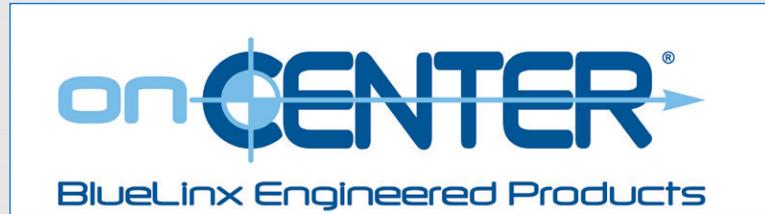


# EWP PRODUCT GUIDE

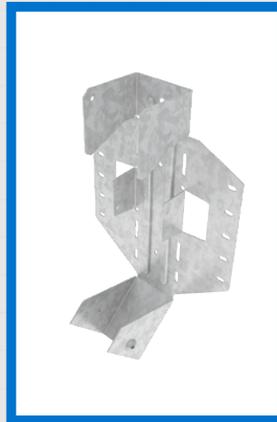
For Use With Products Manufactured by



TH035140



THF12514



LSSH23



SKH2524L

MiTek<sup>®</sup>

1-800-328-5934  
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## Follow these instructions to ensure the proper installation of MiTek products.

- See current MiTek Product Catalog for General Notes, Warranty, and installation information for hanger models, joist sizes, and header situations not shown.
- Loads listed address hanger/header/fastener limitations assuming header material is Douglas Fir-Larch, Southern Pine, or LVL manufactured in the U.S. Joist reaction should be checked by a qualified designer to ensure proper hanger selection.
- Uplift loads have been increased 60% for wind or seismic loads and no further increase shall be permitted. Reduce loads according to code for normal duration loading such as cantilever construction.
- Hangers for joists without web stiffeners must support the I-Joist's top flange and provide lateral resistance with no less than 1/8" contact. Hangers for joists with web stiffeners must support a minimum of 60% of joist depth or potential joist rotation must be addressed. For hangers less than 60% joist depth, install framing angles, one on each side, for lateral stability. See page 3.
- The type and quantity of fasteners used to install MiTek products is critical to connector performance. To achieve the allowable loads shown in

this guide, install with the fasteners specified for that particular product. All specified fasteners must be properly installed prior to applying load of any kind to the connection.

- Throughout this guide, dimensions are expressed in inches and allowable loads in pounds, unless specifically noted otherwise.
- Load values for 10d and 16d designations in the fastener schedules throughout this guide refer to common wire nails, unless noted otherwise.
- The allowable loads shown in this guide are based on Allowable Stress Design methodology.
- **Multiple I-Joist Plies:** Fasten together multiple plies of wood I-Joists, in accordance with the manufacturer's installation guidelines, such that the joists act as a single unit.
- **Sloped I-Joists:** Use hangers with sloped seats and beveled web stiffeners whenever the slope exceeds the following: 1/2:12 for seat bearing lengths of 2 1/2" or less; 3/8:12 for bearing lengths between 2 1/2" and 3 1/2"; and 1/4:12 for bearing lengths in excess of 3 1/2".

**Backer Blocks** — Pattern the nails used to install backer blocks or web stiffeners in wood BLI Joist to avoid splitting the block. The nail pattern should be sufficiently spaced to avoid the same grain line, particularly with solid sawn backer blocks. Backer blocks must be installed on wood

BLI Joist acting as the header, or supporting member. Install in accordance with the BlueLinX installation guidelines. The nails used to install hangers mounted to an BLI Joist header must penetrate through the web and into the backer block on the opposite side.

With top flange hangers, backer block required only for downward loads exceeding 250 lbs or for uplift conditions

**Backer Block Installation (Top Mount Hanger):**  
Install backer tight to top flange. Use 8-10d common nails (15-10d common nails for BLI 65, 80, 90, 700 and 900 series joists). Stagger nails to avoid splitting. Cinch nails when possible

**Backer Block Installation (Face Mount Hanger):**  
Install backer tight to top flange. Use 18-10d common nails. Stagger nails to avoid splitting. Clinch nails when possible.

Typical Top Mount Hanger backer block installation

Typical Face Mount Hanger backer block installation

### Backer Blocks\*

Joist Series	Material
BLI 700	7/8"
BLI 40, 60	1/2" + 1/2"
BLI 65, 80, 90, 900	1-1/2"

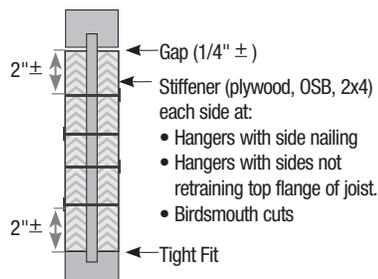
Joist Depth	Top Mount Hanger Block Depth	Face Mount Hanger Block Depth
9-1/2"	5-1/2"	6-1/4"
11-7/8"	5-1/2"	8-5/8"
14"	7-1/4"	10-3/4"
16"	7-1/4"	12-3/4"
18"	7-1/4"	14-3/4"

\* Block centered on hanger location. Minimum length 24".

## Bearing Stiffener Requirements

**Bearing Stiffeners may be required as noted below:**

- Bearing stiffeners are always required in hangers that do not extend up to support the top flange of the BLI Joist. Bearing stiffeners may be required with certain sloped or skewed hangers or to achieve uplift values. Refer to the BlueLinX Products installation requirements.



Joist Series	Stiffener Material	Nails
BLI 40, 60, 700	1/2" + 1/2"	(4) 8d *
BLI 65, 80, 90, 900	1-1/2"	(4) 10d *

Minimum stiffener width is 2-5/16".

