10d	6	10d	2025	2025	2025	---	1700	1700	1700	---	
3-1/2" LVL or I-Joist	MSH424	---	16	3-5/8	2	22	5-3/16	face-max	---	36	10d	66	10d	3960	3960	3960	1285	3325	3325	3325	1080	10, D9
								top-max	4	6	10d	6	10d	2965	2965	2965	1285	2490	2490	2490	1080	
								top-min	4	2	10d	6	10d	1550	1550	1550	---	1300	1300	1300	---	
3-1/2" LVL or I-Joist	MSH422IF	THAC422	16	3-5/8	1-3/4	22	9-13/16	face-max	---	22	10d	4	10d	2550	2935	3190	605	2200	2530	2750	510	10, F16
								top-max	4	6	10d	4	10d	3430	3485	3485	605	2460	2550	2610	510	
								top-min	4	2	10d	4	10d	2210	2210	2210	---	1855	1855	1855	---	
3-1/2" LVL or I-Joist	MSH426 MSH426IF	THA426 THAC426	14	3-5/8	1-3/4	26	8	top-max	4	8	16d	6	16d	3855	3855	3855	1715	3050	3235	3235	1440	10, F16
								top-min	4	2	16d	6	16d	2735	2735	2735	---	2295	2295	2295	---	

1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

2) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.

3) Minimum nail penetration shall be 1-1/2" for 10d nails and 1-5/8" for 16d nails.

New products or updated product information are designated in red.

continued on next page

I-Joist, LVL, LSL, & PSL chart

Joist Material & Width	USP Stock No.	Ref. No.	Steel Gauge	Dimensions				Mounting Condition	Fastener Schedule ^{2,3}					Allowable Loads (Lbs.)						Code Ref.		
				W	D	H	B		Header		Joist			DF-L / SP			S-P-F					
									Top	Face	Qty	Type	Floor	Roof	Uplift ¹	Floor	Roof	Uplift ¹				
									Qty	Type									100%		115%	125%
4-5/8" wide I-Joist	MSH2322-2	---	16	4-3/4	1-3/4	22	9-1/4	face-max	---	46	10d	4	10d	3365	3365	3365	605	2825	2825	2825	510	130
								top-max	4	6	10d	4	10d	2885	2990	3060	605	2090	2180	2240	510	
								top-min	4	2	10d	4	10d	2210	2210	2210	---	1690	1720	1740	---	
4-5/8" wide I-Joist	MSH2622-2	---	16	5-3/8	1-3/4	22	9-1/4	face-max	---	46	10d	4	10d	3365	3365	3365	605	2825	2825	2825	510	130
								top-max	4	6	10d	4	10d	2885	2990	3060	605	2090	2180	2240	510	
								top-min	4	2	10d	4	10d	2210	2210	2210	---	1690	1720	1740	---	

- 1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
 - 2) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.
 - 3) Minimum nail penetration shall be 1-1/2" for 10d nails and 1-5/8" for 16d nails.
- New products or updated product information are designated in red.

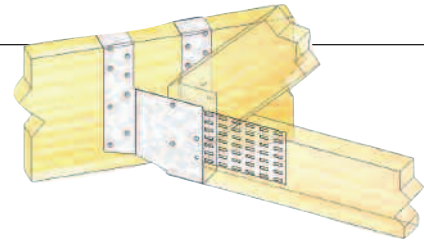
MSH213L/R SKEWED TRUSS HANGER

The MSH213L/R is an adjustable 45° skew hanger designed to permit installation on a 2 x 6 or greater bottom chord, or vertical web member.

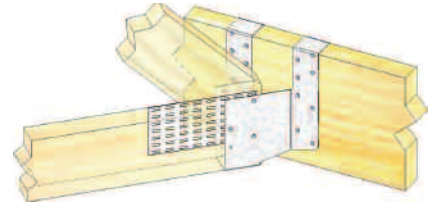
Materials: 18 gauge
Finish: G90 galvanizing
Codes: ESR-1831, FL6223

Installation:

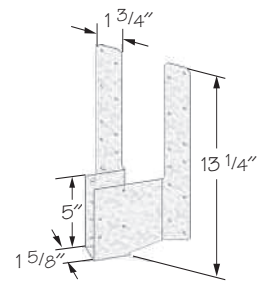
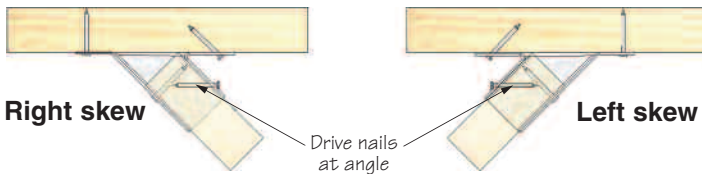
- Use all specified fasteners. See Product Notes, page 10.
- Web stiffeners are required for I-Joist installations.



Typical MSH213R installation
right skew



Typical MSH213L installation
left skew



MSH213L

Joist Material & Width	USP Stock No.	Ref. No.	Steel Gauge	Mounting Condition	Fastener Schedule ^{2,3}						Allowable Loads (Lbs.)						Code Ref.		
					Header		Joist				DF-L / SP			S-P-F					
					Top	Face	Qty	Type	Qty	Type	Floor	Roof	Uplift ¹	Floor	Roof	Uplift ¹			
					Qty	Type												Qty	Type
2x Lumber or Trusses	MSH213L/R	---	18	face-max	---	---	22	10d	6	10d x 1-1/2	1770	1770	1770	730	1485	1485	1485	615	10, F26
				top-max	4	10d	6	10d	6	10d x 1-1/2	1735	1735	1735	730	1455	1455	1455	730	
				top-min	4	10d	2	10d	6	10d x 1-1/2	1240	1240	1240	---	1040	1040	1040	---	

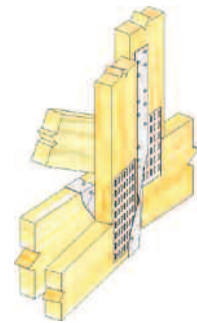
- 1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
 - 2) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.
 - 3) Minimum nail penetration shall be 1-1/2" for 10d nails.
- New products or updated product information are designated in red.

USP's MSSH217 hanger accommodates a skew range of 60° to 85° (30° maximum off the girder) without the need for a more expensive custom design hanger. Face nail to webs or bend the flange strap over the chord. Available in left (L) or right (R) configurations.

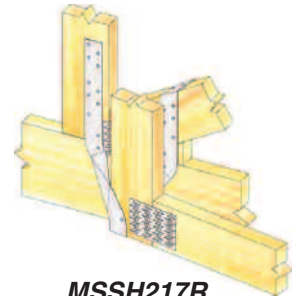
Materials: 18 gauge
Finish: G90 galvanizing

Installation:

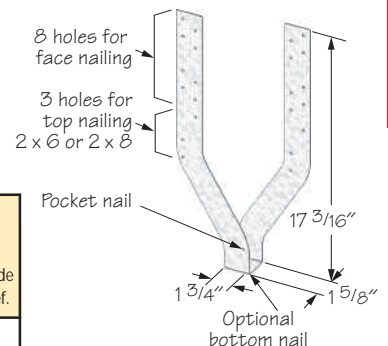
- Use all specified fasteners. See Product Notes, page 10.
- The 3 lower holes on each strap are for top nailing when the strap is bent over the truss chord. These holes are not for face nailing.
- One or both straps may be bent over the bottom chord of the girder with top or backside nailing.
- **Note:** Select the correct (right or left) hanger so that the strap on the outside of the angle will pass the end of the truss. When facing the hanger, the strap in the rear turns in the direction of the skew. The front strap turns to pass behind the end of the carried member.
- Attach the hanger at the end of the truss with a single 10d x 1 1/2" nail into the side flange or bottom.
- Place the truss in position against the girder. Push the outside strap past the end of the truss to the girder web and face nail through the top 8 holes with 10d x 1 1/2" nails for a 1 ply girder, or 10d common nails for multiple-ply girders.
- The strap inside the angle can be formed over diagonal webs (if design allows) or bend over the girder chord. Use two nails into the top and/or back side of the girder.
- If the outside strap does not contact a web, bend the strap tightly over the girder chord. Use two nails into the top and/or back side of the girder.
- For uplift resistance, other means of attachment are required. If both the truss and girder have vertical webs, attach a scab to pack out the girder web nearly flush with the truss web and use a field adjustable MP framing angle across the two. A top chord connection for uplift requires a flat LSTA strap tie wrapped under the girder and over the truss chord.