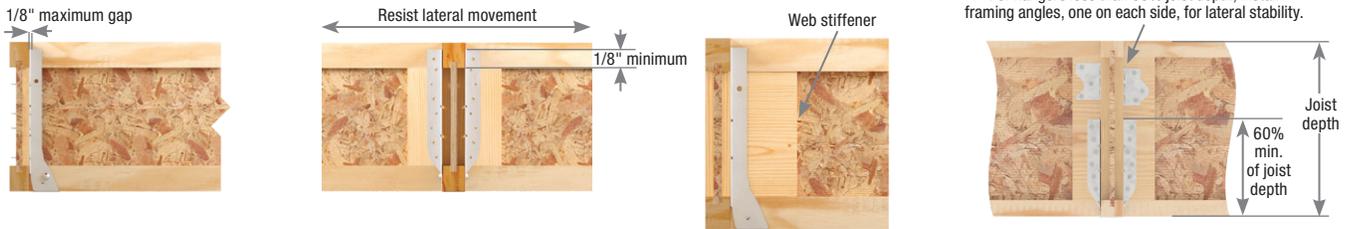
\* Use 6 nails for 18" joists.

## Support Height & Lateral Stability

Hangers for joists **without web stiffeners** must support the I-Joist's top flange and provide lateral resistance with no less than 1/8" contact.

be 60% of the joist height for stability during construction. If this cannot be accomplished, potential joist rotation must be resolved by other means.

MiTek recommends that hangers for joist **with web stiffeners** should



(Top flange support requirements can be verified in EWP Top Mount Hangers charts under Web stiffener Req'd. column) of MiTek's Product Catalog.

## Nailer Installations

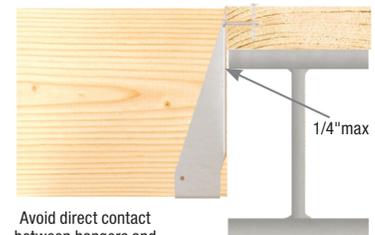
### Correct Hanger Attachment to Nailers

A nailer or sill plate is considered to be any wood member attached to a steel beam, concrete block wall, concrete stem wall, or other type of support unsuitable for nailing which is used as a nailing surface for top mount hangers to hold beams or joists.

### Nailer Sized Correctly

Top flange of hanger is fully supported and recommended nails have full penetration into nailer, resulting in a carried member hanging safely at the proper height.

The nailer must be sized to fit the support width as shown and be of sufficient thickness to satisfy recommended top flange nailing requirements. A design professional must specify nailer attachment to steel beams.



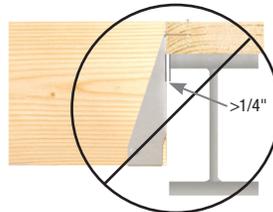
Avoid direct contact between hangers and steel beams which may cause squeaks

### Wrong Nailer Size Causes Component Failure



**! Too Narrow**

Top flange not fully supported can cause nail break-out. Or, by fully supporting top flange, hanger is tilted back, causing lifting of carried member which results in uneven surfaces and squeaky floors.



**! Too Wide**

Loading can cause cross grain breaking of nailer. The recommended nailer overhang is 1/4" maximum per side.



**! Too Thin**

Top flange nailing cannot fully penetrate nailer, causing reduced allowable loads. Never use hangers which require multiple face nails since the allowable loads are dependent on all nail holes being used.

## Top Flange Hangers

The thickness of the hanger metal and nail heads on top mount hangers must be evaluated for the effect on subsequent sheathing. Ensure the top mount hanger is installed so the flanges of the hanger are not over-spread which tends to elevate the supported I-Joist, causing uneven floor surfaces and squeaking. Similarly, ensure the hanger is installed plumb such that the face flanges of the hanger are mounted firmly against the wide-face surface of the header.



**Flush framing**



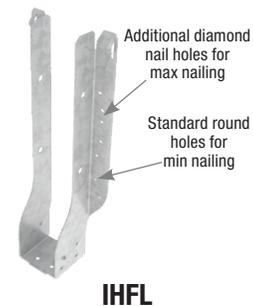
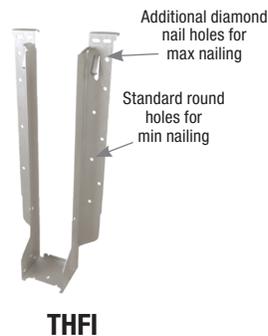
**! Hanger over-spread**



**! Hanger not plumb**

Joist Height	Top Mount Hangers <sup>4,7</sup>								Face Mount Hangers								
	MiTek Stock No. <sup>1</sup>	D Dim <sup>6</sup>	Fastener Schedule <sup>5</sup>				Uplift 160% <sup>3</sup>	Down 100% <sup>2</sup>	MiTek Stock No. <sup>1</sup>	D Dim <sup>6</sup>	Fastener Schedule <sup>5</sup>				Uplift 160% <sup>3</sup>	Down 100% <sup>2</sup>	
			Header		Joist						Min/Max	Header		Joist			
			Qty	Type	Qty	Type						Qty	Type	Qty			Type
<b>BLI 40</b>																	
Joist Width = 2-1/2"																	
9-1/2	TFL2595	2	6	10d	2	10d x 1-1/2	130	1585	THFI2595	2-1/2	--	8	10d	--	--	125	960
<b>BLI 40, BLI 60</b>																	
Joist Width = 2-1/2"																	
11-7/8	TFL25118	2	6	10d	2	10d x 1-1/2	130	1585	THFI25118	2-1/2	--	10	10d	--	--	125	1200
14	TFL2514	2	6	10d	2	10d x 1-1/2	130	1585	THFI2514	2-1/2	Min	12	10d	--	--	125	1440
											Max	14					1680
16	TFL2516	2	6	10d	2	10d x 1-1/2	130	1585	IHFL2516	2-1/2	Min	14	10d	--	--	50	1680
											Max	16					1920
<b>BLI 65, BLI 80, BLI 90</b>																	
Joist Width = 3-1/2"																	
11-7/8	TH035118	2-3/8	10	10d	2	10d x 1-1/2	230	2525	IHFL35112	2-1/2	Min	10	10d	--	--	50	1200
											Max	12					1440
14	TH035140	2-3/8	12	10d	2	10d x 1-1/2	230	2400	IHFL3514	2-1/2	Min	12	10d	--	--	50	1440
											Max	14					1680
16	TH035160	2-3/8	12	10d	2	10d x 1-1/2	230	2400	IHFL3516	2-1/2	Min	14	10d	--	--	50	1680
											Max	16					1920
18	TFI418	2-1/2	6	16d	2	10d x 1-1/2	215	2715	IHFL3516	2-1/2	Min	14	10d	--	--	50	1680
											Max	16					1920
<b>BLI 700</b>																	
Joist Width = 2-5/16"																	
11-7/8	TFL23118	2	6	10d	2	10d x 1-1/2	130	1585	IHFL23112	2-1/2	--	10	10d	--	--	50	1200
14	TFL2314	2	6	10d	2	10d x 1-1/2	130	1585	IHFL2314	2-1/2	Min	12	10d	--	--	50	1440
											Max	14					1680
16	TFL2316	2	6	10d	2	10d x 1-1/2	130	1585	IHFL2316	2-1/2	Min	14	10d	--	--	50	1680
											Max	16					1920
<b>BLI 900</b>																	
Joist Width = 3-1/2"																	
11-7/8	TH035118	2-3/8	10	10d	2	10d x 1-1/2	230	2525	IHFL35112	2-1/2	Min	10	10d	--	--	50	1200
											Max	12					1440
14	TH035140	2-3/8	12	10d	2	10d x 1-1/2	230	2400	IHFL3514	2-1/2	Min	12	10d	--	--	50	1440
											Max	14					1680
16	TH035160	2-3/8	12	10d	2	10d x 1-1/2	230	2400	IHFL3516	2-1/2	Min	14	10d	--	--	50	1680
											Max	16					1920

- Bearing stiffeners may be required for hangers by BlueLinX. See notes on page 2.
- Loads listed are based on hanger attachment to a DF or SP species solid sawn or glulam beam, or LVL header. Some loads may be increased for duration of load adjustments. Refer to MiTek Product Catalog for details.
- Uplift loads have been increased 60% for wind and seismic loading; no further increase shall be permitted.
- Top Mount Hangers require minimum 3" header thickness for THO series hangers; 3-1/2" minimum header thickness for all other stock numbers.
- 10d x 1-1/2 nails are 0.148" dia. by 1-1/2" long and 10d nails are 0.148" dia. by 3" long. 16d sinkers (0.148" dia.) by 3-1/4" long may be substituted for 10d common nails with no load reduction.
- D Dim is the length of the hanger seat.
- For top mount hangers supported by BLI headers with a flange thickness less than 1-1/2", the reduction factor for a 1-1/4" flange is 0.69 and 0.84 for a 1-3/8" flange.



Joist Height	Adjustable Height							Skewed 45° Hangers							Uplift 160% <sup>3</sup>	Down 100% <sup>2</sup>
	MiTek Stock No. <sup>1,7,9</sup>	D Dim <sup>11</sup>	Fastener Schedule <sup>4</sup>				Down 100% <sup>2</sup>	MiTek Stock No. <sup>1,6,7</sup>	D Dim <sup>11</sup>	Fastener Schedule <sup>4</sup>						
			Header		Joist					Min / Max	Header		Joist			
			Qty	Type	Qty	Type					Qty	Type	Qty	Type		
<b>BLI 40</b>															<b>Joist Width = 2-1/2"</b>	
9-1/2	MSH322 <sup>12</sup>	1-3/4	6	10d	4	10d x 1-1/2	2395	SKH2520L/R	1-7/8	--	14	10d	10	10d x 1-1/2	1530	1650
<b>BLI 40, BLI 60</b>															<b>Joist Width = 2-1/2"</b>	
9-1/2	MSH322 <sup>12</sup>	1-3/4	6	10d	4	10d x 1-1/2	2395	SKH2520L/R	1-7/8	--	14	10d	10	10d x 1-1/2	1530	1650
11-7/8	MSH322	1-3/4	6	10d	4	10d x 1-1/2	2395	SKH2520L/R	1-7/8	--	14	10d	10	10d x 1-1/2	1530	1650
14	MSH322	1-3/4	6	10d	4	10d x 1-1/2	2395	SKH2524L/R	1-7/8	--	16	10d	10	10d x 1-1/2	1530	1890
16	MSH322	1-3/4	6	10d	4	10d x 1-1/2	2395	SKH2524L/R	1-7/8	--	16	10d	10	10d x 1-1/2	1530	1890
<b>BLI 65, BLI 80, BLI 90</b>															<b>Joist Width = 3-1/2"</b>	
11-7/8	MSH422	1-3/4	6	10d	6	10d	2530	HD410_SK45L/R_BV <sup>5,10</sup>	2-1/2	Min 14 Max 20	16d	6 10	10d	880 1465	2155 3080	
14	MSH422	1-3/4	6	10d	6	10d	2530	HD414_SK45L/R_BV <sup>5,10</sup>	2-1/2	Min 18 Max 26	16d	8 12	10d	1135 1755	2770 4005	
16	MSH422	1-3/4	6	10d	6	10d	2530	HD414_SK45L/R_BV <sup>5,10</sup>	2-1/2	Min 18 Max 26	16d	8 12	10d	1135 1755	2770 4005	
18	MSH422	1-3/4	6	10d	6	10d	2530	HD414_SK45L/R_BV <sup>5,10</sup>	2-1/2	Min 18 Max 26	16d	8 12	10d	1135 1755	2770 4005	
<b>BLI 700</b>															<b>Joist Width = 2-5/16"</b>	
11-7/8	MSH2322	1-3/4	6	10d	4	10d x 1-1/2	2395	SKH2320L/R	1-7/8	--	14	10d	10	10d x 1-1/2	1530	1650
14	MSH2322	1-3/4	6	10d	4	10d x 1-1/2	2395	SKH2324L/R	1-7/8	--	16	10d	10	10d x 1-1/2	1530	1890
16	MSH2322	1-3/4	6	10d	4	10d x 1-1/2	2395	SKH2324L/R	1-7/8	--	16	10d	10	10d x 1-1/2	1530	1890
<b>BLI 900</b>															<b>Joist Width = 3-1/2"</b>	
11-7/8	MSH422	1-3/4	6	10d	6	10d	2530	HD410_SK45L/R_BV <sup>5,10</sup>	2-1/2	Min 14 Max 20	16d	6 10	10d	880 1465	2155 3080	
14	MSH422	1-3/4	6	10d	6	10d	2530	HD414_SK45L/R_BV <sup>5,10</sup>	2-1/2	Min 18 Max 26	16d	8 12	10d	1135 1755	2770 4005	
16	MSH422	1-3/4	6	10d	6	10d	2530	HD414_SK45L/R_BV <sup>5,10</sup>	2-1/2	Min 18 Max 26	16d	8 12	10d	1135 1755	2770 4005	