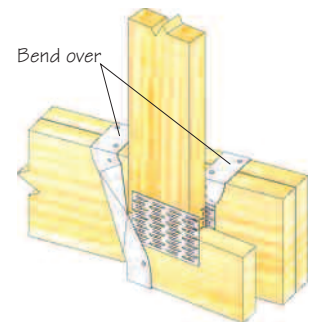
MSSH217L
Left shown attached to web and top of chord



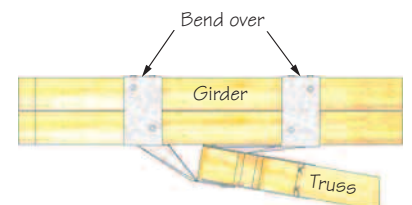
MSSH217R
Right shown attached to webs



MSSH217R
right shown



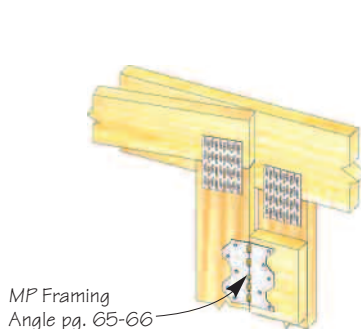
Right shown bent over bottom chord



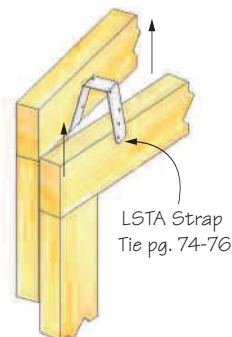
Top view right shown

USP Stock No.	Ref. No.	Steel Gauge	Fastener Schedule ²				Girder Truss	Allowable Loads (Lbs.) ¹						Code Ref.
			Girder Truss		Hip			DF-L / SP			S-P-F			
			Carrying Member		Carried Member			100%	115%	125%	100%	115%	125%	
			Qty	Type	Qty	Type								
MSSH217L/R	---	18	8	10d per strap OR	1	10d x 1-1/2	1 Ply	1470	1690	1700	1195	1205	1215	130
			4	10d top of bent straps			2 Ply	1700	1700	1700	1195	1205	1215	
			Optional Construction: Parallel to Grain Loading in Hanger Seat											
			8	10d per strap OR	1	10d x 1-1/2	1 Ply	1470	1690	1700	1265	1455	1580	
			4	10d top of bent straps			2 Ply	1700	1700	1700	1550	1630	1700	

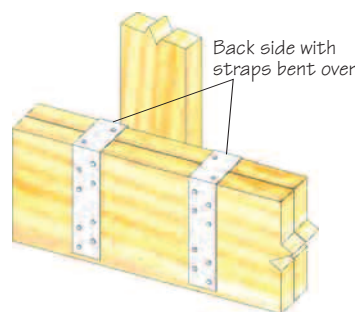
1) No uplift value with this hanger. Use other hardware or nailing higher on carried member to counteract uplift.
2) One or both straps may be bent over bottom chord of girder with top or backside nailing.
Note: The 3 lower holes on each strap are for top nailing when strap is bent. These holes are not for face nailing.
New products or updated product information are designated in red.



Additional Strapping for High Uplift



Additional Strapping for High Uplift



Back view shown

The SNP3 Skewed Nail Plate is designed and tested for connecting square cut corner jack trusses at skews from 45° to 90°.

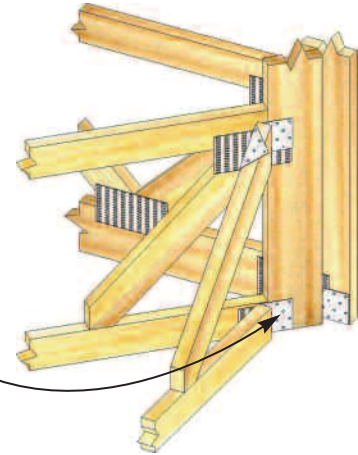
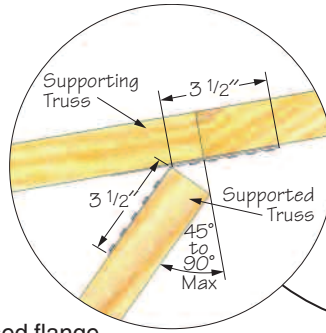
Materials: 16 gauge

Finish: G90 galvanizing

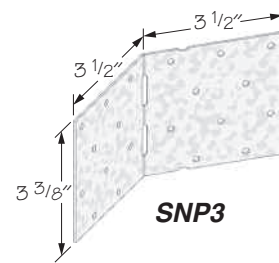
Codes: ESR-2104, FL820, L.A. City RR 25745

Installation:

- Install specified fasteners from bend line out from each end. Not all nail holes will be filled.
- Attach to the supported truss on the acute angle side so the SNP3 runs behind the end of the jack.
- Set jack truss against supporting truss and nail on exposed flange.
- **Bend angle only once.**
- 8d common nails may be substituted for 8d x 1 1/2" nails with no reduction in load.



Typical SNP3 installation



USP Stock No.	Ref. No.	Steel Gauge	Fastener Schedule ²				Wood Species	Allowable Loads (Lbs.) ¹				Code Ref.
			Supporting Member		Supported Member			100%	115%	125%	Upift 160%	
			Qty	Type	Qty	Type						
SNP3	TJC37	16	6	8d x 1-1/2	6	8d x 1-1/2	DF-L	530	530	530	530	8, F14, R9
						SP	530	530	530	530		
						S-P-F	445	445	445	445		

1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

2) 8d x 1-1/2" nails are 11 gauge (0.131" diameter) by 1-1/2" long.

New products or updated product information are designated in red.

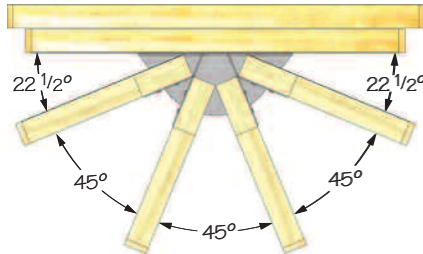


Designed to carry four mono trusses in one connector, it reduces installation time and cost. Provides a tested, load rated connection. Standard configuration spacing: 22 1/2°, 45°, 45°, 22 1/2°. The design also includes field adjustable nailing tabs.

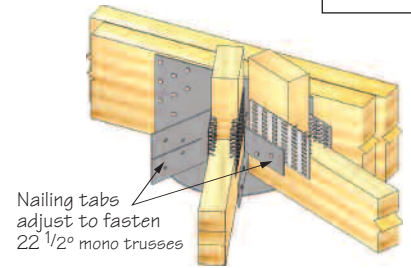
Materials: 14 gauge
Finish: USP primer
Codes: ESR-2757, FL819

Installation:

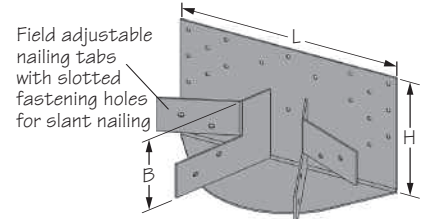
- Use all specified fasteners. See Product Notes, page 10.
- Allow a 2" setback for each mono truss.
- For pitched ceiling, design mono trusses with end-vertical upset. Upset equals tangent of the ceiling slope times 5.6".
- **Bend tab only once.**



BN264
Standard configuration
(top view)



Typical BN264
installation



BN264

USP Stock No.	Ref. No.	Steel Gauge	Dimensions			Fastener Schedule ⁴				Allowable Loads (Lbs.) ²				Code Ref.
			L	H	B	Carrying Member		Carried Member		DF-L / SP				
						Qty	Type	Qty	Type	per Mono Truss	Floor	Roof	Uplift ^{1,5}	
BN264	---	14	10	5-3/8	3-1/4	20	10d	2	10d x 1-1/2	2380	2735	2975	645	12, F13
BN284	---	14	10	7-1/8	3-1/4	20	10d	2	10d x 1-1/2	2380	2735	2975	645	

1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
 2) Loading published for total load of connection.
 3) Minimum nail penetration is 1-1/2" for 10d nails.
 4) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.
 5) Maximum uplift per mono truss is 160 lbs. at 160% for DF-L/SP and 140 lbs. at 160% for S-P-F.
 New products or updated product information are designated in red.

HIP/JACK CONNECTORS – HHC, HJC, HJHC, & HTHJ SERIES

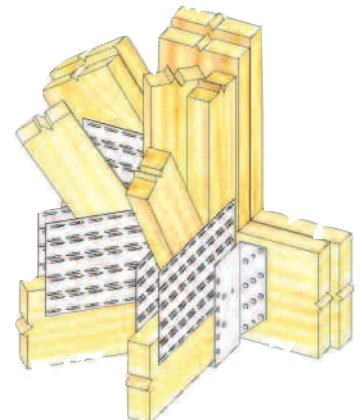
HHC & HJHC – Allows for hip/hip support and hip/jack/hip installations.

HJC & HTHJ – Used to simultaneously hang a combination of hips and jacks off girder trusses. These hangers fit both left-hand and right-hand applications. An open back design allows for retrofit installations.

Materials: HHC, HJC, & HJHC – 12 gauge
 HTHJ – 18 gauge
Finish: G90 galvanizing
Options: See Specialty Options Chart.
Codes: ESR-2756, FL817, FL571,
 Dade County, FL 07-0214.20

Installation:

- Use all specified fasteners. See Product Notes, page 10.