- 1) Shaded hangers require bearing stiffeners at joist ends.
- 2) Loads listed are based on hanger attachment to a DF or SP species solid sawn or glulam beam, or LVL header.  
Some loads may be increased for duration of load adjustments. Refer to MiTek Product Catalog for details.
- 3) Uplift loads have been increased 60% for wind and seismic loading; no further increase shall be permitted.
- 4) 10d x 1-1/2 nails are 0.148" dia. by 1-1/2" long, 10d nails are 0.148" dia. by 3" long, and 16d nails are 0.162" dia. by 3-1/2" long.
- 5) Bevel cut required on end of joist to achieve design loads.
- 6) For additional sizes, stock numbers, and modifications not shown, refer to MiTek USP's Product Catalog.
- 7) Hangers utilizing 16d nails are not compatible with I-joist headers.
- 8) Supplemental lateral support connection recommended when hanger height is less than 60% of joist height.
- 9) MSH allowable loads listed in this table assume Top-Min mounting condition installed with 4 - 10d top nails and 2 - 10d face nails. For MSH Face-Max and Top-Max mounting conditions not included in this table, refer to the current MiTek Product Catalog.
- 10) Hangers are special order. Contact MiTek for pricing and lead times.
- 11) D Dim is the length of the hanger seat.
- 12) Flanges on the bucket of the hanger may extend above the top of the joist.



MSH



SKH\_L  
left shown

Joist Height	Top Mount Hangers <sup>4,8</sup>								Face Mount Hangers								
	MiTek Stock No. <sup>1,6</sup>	D Dim <sup>7</sup>	Fastener Schedule <sup>5</sup>				Uplift 160% <sup>3</sup>	Down 100% <sup>2</sup>	MiTek Stock No. <sup>1,6</sup>	D Dim <sup>7</sup>	Min/Max	Fastener Schedule <sup>5</sup>				Uplift 160% <sup>3</sup>	Down 100% <sup>2</sup>
			Header		Joist							Header		Joist			
			Qty	Type	Qty	Type						Qty	Type	Qty	Type		
<b>Double BLI 40</b> Joist Width = 5"																	
9-1/2	TH025950-2	3	10	16d	6	10d	1145	3640	IHF25925-2	2-1/2	Min Max	10 24	10d 16d	2	10d x 1-1/2	330	1250 3530
<b>Double BLI 40, BLI 60</b> Joist Width = 5"																	
11-7/8	TH025118-2	3	10	16d	6	10d	1145	3640	IHF25112-2	2-1/2	Min Max	10 24	10d 16d	2	10d x 1-1/2	330	1250 3530
14	TH025140-2	3	12	16d	6	10d	1145	4420	THF25140-2	2-1/2	--	20	10d	6	10d	1275	2660
16	TH025160-2	3	12	16d	6	10d	1145	4420	THF25160-2	2-1/2	--	24	10d	6	10d	1275	3190
<b>Double BLI 65, BLI 80, BLI 90</b> Joist Width = 7"																	
11-7/8	BPH71118	3	10	16d	6	10d	1275	3075	HD7120	2-1/2	Min Max	16 22	16d	6 8	16d	1305 1845	2465 3390
14	BPH7114	3	10	16d	6	10d	1275	3075	HD7140	2-1/2	Min Max	20 26	16d	8 12	16d	1845 2765	3080 4005
16	BPH7116	3	10	16d	6	10d	1275	3075	HD7160	2-1/2	--	24	16d	8	10d	1560	3695
18	BPH7118	3	10	16d	6	10d	1275	3075	HD7160	2-1/2	--	24	16d	8	10d	1560	3695
<b>Double BLI 700</b> Joist Width = 4-5/8"																	
11-7/8	TH023118-2	3	10	16d	6	10d	1145	3640	THF23118-2	2-1/2	--	16	10d	6	10d	1135	1890
14	TH023140-2	3	12	16d	6	10d	1145	4420	THF23140-2	2-1/2	--	20	10d	6	10d	1275	2660
16	TH023160-2	3	12	16d	6	10d	1145	4420	THF23160-2	2-1/2	--	24	10d	6	10d	1275	3190
<b>Double BLI 900</b> Joist Width = 7"																	
11-7/8	BPH71118	3	10	16d	6	10d	1275	3075	HD7120	2-1/2	Min Max	16 22	16d	6 8	16d	1305 1845	2465 3390
14	BPH7114	3	10	16d	6	10d	1275	3075	HD7140	2-1/2	Min Max	20 26	16d	8 12	16d	1845 2765	3080 4005
16	BPH7116	3	10	16d	6	10d	1275	3075	HD7160	2-1/2	--	24	16d	8	10d	1560	3695