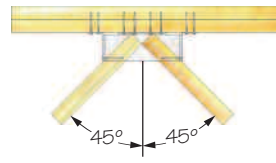


Typical HJC/HTHJ
installation

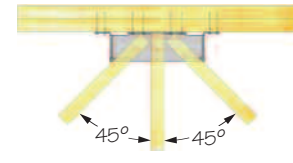
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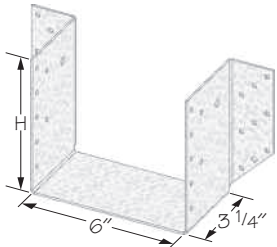
Typical HJC/HTHJ installation top view



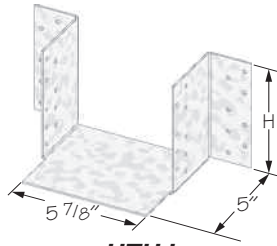
Typical HHC installation top view



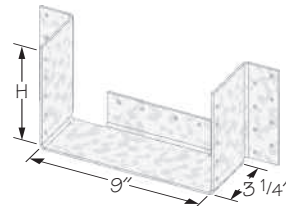
Typical HJHC installation top view



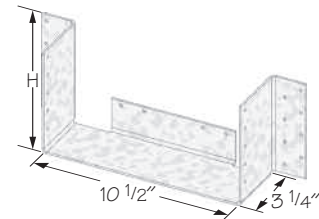
HJC



HTHJ



HHC



HJHC

Plated Truss

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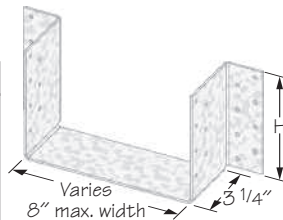
Description	USP Stock No.	Ref. No.	Steel Gauge	H	Fastener Schedule					Allowable Loads (Lbs.) ²								Code Ref.
					Carrying Member ³		Carried Member			DF-L / SP				S-P-F				
					Qty	Type	per Hip	per Jack	Type	Uplift ¹				Uplift ¹				
										100%	115%	125%	160%	100%	115%	125%	160%	
2 x 6 right / left	HJC26	---	12	5-3/8	16	16d	5	7	10d	2385	2740	2980	1840	2065	2375	2580	1545	11, F6, F12, D3
2 x 8 right / left	HJC28	---	12	7-1/8	20	16d	6	8	10d	2980	3425	3505	1840	2580	2945	2945	1545	
2 x 6 terminal	HHC26	---	12	5-7/16	20	16d	5	---	10d	2980	3425	3505	1015	2580	2945	2945	1545	
2 x 8 terminal	HHC28	---	12	7-3/16	24	16d	6	---	10d	3505	3505	3505	1840	2945	2945	2945	1545	130
2 x 6 terminal	HJHC26	MTHM	12	5-7/16	20	16d	5	2	10d	2980	3425	3505	1840	2580	2945	2945	1545	
2 x 8 terminal	HJHC28	---	12	7-3/16	24	16d	6	2	10d	3505	3505	3505	1840	2945	2945	2945	1545	
2 x 4 terminal	HTHJ24-18	---	18	3	10	10d	5	3	10d	1140	1310	1425	865	980	1125	1225	730	11, F13
2 x 6 terminal	HTHJ26-18	---	18	5	16	16d	7	5	16d	2190	2520	2740	1790	1870	2155	2340	1505	

1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
 2) Loading published for total load of hip / jack connection.
 3) Minimum nail penetration is 1-5/8" for 16d nails.

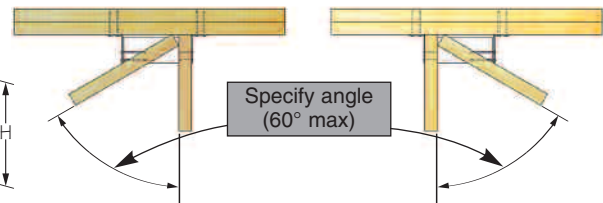
New products or updated product information are designated in red.

HJC Specialty Options Chart

Option	Hip Truss Skew
Range	30° to 60°
Allowable Loads	100% of table load
Ordering	Add SK, angle of hip required, to product number. Ex. HJC26-SK55



HJC (skewed)



Typical HJC (skewed) installation with alternate skew angle top view

GIRDER TRUSS HANGERS – GT, GTD, & GTS SERIES



Plated Truss

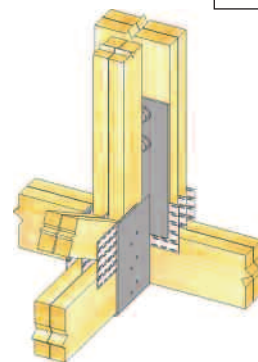
The GT primarily hangs girder trusses off other girder trusses, although a wide variety of other heavy-duty installations apply.

Materials: See chart

Finish: USP primer

Options: All models available in LVL sizes, use M in place of T, as in **GT2M4B**.

Codes: ESR-1831, FL822



Typical GT2T4B installation

Installation:

- Use all specified fasteners. See Product Notes, page 10.
- Minimum heel height is 9 1/4" for GT hangers.

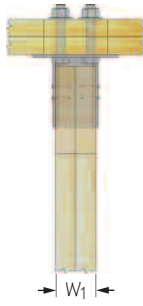
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Supported Member	USP Stock No.	Ref. No.	Steel Gauge		Dimensions					Fastener Schedule ^{1,2}				Wood Species	Allowable Loads (Lbs.)							Code Ref.	
			Back Plate	Strap	W1	L	H	D	B	Supporting Truss		Supported Truss			Supporting Member								
										Qty	Bolt Dia.	Qty	Type		1 Ply		2 Ply		3 Ply		Uplift		
															100%	115%	100%	115%	100%	115%			160%
2 ply	GT2T2B	---	3	7	3-7/16	6	19	4-1/2	9-1/4	2	3/4	12	16d	DF-L / SP	1725	1985	2950	3390	3340	3840	2000	130	
														S-P-F	1515	1740	2515	2895	3085	3545	2000		
	GT2T2BH	---	3	7	3-7/16	6	22-1/4	4-1/2	9-1/4	2	1	12	16d	DF-L / SP	2270	2610	3920	4510	5715	6575	2000	130	
														S-P-F	1980	2275	3330	3830	4850	5580	2000		
	GT2T3B	---	3	7	3-7/16	6	22	4-1/2	9-1/4	3	3/4	12	16d	DF-L / SP	2505	2880	4370	5025	4985	5730	2000	130	
														S-P-F	2175	2505	3710	4265	4590	5275	2000		
	GT2T4B	THGB2	---	3	7	3-7/16	7	19	5-1/2	9-1/4	4	3/4	12	16d	DF-L / SP	3465	3985	5905	6790	6680	7680	2000	10, F16
														S-P-F	3040	3495	5040	5785	5485	5785	2000		
GT2T6B	---	---	3	7	3-7/16	7-1/4	22	6	9-1/4	6	3/4	12	16d	DF-L / SP	5200	5980	8860	10190	10020	11520	2000	10	
													S-P-F	4560	5245	7560	8695	9260	9925	2000			
GT2T6BH	---	---	3	7	3-7/16	7-1/4	26-1/4	6	9-1/4	6	1	12	16d	DF-L / SP	6855	7885	11795	13565	13530	13870	2000	130	
													S-P-F	5995	6890	9630	9925	9630	9925	2000			
GT2T8B	THGBH2	---	3	7	3-7/16	7-1/4	25	6	9-1/4	8	3/4	12	16d	DF-L / SP	6935	7975	11815	13585	13355	13870	2000	10	
													S-P-F	6080	6995	9630	9925	9630	9925	2000			
3 ply	GT3T3B	---	3	7	5-1/8	6	22	4-1/2	9-1/4	3	3/4	12	16d	DF-L / SP	2505	2880	4370	5025	4985	5730	2000	130	
														S-P-F	2175	2505	3710	4265	4590	5275	2000		
	GT3T3BH	---	3	7	5-1/8	6	26-1/4	4-1/2	9-1/4	3	1	12	16d	DF-L / SP	3200	3675	5740	6605	8490	9765	2000	130	
														S-P-F	2745	3160	4830	5555	7160	8230	2000		
	GT3T4B	THGB3	---	3	7	5-1/8	7	19	5-1/2	9-1/4	4	3/4	12	16d	DF-L / SP	3465	3985	5905	6790	6680	7680	2000	10
														S-P-F	3040	3495	5040	5795	6175	7000	2000		
	GT3T4BH	---	---	3	7	5-1/8	7	22-1/4	5-1/2	9-1/4	4	1	12	16d	DF-L / SP	4570	5255	7865	9045	11435	13150	2000	10, F16
														S-P-F	3995	4595	6685	7690	9720	11180	2000		
GT3T6B	---	---	3	7	5-1/8	7-1/4	22	6	9-1/4	6	3/4	12	16d	DF-L / SP	5200	5980	8860	10190	10020	11520	2000	10, F16	
													S-P-F	4560	5245	7560	8695	9260	10650	2000			
GT3T6BH	---	---	3	7	5-1/8	7-1/4	26-1/4	6	9-1/4	6	1	12	16d	DF-L / SP	6855	7885	11795	13565	14860	14860	2000	10	
													S-P-F	5995	6890	10030	11535	12480	12480	2000			
GT3T8B	THGBH3	---	3	7	5-1/8	7-1/4	25	6	9-1/4	8	3/4	12	16d	DF-L / SP	6935	7975	11815	13585	13355	15360	2000	10	
													S-P-F	6080	6995	10080	11590	12350	13090	2000			
GT3T8BH	---	---	3	7	5-1/8	7-1/4	30-1/4	6	9-1/4	8	1	12	16d	DF-L / SP	9140	10515	15725	18085	19155	19465	2000	10	
													S-P-F	7990	9190	13370	13750	13455	13750	2000			
4 ply	GT4T4B	---	3	7	6-1/2	7-1/2	19	5-1/2	9-1/4	4	3/4	12	16d	DF-L / SP	3465	3985	5905	6790	6680	7680	2000	10	
														S-P-F	3040	3495	5040	5795	6175	7000	2000		
	GT4T4BH	---	3	7	6-1/2	7-1/2	22-1/4	5-1/2	9-1/4	4	1	12	16d	DF-L / SP	4570	5255	7860	9040	11440	13155	2000	10	
														S-P-F	3995	4595	6685	7685	9720	11175	2000		
	GT4T6B	---	3	7	6-1/2	7-1/2	22	6	9-1/4	6	3/4	12	16d	DF-L / SP	5200	5980	8860	10185	10020	11525	2000	10	
														S-P-F	4560	5245	7560	8690	9260	10650	2000		
GT4T6BH	---	---	3	7	6-1/2	7-1/2	26-1/4	6	9-1/4	6	1	12	16d	DF-L / SP	6855	7880	11790	13560	14860	14860	2000	10, F16	
													S-P-F	5990	6890	10025	11530	12480	12480	2000			
GT4T8B	THGBH4	---	3	7	6-1/2	7-1/2	25	6	9-1/4	8	3/4	12	16d	DF-L / SP	6930	7970	11810	13580	13360	15365	2000	10, F16	
													S-P-F	6080	6990	10080	11590	12345	13090	2000			
5 ply	GT5T8BH	---	3	7	8-1/8	9-1/4	30-1/4	6	9-1/4	8	1	12	16d	DF-L / SP	9140	10510	15720	18080	19465	19465	2000	10, F16	
														S-P-F	7990	9185	13365	15370	16350	16350	2000		