1) Shaded hangers require bearing stiffeners at joist ends. Bearing stiffeners may be required for non-shaded hangers by BlueLinX. See notes on page 2.

2) Loads listed are based on hanger attachment to a DF or SP species solid sawn or glulam beam, or LVL header.

Some loads may be increased for duration of load adjustments. Refer to MiTek Product Catalog for details.

3) Uplift loads have been increased 60% for wind and seismic loading; no further increase shall be permitted.

4) Top Mount Hangers require minimum 3" header thickness for TH0 series hangers; 3-1/2" minimum header thickness for all other stock numbers.

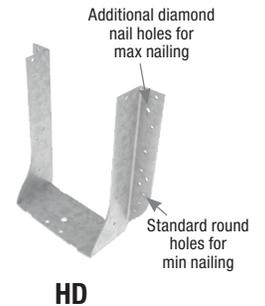
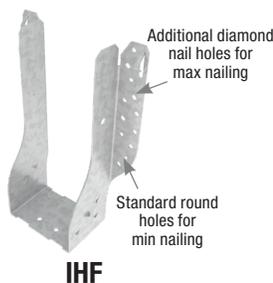
5) 10d x 1-1/2 nails are 0.148" dia. by 1-1/2" long, 10d nails are 0.148" dia. by 3" long, and 16d nails are 0.162" dia. by 3-1/2" long.

16d sinkers (0.148" dia.) by 3-1/4" long may be substituted for 10d common nails with no load reduction.

6) Hangers utilizing 16d nails are not compatible with I-joist headers.

7) D Dim is the length of the hanger seat.

8) For top mount hangers supported by BLI headers with a flange thickness less than 1-1/2", the reduction factor for a 1-1/4" flange is 0.69 and 0.84 for a 1-3/8" flange.



Joist Height	Adjustable Height								Skewed 45° Hangers							
	MiTek Stock No. <sup>1,5,6,9</sup>	D Dim <sup>10</sup>	Fastener Schedule <sup>4</sup>				Down 100% <sup>2</sup>	MiTek Stock No. <sup>1,5,6</sup>	D Dim <sup>10</sup>	Min/Max	Fastener Schedule <sup>4</sup>				Uplift 160% <sup>3</sup>	Down 100% <sup>2</sup>
			Header		Joist						Header		Joist			
			Qty	Type	Qty	Type					Qty	Type	Qty	Type		
<b>Double BLI 40</b>								<b>Joist Width = 5"</b>								
9-1/2	MSH2622-2	1-3/4	6	10d	4	10d	2530	SKH2520L/R-2 <sup>7</sup>	3-1/2	--	14	10d	10	10d	1645	1710
<b>Double BLI 40, BLI 60</b>								<b>Joist Width = 5"</b>								
9-1/2	MSH2622-2	1-3/4	6	10d	4	10d	2530	SKH2520L/R-2 <sup>7</sup>	3-1/2	--	14	10d	10	10d	1645	1710
11-7/8	MSH2622-2	1-3/4	6	10d	4	10d	2530	SKH2520L/R-2 <sup>7</sup>	3-1/2	--	14	10d	10	10d	1645	1710
14	MSH2622-2	1-3/4	6	10d	4	10d	2530	SKH2524L/R-2 <sup>7</sup>	3-1/2	--	16	10d	10	10d	1680	1950
16	MSH2622-2	1-3/4	6	10d	4	10d	2530	SKH2524L/R-2 <sup>7</sup>	3-1/2	--	16	10d	10	10d	1680	1950
<b>Double BLI 65, BLI 80, BLI 90</b>								<b>Joist Width = 7"</b>								
11-7/8	MSH422-2	2	8	16d	6	16d	3740	HD7120-SK45L/R_BV <sup>7,8</sup>	2-1/2	Min Max	16 22	16d	6 8	16d	980 1385	2465 3390
14	MSH422-2	2	8	16d	6	16d	3740	HD7140-SK45L/R_BV <sup>7,8</sup>	2-1/2	Min Max	20 26	16d	8 12	16d	1385 2075	3080 4005
16	MSH422-2	2	8	16d	6	16d	3740	HD7160-SK45L/R_BV <sup>7,8</sup>	2-1/2	--	24	16d	8	10d	1170	3695
18	MSH422-2	2	8	16d	6	16d	3740	HD7180-SK45L/R_BV <sup>7,8</sup>	2-1/2	--	28	16d	8	10d	1170	4310
<b>Double BLI 700</b>								<b>Joist Width = 4-5/8"</b>								
11-7/8	MSH2322-2	1-3/4	6	10d	4	10d	2530	SKH2320L/R-2 <sup>7</sup>	3-1/2	--	14	10d	10	10d	1645	1710
14	MSH2322-2	1-3/4	6	10d	4	10d	2530	SKH2324L/R-2 <sup>7</sup>	3-1/2	--	16	10d	10	10d	1680	1950
16	MSH2322-2	1-3/4	6	10d	4	10d	2530	SKH2324L/R-2 <sup>7</sup>	3-1/2	--	16	10d	10	10d	1680	1950
<b>Double 900</b>								<b>Joist Width = 7"</b>								
11-7/8	MSH422-2	2	8	16d	6	16d	3740	HD7120-SK45L/R_BV <sup>7,8</sup>	2-1/2	Min Max	16 22	16d	6 8	16d	980 1385	2465 3390
14	MSH422-2	2	8	16d	6	16d	3740	HD7140-SK45L/R_BV <sup>7,8</sup>	2-1/2	Min Max	20 26	16d	8 12	16d	1385 2075	3080 4005
16	MSH422-2	2	8	16d	6	16d	3740	HD7160-SK45L/R_BV <sup>7,8</sup>	2-1/2	--	24	16d	8	10d	1170	3695

- 1) Shaded hangers require bearing stiffeners at joist ends.
- 2) Loads listed are based on hanger attachment to a DF or SP species solid sawn or glulam beam, or LVL header. Some loads may be increased for duration of load adjustments. Refer to MiTek Product Catalog for details.
- 3) Uplift loads have been increased 60% for wind and seismic loading; no further increase shall be permitted.
- 4) 10d x 1-1/2 nails are 0.148" dia. by 1-1/2" long, 10d nails are 0.148" dia. by 3" long, and 16d nails are 0.162" dia. by 3-1/2" long. 16d sinkers (0.148" dia.) by 3-1/4" long may be substituted for 10d common nails with no load reduction.
- 5) For additional sizes, stock numbers, and modifications not shown, refer to MiTek's Product Catalog.
- 6) Hangers utilizing 16d nails are not compatible with I-joist headers.
- 7) Bevel cut required on end of joist to achieve design loads.
- 8) Hangers are special order. Consult MiTek for pricing and lead times.
- 9) MSH allowable loads listed in this table assume Top-Min mounting condition installed with 4 - 10d top nails and 2 - 10d face nails. For MSH Face-Max and Top-Max mounting conditions not included in this table, refer to the current MiTek Product Catalog.
- 10) D Dim is the length of the hanger seat.
- 11) Flanges on the bucket of the hanger may extend above the top of the joist.