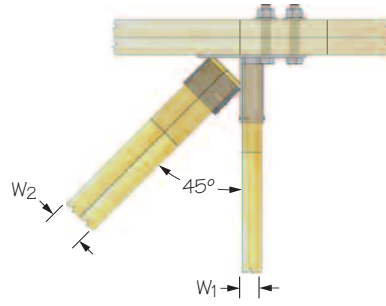
1) Bolts shall conform to ASTM A 307 Grade A or better.

2) GT series require 2 x 6 vertical member for 2, 3, and 4 bolt hangers and 2 x 8 for 6 and 8 bolt hangers.

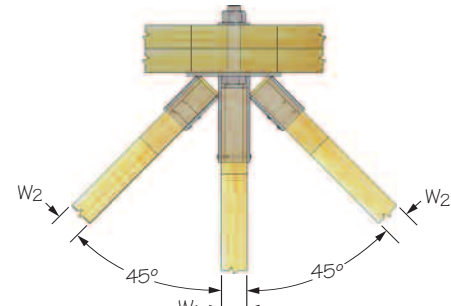
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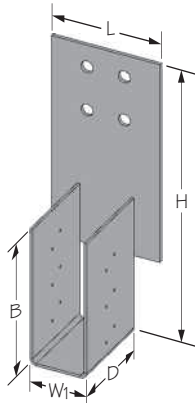
GT



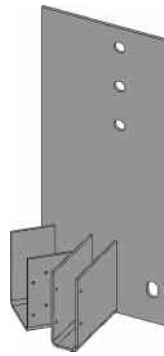
GTS
left shown



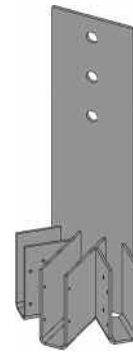
GTD



GT2T4B



GTS1T2H3BSKL
left shown



GTD1T1H3B

Plated Truss

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GT series – Hip Applications

Supported Member	USP Stock No.	Ref. No.	Steel Gauge		Dimensions						Fastener Schedule ²						Wood Species	Allowable Loads (Lbs.) ¹								Code Ref.
			Back Plate	Strap	W1	W2	L	H	D	B	Supporting Truss		Supported Truss		Supported Hip			Supporting Member								
											Qty	Bolt Dia.	Qty	Type	Qty	Type		100%	115%	100%	115%	100%	115%	160%		
																									Uplift	
2 ply skewed 45°	*GT2T2BSKL/R	---	3	7	3-7/16	---	6	19	4-1/2	9-1/4	3	3/4	12	16d	---	---	DF-L / SP	1695	1945	2935	3375	3310	3810	2000	130	
	*GT2T4BSKL/R	---	3	7	3-7/16	---	7-1/4	19	4-1/2	9-1/4	5	3/4	12	16d	---	---	DF-L / SP	3385	3895	5870	6750	6625	7620	2000		
3 ply skewed 45°	*GT3T6BSKL/R	---	3	7	5-1/8	---	7-1/4	22	4-1/2	9-1/4	7	3/4	12	16d	---	---	DF-L / SP	5105	5870	8820	10145	9945	11435	2000		
																	S-P-F	4475	5145	7510	8635	9185	10565	2000		
1 ply hip & jack	*GTS1T1H3BSKL/R	---	3	7	1-5/8	1-5/8	9-1/4	22	**4-1/2	5-1/2	4	3/4	4	10d x 1-1/2	4	10d x 1-1/2	DF-L / SP	2445	2815	4330	4980	4920	5660	---		
	*GTS1T1H4BSKL/R	---	3	7	1-5/8	1-5/8	9-1/4	19	**4-1/2	5-1/2	5	3/4	4	10d x 1-1/2	4	10d x 1-1/2	DF-L / SP	3385	3890	5865	6745	6620	7610	---		
2 ply hip & 1 ply jack	*GTS1T2H3BSKL/R	---	3	7	1-5/8	3-7/16	9-1/4	22	**4-1/2	5-1/2	4	3/4	4	10d x 1-1/2	4	10d x 1-1/2	DF-L / SP	2445	2815	4330	4980	4920	5660	---		
																	S-P-F	2120	2440	3665	4215	4530	5210	---		
1 ply terminal hip	GTD1T1H3B	THMA	3	7	1-5/8	1-5/8	6	22	**4-1/2	5-1/2	3	3/4	4	10d x 1-1/2	4	10d x 1-1/2	DF-L / SP	2460	2830	4355	5005	4950	5695	---		
2 ply terminal hip	GTD1T2H3B	THMA-2	3	7	1-5/8	3-7/16	8	22	**4-1/2	5-1/2	3	3/4	4	10d x 1-1/2	4	10d x 1-1/2	DF-L / SP	2450	2820	4335	4985	4930	5670	---		
																	S-P-F	2125	2445	3670	4220	4535	5215	---		

1) The listed loads for GTS and GTD is the total of hip and jack connection.
 2) Bolts shall conform to ASTM A 307 or better.
 GT Series require 2 x 6 vertical member for 2, 3, and 4 bolt hangers and 2 x 8 for 6 and 8 bolt hangers.
 All side pocket applications assume 45° angle.
 Must specify right or left for all GTS and GT skewed.
 **D is 3" for hip bucket.

The GTU and GTWS series girder-to-girder hangers feature high uplift capacities along with high gravity load ratings.

GTU – Utilizes bolting through the vertical member of the supported truss, which spreads the load more effectively throughout the multiple truss members.

GTWS – Low profile version, which utilizes USP’s WS3 Wood Screw, shown on page 22.

Materials: See chart

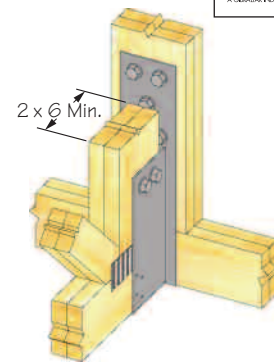
Finish: GTU – USP primer; GTWS – G90 galvanizing

Codes: ESR-2757, FL819, FL578, FL6223,

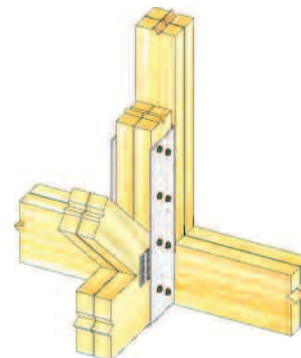
Dade County, FL 07-1003.10

Installation

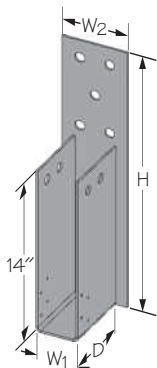
- Use all specified fasteners. See Product Notes, page 10.
- WS Wood Screws are included with hangers where specified.
- **GTU40** and **GTU80** shall be installed to a minimum 2x6 vertical member of a girder truss having a maximum 2x8 bottom chord.
- **GTU100** shall be installed to a minimum 2x8 vertical member of a girder truss having a maximum 2x8 bottom chord.
- **GTWS2T** shall be installed to a minimum 2x4 vertical member of a girder truss with no restriction on the size of the bottom chord.
- **GTWS3T** shall be installed to a minimum 2x6 vertical member of a girder truss with no restriction on the size of the bottom chord.
- **GTWS4T** shall be installed to a minimum 2x8 vertical member of a girder truss with no restriction on the size of the bottom chord.