MSH



SKH\_L Double  
Left shown

Joist Height	Top Mount Hangers <sup>3</sup>									Face Mount Hangers								
	MiTek Stock No. <sup>6</sup>	D Dim <sup>7</sup>	Fastener Schedule <sup>4</sup>				Uplift 160% <sup>2</sup>	Down 100% <sup>1</sup>	MiTek Stock No.	D Dim <sup>7</sup>	Min / Max	Fastener Schedule <sup>4</sup>				Uplift 160% <sup>2</sup>	Down 100% <sup>1</sup>	
			Header		Joist							Header		Joist				
			Qty	Type	Qty	Type						Qty	Type	Qty	Type			
<b>1-3/4" LVL</b>																		
7-1/4	PHXU17725	3-1/4	8	16d	6	10d x 1-1/2	930	4350	HD1770	2-1/2	Min 12	16d	4	10d x 1-1/2	760	1850		
											Max 16		8		1190	2465		
9-1/4	BPH17925	2-3/8	10	16d	4	10d x 1-1/2	850	2970	HD17925	2-1/2	Min 18	16d	6	10d x 1-1/2	1170	2770		
											Max 24		10		1900	3695		
	PHXU17925	3-1/4	8	16d	6	10d x 1-1/2	930	4350	HUS179 <sup>5</sup>	3	--	30	16d	10	16d	4110	5580	
9-1/2	BPH1795	2-3/8	10	16d	4	10d x 1-1/2	850	2970	HD17925	2-1/2	Min 18	16d	6	10d x 1-1/2	1170	2770		
											Max 24		10		1900	3695		
	PHXU1795	3-1/4	8	16d	6	10d x 1-1/2	930	4350	HUS179 <sup>5</sup>	3	--	30	16d	10	16d	4110	5580	
11-1/4	BPH17112	2-3/8	10	16d	4	10d x 1-1/2	850	2970	HD17112	2-1/2	Min 22	16d	6	10d x 1-1/2	1170	3390		
											Max 30		12		1900	4320		
	PHXU17112	3-1/4	8	16d	6	10d x 1-1/2	930	4350	HUS179 <sup>5</sup>	3	--	30	16d	10	16d	4110	5580	
11-7/8	BPH17118	2-3/8	10	16d	4	10d x 1-1/2	850	2970	HD17112	2-1/2	Min 22	16d	6	10d x 1-1/2	1170	3390		
											Max 30		12		1900	4320		
	PHXU17118	3-1/4	8	16d	6	10d x 1-1/2	930	4350	HUS179 <sup>5</sup>	3	--	30	16d	10	16d	4110	5580	
14	BPH1714	2-3/8	10	16d	4	10d x 1-1/2	850	2970	HD1714	2-1/2	Min 28	16d	8	10d x 1-1/2	1510	3790		
											Max 36		14		1900	4580		
	PHXU1714	3-1/4	8	16d	6	10d x 1-1/2	930	4350	HUS179 <sup>5</sup>	3	--	30	16d	10	16d	4110	5580	
<b>2 Ply 1-3/4" or 3-1/2" LVL</b>																		
7-1/4	PHXU35725	3-1/4	8	16d	6	10d	1120	5910	THD48	3	--	28	16d	16	10d	2595	4310	
9-1/4	HBPH35925	3-1/2	22	16d	10	16d	2705	6310	THD410	3	--	38	16d	20	10d	3905	5850	
	HLBH35925	6	15	NA16D-RS	6	16d	1420	10045	THDH410 <sup>5</sup>	4	--	46	16d	12	16d	4345	9020	
9-1/2	HBPH3595	3-1/2	22	16d	10	16d	2705	6310	THD410	3	--	38	16d	20	10d	3905	5850	
	HLBH3595	6	15	NA16D-RS	6	16d	1420	10045	THDH410 <sup>5</sup>	4	--	46	16d	12	16d	4345	9020	
11-1/4	HBPH35112	3-1/2	22	16d	10	16d	2705	6310	THD410	3	--	38	16d	20	10d	3905	5850	
	HLBH35112	6	15	NA16D-RS	6	16d	1420	10045	THDH412 <sup>5</sup>	4	--	56	16d	14	16d	5290	9710	
11-7/8	HBPH35118	3-1/2	22	16d	10	16d	2705	6310	THD410	3	--	38	16d	20	10d	3905	5850	
	HLBH35118	6	15	NA16D-RS	6	16d	1420	10045	THDH412 <sup>5</sup>	4	--	56	16d	14	16d	5290	9710	
14	HBPH3514	3-1/2	22	16d	10	16d	2705	6310	THD410	3	--	38	16d	20	10d	3905	5850	
	HLBH3514	6	15	NA16D-RS	6	16d	1420	10045	THDH414 <sup>5</sup>	4	--	66	16d	16	16d	5305	11325	
16	HBPH3516	3-1/2	22	16d	10	16d	2705	6310	THD412	3	--	48	16d	20	10d	3905	7045	
	HLBH3516	6	15	NA16D-RS	6	16d	1420	10045	THDH414 <sup>5</sup>	4	--	66	16d	16	16d	5305	11325	
18	HBPH3518	3-1/2	22	16d	10	16d	2705	6310	THD412	3	--	48	16d	20	10d	3905	7045	
	HLBH3518	6	15	NA16D-RS	6	16d	1420	10045	THDH414 <sup>5</sup>	4	--	66	16d	16	16d	5305	11325	
20	HBPH3520	3-1/2	22	16d	10	16d	2705	6310	THD414	3	--	58	16d	20	10d	3905	7045	
	HLBH3520	6	15	NA16D-RS	6	16d	1420	10045	THDH414 <sup>5</sup>	4	--	66	16d	16	16d	5305	11325	
22	PHXU3522	3-1/4	8	16d	6	10d	1120	5910	HD418		--	28	16d	8	10d	1560	4310	
	HBPH3522	3-1/2	22	16d	10	16d	2705	6310	THDH414 <sup>5</sup>	4	--	66	16d	16	16d	5305	11325	
24	HBPH3524	3-1/4	22	16d	10	16d	2705	6310	HD418		--	28	16d	8	10d	1560	4310	

- 1) Loads listed are based on hanger attachment to a DF or SP species solid sawn, LVL, PSL, or LSL header. Contact your local BlueLinx or MiTek Technical Representative for additional duration of load values.
- 2) Uplift loads have been increased 60% for wind and seismic loading; no further increase shall be permitted.
- 3) Top Mount Hangers require a minimum 3" header width for TH0 series hangers; 3-1/2" minimum header thickness for all other stock numbers.
- 4) 10d x 1-1/2 nails are 0.148" diameter x 1-1/2" long, 10d nails are 0.148" diameter x 3" long, and 16d nails are 0.162" diameter x 3-1/2" long. 16d sinkers are 0.148" diameter x 3-1/4" long and may be used where 10d nails (0.148" diameter x 3" long) are specified.
- 5) Joist nails need to be toe nailed at a 30° to 45° angle with the carried member to achieve listed loads for THDH and HUS models.
- 6) For additional sizes, stock numbers, and modifications not shown, refer to MiTek's Product Catalog.
- 7) D Dim is the length of the hanger seat.
- 8) Supplemental lateral support connection recommended when hanger height is less than 60% of joist height.