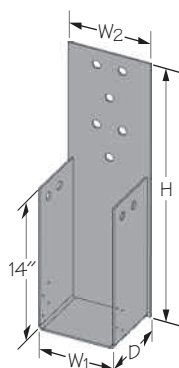
Typical GTU40 installation



Typical GTWS installation



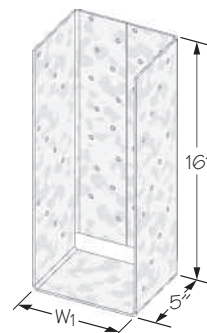
GTU40



GTU100



GTWS2T



GTWS3T

Plated Truss

USP Stock No.	Ref. No.	Steel Gauge	Dimensions				Fastener Schedule ³								No. of Plys	Allowable Loads (Lbs.)				Code Ref.
			W1	W2	H	D	Supporting Truss				Supported Truss					DF-L / SP				
							Qty	Bolt Dia. ^{2,5}	Wood Screws ^{4,6}	Qty	Bolt Dia. ^{2,5}	Qty	Nails	Wood Screws ^{4,6}		100%	115%	125%	Uplift ¹ 160%	
GTU40	---	7	3-1/4	5-1/2	22-1/2	6	5	3/4	---	2	3/4	8	10d	---	2 Ply	6250	6250	6250	8335	12, F13
															3 Ply	6250	6250	6250	8335	
GTU80	---	7	4-7/8	5-1/2	25-1/2	6	6	3/4	---	2	3/4	8	10d	---	2 Ply	8435	9700	10545	10000	12, F9, F13, D8
															3 Ply	9270	10660	10665	10000	
GTU100	---	7	7	8	25-1/2	6	6	3/4	---	2	3/4	8	10d	---	2 Ply	8530	9810	10660	10000	F26
															3 Ply	9335	10665	10665	10000	
GTWS2T	---	10	3-1/4	---	16	4	22	---	WS3	16	---	---	---	WS3	2 Ply	6730	7740	8415	7835	
GTWS3T	---	10	4-7/8	---	16	5	28	---	WS3	24	---	---	---	WS3	2 Ply	8570	9855	10710	11750	
GTWS4T	---	10	6-1/2	---	16	5	28	---	WS3	24	---	---	---	WS3	2 Ply	8570	9855	10710	11750	

1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
 2) Bolts shall conform to ASTM A 307 or better.
 3) GTU series 3/4" girder bolts and GTWS WS3 wood screws require a minimum 3" wood penetration.
 4) WS3 wood screws are 1/4" x 3" long and are included with the GTWS hangers.
 5) All bolts of the GTU hangers shall be installed in the vertical member satisfying all code spacing requirements.
 6) The wood screws of the GTWS hangers may be installed in both vertical and horizontal members.
 New products or updated product information are designated in red.

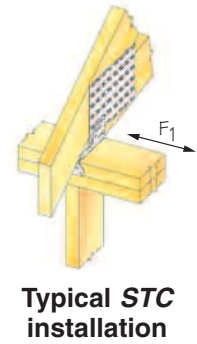
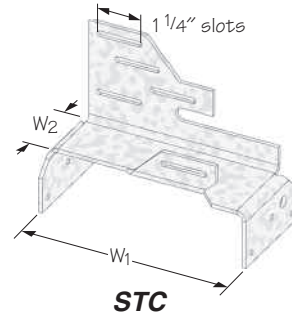
Bolts must be ordered separately. See page 20 for available sizes.

The STC provides uplift resistance by securing trusses to top plates. Slotted nail holes allow for horizontal movement as scissor trusses deflect.

Materials: 12 gauge
Finish: G90 galvanizing
Codes: ESR-2756, FL817

Installation:

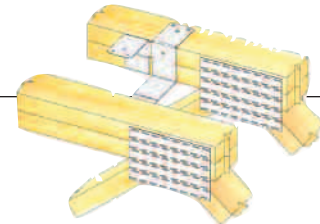
- Use all specified fasteners. See Product Notes, page 10.
- When installing, do not fully set nails.
- Locate nails into the center of slots to allow for horizontal movement.



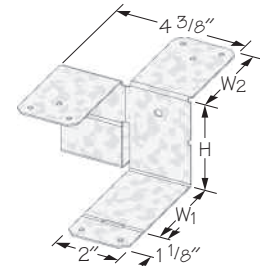
Typical STC installation

USP Stock No.	Ref. No.	Steel Gauge	Description	Dimensions		Fastener Schedule ²				Allowable Loads (Lbs.)				Code Ref.
				W1	W2	Truss		Plate		DF-L / SP		S-P-F		
						Qty	Type	Qty	Type	F1	Uplift ¹	F1	Uplift ¹	
STC24	TC24	12	2 x 4 top plate	3-9/16	1-5/8	5	10d x 1-1/2	6	10d x 1-1/2	330	810	275	680	11, F12
STC26	TC26	12	2 x 6 top plate	5-1/2	1-5/8	5	10d x 1-1/2	6	10d x 1-1/2	330	810	275	680	
STC28	TC28	12	2 x 8 top plate	7-1/4	1-5/8	5	10d x 1-1/2	6	10d x 1-1/2	330	810	275	680	

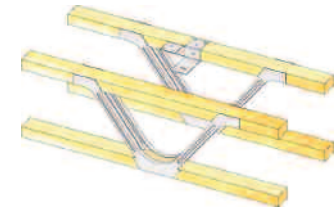
1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
 2) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.
 New products or updated product information are designated in red.



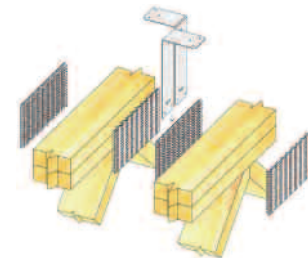
Typical FTC installation



FTC



Typical FTC 2 ply metal web truss installation



Typical FTC2F retrofit installation

FLOOR TRUSS CLIPS – FTC SERIES

The Floor Truss Clip efficiently transfers loads between floor truss plies. The FTC slides easily onto the top or bottom chord and provides a guide to help position and support the second truss during assembly.

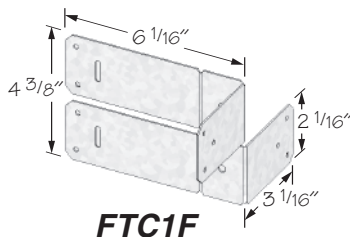
Materials: 18 gauge
Finish: G90 galvanizing
Codes: ESR-2756, FL817
Patents: #5,653,079

Installation:

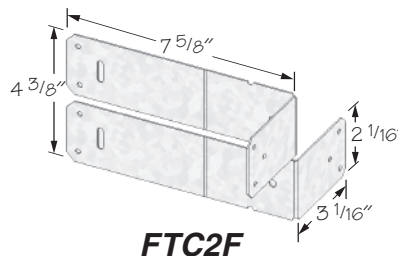
- Use all specified fasteners. See Product Notes, page 10.
- The truss designer must determine the number of clips and spacing between units according to concentrated load conditions and uniform loading requirements.

Truss Size	USP Stock No.	Ref. No.	Steel Gauge	Dimensions			Fastener Schedule ^{2,3}		Maximum Transfer Loads ^{1,4}		Code Ref.
				W1	W2	H	Qty	Type	DF-L / SP	S-P-F	
3 x 2	FTC32	---	18	2-1/16	2-1/2	1-1/2	10	10d x 1-1/2	680	590	11, F12
(2) 3 x 2	FTC32-2	---	18	2-1/16	2-1/2	3	10	10d x 1-1/2	680	590	11, F12
4 x 2	FTC1	---	18	3-1/2	3-1/16	1-1/2	10	10d	865	750	11, F12
	FTC1F	---	18	3-1/16	---	4-3/8	10	10d	865	750	11
(2) 4 x 2	FTC2	---	18	3-1/2	3-1/16	3	10	10d	865	750	11, F12
	FTC2F	---	18	3-1/16	---	4-3/8	10	10d	865	750	11

1) Transfer loads are for 100% floor load, and shall not be increased for short term load duration.
 2) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.
 3) Minimum nail penetration shall be 1-1/2" for 10d nails.
 4) Truss designer shall determine the number of clips for concentrated loads and the spacing for uniform loads.



FTC1F



FTC2F

Plated Truss

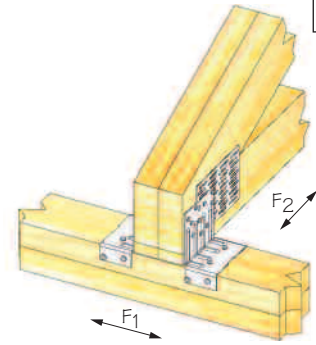
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Use the SBP instead of extra truss plys or nail-on scabs to distribute concentrated truss reactions and avoid top plate crushing. The two-piece design accommodates any number of girder plys. A wraparound design gives superior uplift resistance, and reinforcement ribs effectively distribute bearing loads. Works with both single and double 2x4 or 2x6 top plates.

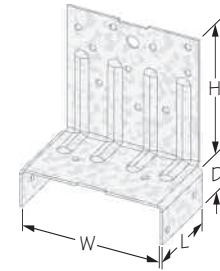
Materials: 16 gauge
Finish: G90 galvanizing
Codes: ESR-1831, FL822

Installation:

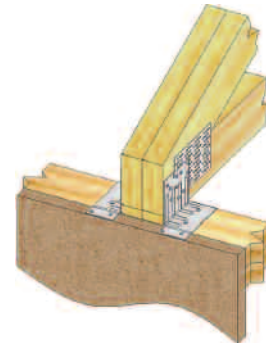
- Use all specified fasteners. See Product Notes, page 10.
- **The SBP shall be installed in pairs.**



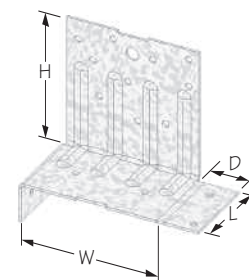
Typical SBP standard installation



SBP



Typical SBP alternate installation



SBP tab up

No. of Truss Plys	Wood Species	F _c (psi)	Allowable Loads (Lbs.) ^{1,2,3}								
			SBP's Alone			SBP + Truss Bearing ⁴					
			100%	115%	125%	100%	EBL	115%	EBL	125%	EBL
SBP4 on 2 x 4 Top Plate (3-1/2" wide)											
1 Ply	DF-L	625	2260	2600	2825	5540	5.91	5880	6.27	6105	6.51
	SP	565	2440	2805	3050	5405	6.38	5770	6.81	6015	7.10
	S-P-F	425	1940	2230	2425	4170	6.54	4460	7.00	4655	7.30
	Hem Fir	405	1980	2275	2475	4105	6.76	4400	7.24	4600	7.57
2 Ply	DF-L	625	2320	2670	2900	8885	4.74	9235	4.93	9465	5.05
	SP	565	2500	2875	3075	8435	4.98	8810	5.20	9010	5.32
	S-P-F	425	2000	2300	2500	6465	5.07	6765	5.31	6965	5.46
3 Ply	DF-L	625	2320	2670	2900	12165	4.33	12515	4.45	12745	4.53
	SP	565	2500	2875	3075	11400	4.48	11775	4.63	11975	4.71
	S-P-F	425	2000	2300	2500	8695	4.55	8995	4.70	9195	4.81
4 Ply	DF-L	625	2320	2670	2900	15445	4.12	15795	4.21	16025	4.27
	SP	565	2500	2875	3075	14365	4.24	14740	4.35	14940	4.41
	S-P-F	425	2000	2300	2500	10925	4.28	11225	4.40	11425	4.48
5 Ply	DF-L	625	2320	2670	2900	18785	4.00	19135	4.08	19365	4.14
	SP	565	2500	2875	3075	17705	4.12	18055	4.23	18255	4.29
	S-P-F	425	2000	2300	2500	13445	4.16	13745	4.27	13945	4.33
SBP6 on 2 x 6 Top Plate (5-1/2" wide)											
1 Ply	DF-L	625	3165	3640	3955	8320	8.87	8795	9.38	9110	9.72
	SP	565	3415	3930	4270	8075	9.53	8590	10.14	8930	10.54
	S-P-F	425	2715	3125	3395	6220	9.76	6630	10.40	6900	10.82
	Hem Fir	405	2770	3190	3465	6110	10.06	6530	10.75	6805	11.20
2 Ply	DF-L	625	3250	3735	4060	13565	7.23	14050	7.49	14375	7.67
	SP	565	3500	4025	4375	12825	7.57	13350	7.88	13700	8.08
	S-P-F	425	2800	3220	3500	9815	7.70	10235	8.03	10515	8.25
	Hem Fir	405	2855	3285	3570	9540	7.85	9970	8.21	10255	8.44
3 Ply	DF-L	625	3250	3735	4060	18720	6.66	19205	6.83	19530	6.94
	SP	565	3500	4025	4375	17485	6.88	18010	7.08	18360	7.22
	S-P-F	425	2800	3220	3500	13320	6.96	13740	7.18	14020	7.33
	Hem Fir	405	2855	3285	3570	12880	7.07	13310	7.30	13595	7.46
4 Ply	DF-L	625	3250	3735	4060	23875	6.37	24360	6.50	24685	6.58
	SP	565	3500	4025	4375	22145	6.53	22670	6.69	23020	6.79
	S-P-F	425	2800	3220	3500	16825	6.60	17245	6.76	17525	6.87
	Hem Fir	405	2855	3285	3570	16220	6.67	16650	6.85	16935	6.97

- 1) Allowable loads are for a pair of SBP devices. SBP's shall be installed in pairs.
- 2) Multiple ply trusses shall be fastened together to act as a single unit.
- 3) EBL denotes effective bearing length and includes the actual bearing length plus the contribution of the SBP device.
- 4) Assumes full seating of truss on top plate.

USP Stock No.	Ref. No.	Steel Gauge	Dimensions				Joist Thickness	Fastener Schedule ^{1,4}				Allowable Loads (Lbs.) ^{2,3}						Code Ref.		
								Plate		Truss		DF-L / SP			S-P-F					
			Top	Sides	Qty	Type		Qty	Type	F1	F2	Uplift ⁵	F1	F2	Uplift ⁵					
			Qty	Type	Qty	Type		Qty	Type	160%	160%	160%	160%	160%	160%					
SBP4	TBE4	16	3-1/2	3-1/4	2	1	2-7/8" or less	4	10d	8	10d	20	10dx1-1/2	1390	1630	1295	1170	1370	1085	10, F16
												20	10d	1390	1630	1295	1170	1370	1085	
SBP6	TBE6	16	5-1/2	3-1/4	2	1	2-7/8" or less	4	10d	8	10d	28	10dx1-1/2	1390	1630	1295	1170	1370	1085	
												28	10d	1390	1630	1295	1170	1370	1085	

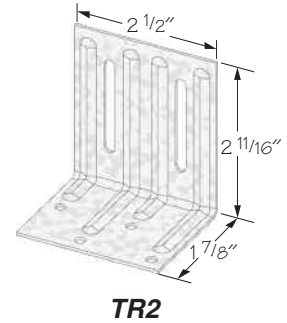
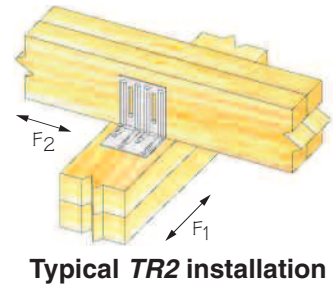
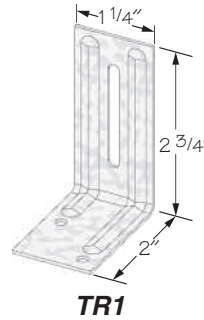
- 1) Fastener Schedule is for a pair of SBP devices.
 - 2) Allowable loads are for a pair of SBP devices. SBP's shall be installed in pairs.
 - 3) Multiple ply trusses shall be fastened together to act as a single unit.
 - 4) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) x 1-1/2" long.
 - 5) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
- New products or updated product information are designated in red.

Slotted design allows truss to deflect without imposing load on wall below.

Materials: See chart
Finish: G90 galvanizing

Installation:

- Use all specified fasteners. See Product Notes, page 10.
- Do not fully set nails.
- Locate nails into the center of slots.



USP Stock No.	Ref. No.	Steel Gauge	Description	Fastener Schedule				Allowable Loads (Lbs.) ¹				Code Ref.
				Truss		Plate		DF-L / SP				
				Qty	Type	Qty	Type	Without Gap ²		With 1/4" Gap ³		
								F1	F2	F1	F2	
TR1	STC	18	single slot	1	8d	2	8d	85	50	35	35	130
TR2	DTC	18	double slot	2	8d	4	8d	125	210	85	135	

- 1) Loads have been increased for short-term loading; no further increase allowed.
- 2) Truss must be bearing on top plate to achieve the allowable loads under "Without Gap".
- 3) Installed with maximum 1/4" space between rafter or truss and top plate under "With 1/4" Gap". Space is not limited to 1/4", where loads are not required.

Plated Truss

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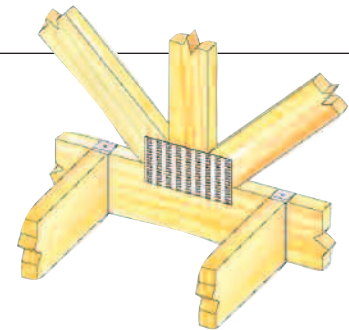
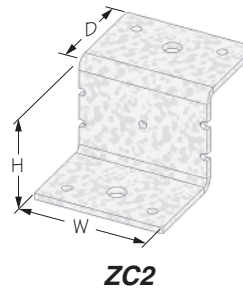
BLOCKING SUPPORTS – ZC SERIES

ZC clips secure blocking between joists or trusses which provides support for drywall or sheathing.

Materials: See chart
Finish: G90 galvanizing
Codes: ESR-2756, FL817

Installation:

- Use all specified fasteners. See Product Notes, page 10.



USP Stock No.	Ref. No.	Steel Gauge	Dimensions			Fastener Schedule ¹				Allowable Load (Lbs.) ²		Code Ref.
			W	H	D	Header		Blocking		DF-L / SP		
						Qty	Type	Qty	Type	Downward		
ZC2	Z2	20	2-1/4	1-9/16	1-1/2	3	10d x 1-1/2	2	10d x 1-1/2	240	11, F12	
ZC4	Z4	12	1-1/2	3-9/16	1-3/8	2	10d x 1-1/2	1	10d x 1-1/2	420	11, F12	
ZC6	Z6	12	1-1/2	5-9/16	1-3/8	2	10d x 1-1/2	1	10d x 1-1/2	420	11, F12	
ZC24	Z28	28	2-1/2	1-9/16	1-3/8		10d x 1-1/2		10d x 1-1/2	---	120	
ZC34	Z38	28	2-1/2	2-9/16	1-5/16		10d x 1-1/2		10d x 1-1/2	---	120	

- 1) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.
 - 2) Allowable load shall not be increased for other load duration factors.
- New products or updated product information are designated in red.

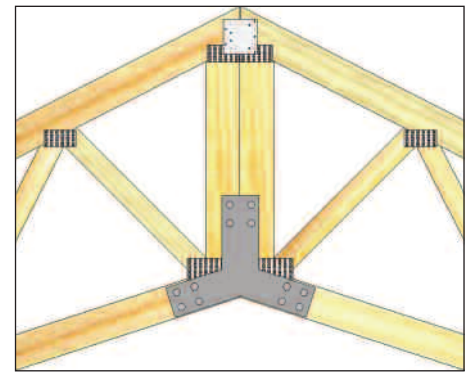


Job site splicing of long trusses is made easier with Truss Field Splice Kits. The FS and FSS (for scissors trusses) includes a pair of plates, bolts, nuts, and a Splice Clip for top chord alignment. Allowable loads are sometimes limited by tension in the net section of the wood. Choose the bottom chord size and species that will satisfy the tension requirement. Analyze tension in the web to determine the required size.

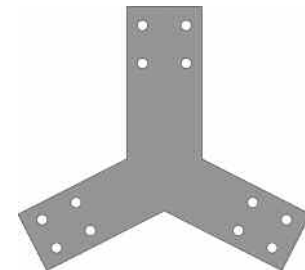
- Materials:** FS & FSS – See chart, bolts, and nuts included
 Splice Clip – 12 gauge
Finish: FS & FSS – USP primer;
 Splice Clip – G90 galvanizing;
 Bolts – zinc plating

Installation:

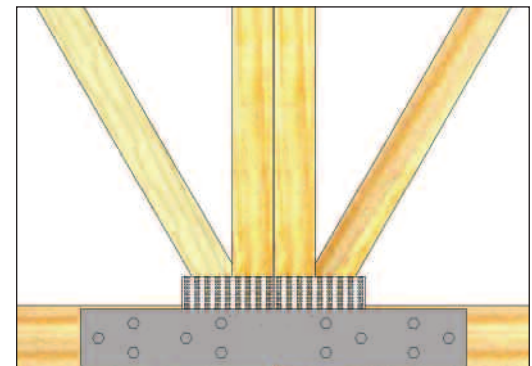
- Use all specified fasteners. See Product Notes, page 10.
- Position the two trusses, center one splice plate on the bottom chords and clamp in place for a drilling template. Install the Splice Clip at the top truss plate and fasten with (18) 10d x 1 1/2" nails. Drill through the bottom chord using splice plate as a template. Place splice plate on each side and bolt the connection firmly.



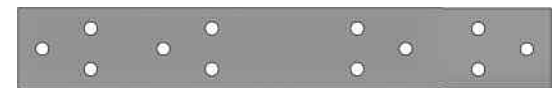
Typical FSS installation



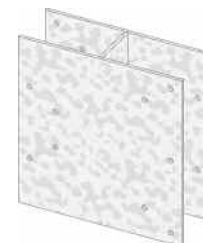
FSS



Typical FS installation



FS



Splice Clip

USP Stock No.	Ref. No.	Steel Gauge	Truss Plies	Bolt Schedule		Chord Size	Allowable Loads (Lbs.) ¹			Code Ref.
				Qty	Type		DF-L	SP	S-P-F	
							115%	115%	115%	
FS8B	---	7	1	8	3/4" x 3"	2 x 6	4995	4845	3910	130
						2 x 8	6695	6305	5240	
						2 x 10	7195	7565	6030	
FS12B	---	3	1	12	3/4" x 3"	2 x 6	4995	4845	3910	
						2 x 8	6695	6305	5240	
						2 x 10	8320	7565	6510	
FS8B-2	---	7	2	8	3/4" x 5"	2 x 6	9995	9690	7820	
						2 x 8	13390	12615	10480	
						2 x 10	14130	14725	12140	
FS12B-2	---	3	2	12	3/4" x 5"	2 x 6	9995	9690	7820	
						2 x 8	13390	12615	10480	
						2 x 10	16640	15125	13020	
FS8B-3	---	7	3	8	3/4" x 7"	2 x 6	14120	14540	11730	
						2 x 8	14145	14740	13070	
						2 x 10	14130	14725	13075	
FS12B-3	---	3	3	12	3/4" x 7"	2 x 6	14990	14540	11730	
						2 x 8	20085	18920	15720	
						2 x 10	21770	22670	19530	
FSS8B	---	7	1	12	3/4" x 3"	2 x 6	4995	4845	3910	
						2 x 8	6695	6305	5240	
						2 x 10	7195	7565	6030	
FSS12B	---	3	1	18	3/4" x 3"	2 x 6	4995	4845	3910	
						2 x 8	6695	6305	5240	
						2 x 10	8320	7565	6510	
FSS8B-2	---	7	2	12	3/4" x 5"	2 x 6	9995	9690	7820	
						2 x 8	13390	12615	10480	
						2 x 10	14130	14725	12140	
FSS12B-2	---	3	2	18	3/4" x 5"	2 x 6	9995	9690	7820	
						2 x 8	13390	12615	10480	
						2 x 10	16640	15125	13020	

1) Allowable loads shall not be increased for other load duration factors.
 2) Allowable loads are based on the lesser of the calculated bolt loads and the calculated wood tensile strength at the critical net section.
 3) Wood tensile strengths are based on the Ft of 450 psi for S-P-F, 575 psi for DF-L, and approximately 540 psi for SP; and increased by the size factors in accordance with the NDS®.

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Plated Truss

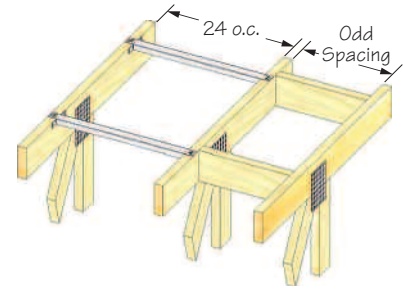
The Stabilizer™ Truss Brace & Spacer provides temporary construction bracing in the roof and ceiling planes, as well as permanent lateral bracing for webs as specified by your truss engineering.

The Stabilizer™ is easily installed by embedding the patented MII 20 teeth on the top flange straight into the edge of the truss member to be braced with a framing hammer. The side tabs are then secured by driving the teeth into the face of the truss member being braced.

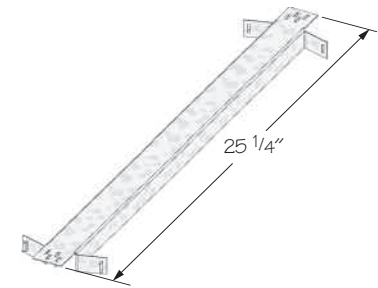
- Materials:** 20 gauge
Finish: G60 galvanizing
Codes: ESR-2362

Installation:

- Use The Stabilizer™ for standard 24" o.c. spacing. For odd spacing, cut and insert a solid block between the trusses.
- Typically, The Stabilizer™ is installed at 6' – 8' centers along the roof plane and 10' – 15' along the ceiling plane. (Refer to engineering specifications BCSI 1-03, published by The Truss Plate Institute for specific bracing requirements.)
- The Stabilizer™ must be supplemented with diagonal bracing in the roof and ceiling planes and cross bracing in the web plane at required intervals.
- Web forces are not to exceed 8000 lbs.
- The Stabilizer™ is properly installed when the top flap and side tabs are flush with the member being braced.



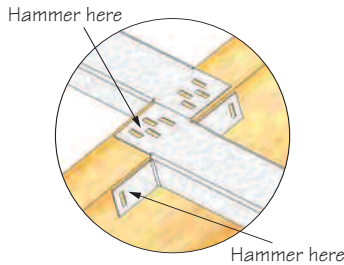
Temporary Construction Bracing Installation



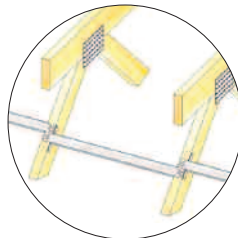
ST24H Stabilizer™

Important: The erection contractor is responsible for determining and installing the temporary bracing for the structure, including the trusses. It is most important for the installer to provide adequate means for bracing the first truss installed. The performance of the entire bracing system depends on the adequacy of the ground bracing or other means of bracing the first group of trusses installed. The building designer is responsible for the permanent bracing design of the overall structure including the truss. This includes the design of required supplemental diagonal and cross bracing.

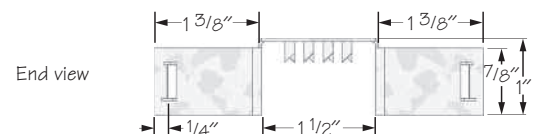
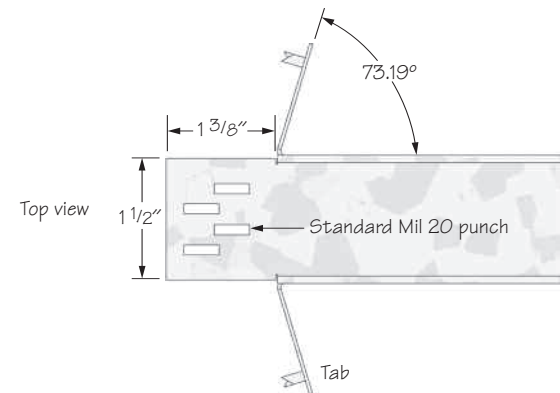
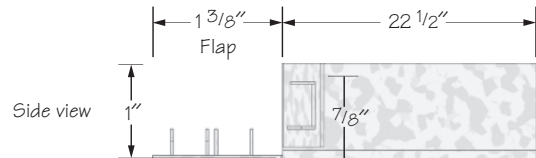
Plated Truss



Chord attachment detail



Web bracing installation



USP Stock No.	Ref. No.	Steel Gauge	O.C. Spacing	Allowable Axial Loads (Lbs.)		
				Tension	Tension with Fastener	Compression
ST24H	TSB2-24	20	24'	105	155	420

1) 1 pound = 4.448N
 2) Fastener shall be (1) 8d or 10d common wire nail inserted through nail slot.

Truss spacers give framers fast and accurate spacing for trusses, rafters, or floor joists. The TS and TSX eliminate the need to mark layouts on bearing plates, improve installation speed, and help eliminate spacing errors. These spacers are light weight and compact.

Materials: See chart

Installation:

- Use (1) 8d nail per end to fasten units to trusses, rafters, or floor joists.

Important: These units provide spacing guides only. Do not rely on the TS or TSX for bracing.

Joist Width	USP Stock No. ¹	Ref. No.	Steel Gauge	O. C. Spacing	Overall Length	Sections Per Piece	Code Ref.
1-1/4	TS	--	20	24"	2' 1-1/2"	1	120
1-1/2	TS24	--	22	24"	2'	1	
	TSX16	TSF2-16	22	16"	8'	6	
	TSX19	--	22	19.2"	8'	5	
	TSX24	TSF2-24	22	24"	10'	5	

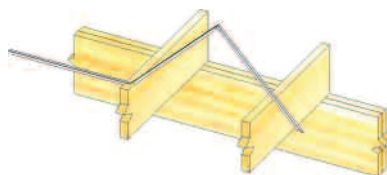
1) TSX spacers are shipped folded.



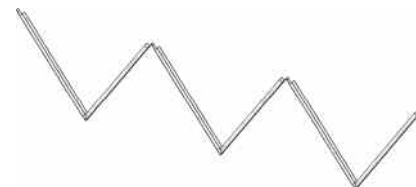
TS single-unit spacer



TS24



Typical TSX installation



TSX multi-unit spacer

DRAG STRUT CONNECTOR – LDSC & DSC SERIES

Transfers lateral loads from girder truss into bearing walls.

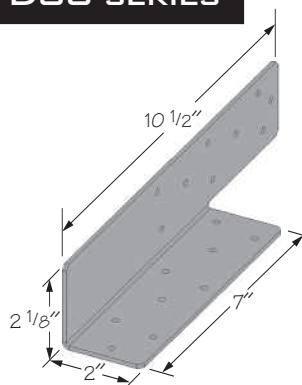
Materials: See chart

Finish: USP primer

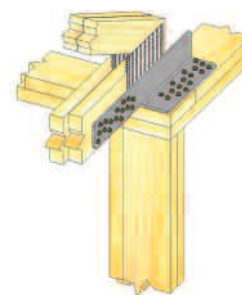
Codes: ESR-2576, FL817

Installation:

- Use all specified fasteners. See Product Notes, page 10.
- WS3 Wood Screw, 1/4" dia. x 3" long, are supplied with DSC4 connector.



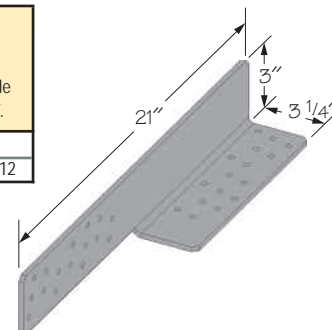
LDSC4L left shown



Typical DSC4R installation

USP Stock No.	Ref. No.	Steel Gauge	Fastener Schedule ^{2,3}		Allowable Tension Loads (Lbs.) ¹				Code Ref.
			Qty	Type	DF-L / SP		S-P-F		
					Compression	Tension	Compression	Tension	
LDSC4L/R	--	14	8	10d x 1-1/2	1640	1640	1425	1425	11
DSC4L/R	DSC4R/L-SDS3	3	32	WS3	4965	4945	4270	4250	11, F12

1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
 2) WS3 wood screws are 1/4" x 3" and are included with DSC4 connector.
 3) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.

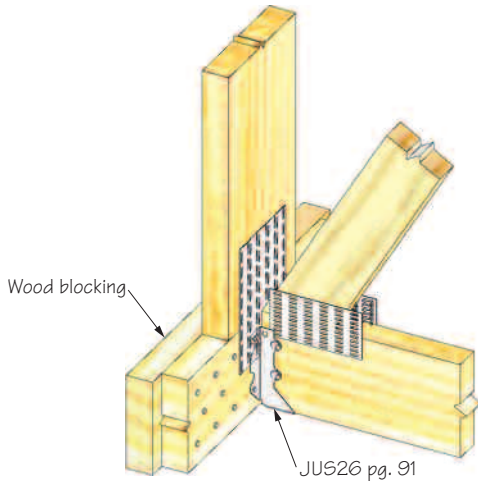


DSC4R right shown

Backer block installation

Wood blocking used to achieve full design load value of a face mount hanger attached to a carrying member.

(Blocking to be designed by truss designer or engineer of record)

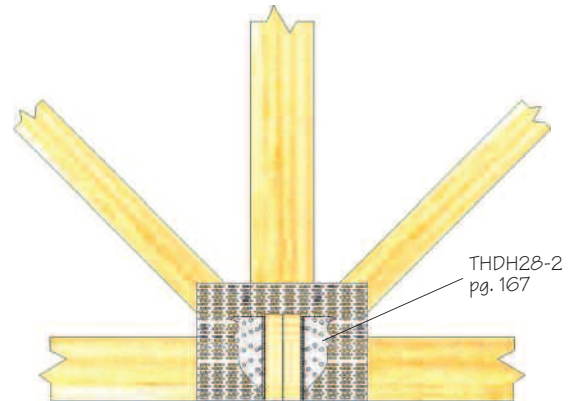


Panel point installation

Connection with face mount hanger attaching to a truss panel point.

(Hanger nails that do not penetrate wood in panel point provide no load resistance)

Reduce load according to the code.



- Wood blocking should be of similar size/grade as the truss member to which it is attached. The blocking should be designed to act as one unit with truss members.
- Truss designer shall approve blocking size/grade, fasteners required, and application.
- All fasteners used to attach wood blocking should be independent of the fasteners in the truss hanger.

Filler block installation

Wood filler blocking used for supported member width less than hanger width.

(Blocking to be designed by truss designer or engineer of record)