**BPH**



**TH0**



**PHXU**

Additional diamond nail holes for max nailing



Standard round holes for min nailing

**HD**



**HUS**

Joist Height	Top Mount Hangers <sup>3</sup>								Face Mount Hangers								
	MiTek Stock No. <sup>6</sup>	D Dim <sup>7</sup>	Fastener Schedule <sup>4</sup>				Uplift 160% <sup>2</sup>	Down 100% <sup>1</sup>	MiTek Stock No.	D Dim <sup>7</sup>	Min / Max	Fastener Schedule <sup>4</sup>				Uplift 160% <sup>2</sup>	Down 100% <sup>1</sup>
			Header		Joist							Header		Joist			
			Qty	Type	Qty	Type						Qty	Type	Qty	Type		
<b>3 Ply 1-3/4" or 5-1/4" LVL</b>																	
7-1/4	BPH55725	2-1/4	10	16d	6	10d	850	3065	HD68	2-1/2	Min	10	16d	4	16d	920	1540
											Max	14		6		1305	2155
9-1/4	HBPH55925	3-1/2	22	16d	10	16d	2705	6185	THD610	3	--	38	16d	20	10d	4035	6535
	HLBH55925	6	15	NA16D-RS	6	16d	1580	10045	THDH610 <sup>5</sup>	4	--	46	16d	16	16d	5290	9020
9-1/2	HBPH5595	3-1/2	22	16d	10	16d	2705	6185	THD610	3	--	38	16d	20	10d	4035	6535
	HLBH5595	6	15	NA16D-RS	6	16d	1580	10045	THDH610 <sup>5</sup>	4	--	46	16d	16	16d	5290	9020
11-1/4	HLBH55112	3-1/2	22	16d	10	16d	2705	6185	THD610	3	--	38	16d	20	10d	4035	6535
	HLBH55112	6	15	NA16D-RS	6	16d	1580	10045	THDH612 <sup>5</sup>	4	--	56	16d	20	16d	5290	9530
11-7/8	HBPH55118	3-1/2	22	16d	10	16d	2705	6185	THD610	3	--	38	16d	20	10d	4035	6535
	HLBH55118	6	15	NA16D-RS	6	16d	1580	10045	THDH612 <sup>5</sup>	4	--	56	16d	20	16d	5290	9530
14	HBPH5514	3-1/2	22	16d	10	16d	2705	6185	THD610	3	--	38	16d	20	10d	4035	6535
	HLBH5514	6	15	NA16D-RS	6	16d	1580	10045	THDH614 <sup>5</sup>	4	--	66	16d	22	16d	5305	11325
16	HBPH5516	3-1/2	22	16d	10	16d	2705	6185	THD612	3	--	48	16d	20	10d	4035	8255
	HLBH5516	6	15	NA16D-RS	6	16d	1580	10045	THDH614 <sup>5</sup>	4	--	66	16d	22	16d	5305	11325
18	HBPH5518	3-1/2	22	16d	10	16d	2705	6185	THD612	3	--	48	16d	20	10d	4035	8255
	HLBH5518	6	15	NA16D-RS	6	16d	1580	10045	THDH614 <sup>5</sup>	4	--	66	16d	22	16d	5305	11325
20	HBPH5520	3-1/2	22	16d	10	16d	2705	6185	THD614	3	--	58	16d	20	10d	4035	8285
	HLBH5520	6	15	NA16D-RS	6	16d	1580	10045	THDH614 <sup>5</sup>	4	--	66	16d	22	16d	5305	11325
22	XHLBH5522 <sup>8</sup>	6	15	NA16D-RS	6	16d	1580	10045	THD614	3	--	58	16d	20	10d	4035	8285
	--	--	--	--	--	--	--	--	THDH614 <sup>5</sup>	4	--	66	16d	22	16d	5305	11325
24	XHLBH5524 <sup>8</sup>	6	15	NA16D-RS	6	16d	1580	10045	THD614	3	--	58	16d	20	10d	4035	8285
	--	--	--	--	--	--	--	--	THDH614 <sup>5</sup>	4	--	66	16d	22	16d	5305	11325
<b>4 Ply 1-3/4" or 7" LVL</b>																	
9-1/4	HBPH71925	3-1/2	22	16d	10	16d	2705	6185	THD7210	3	--	38	16d	20	10d	4035	6535
	HLBH71925	6	15	NA16D-RS	6	16d	1580	10045	THDH7210 <sup>5</sup>	4	--	46	16d	12	16d	4345	9020
9-1/2	HBPH7195	3-1/2	22	16d	10	16d	2705	6185	THD7210	3	--	38	16d	20	10d	4035	6535
	HLBH7195	6	15	NA16D-RS	6	16d	1580	10045	THDH7210 <sup>5</sup>	4	--	46	16d	12	16d	4345	9020
11-1/4	HBPH71112	3-1/2	22	16d	10	16d	2705	6185	THD7210	3	--	38	16d	20	10d	4035	6535
	HLBH71112	6	15	NA16D-RS	6	16d	1580	10045	THDH7212 <sup>5</sup>	4	--	56	16d	14	16d	5290	9020
11-7/8	HBPH71118	3-1/2	22	16d	10	16d	2705	6185	THD7210	3	--	38	16d	20	10d	4035	6535
	HLBH71118	6	15	NA16D-RS	6	16d	1580	10045	THDH7212 <sup>5</sup>	4	--	56	16d	14	16d	5290	9020
14	HBPH7114	3-1/2	22	16d	10	16d	2705	6185	THD7210	3	--	38	16d	20	10d	4035	6535
	HLBH7114	6	15	NA16D-RS	6	16d	1580	10045	THDH7214 <sup>5</sup>	4	--	66	16d	16	16d	5305	11325
16	HBPH7116	3-1/2	22	16d	10	16d	2705	6185	HD7120	2-1/2	Min	16	16d	6	16d	1305	2465
											Max	22		8		1845	3390
	HLBH7116	6	15	NA16D-RS	6	16d	1580	10045	THDH7214 <sup>5</sup>	4	--	66	16d	16	16d	5305	11325
18	HBPH7118	3-1/2	22	16d	10	16d	2705	6185	HD7140	2-1/2	Min	20	16d	8	16d	1845	3080
											Max	26		12		2765	4005
	HLBH7118	6	15	NA16D-RS	6	16d	1580	10045	THDH7214 <sup>5</sup>	4	--	66	16d	16	16d	5305	11325
20	HBPH7120	3-1/2	22	16d	10	16d	2705	6185	HD7140	2-1/2	Min	20	16d	8	16d	1845	3080
											Max	26		12		2765	4005
	HLBH7120	6	15	NA16D-RS	6	16d	1580	10045	THDH7214 <sup>5</sup>	4	--	66	16d	16	16d	5305	11325
22	HBPH7122	3-1/2	22	16d	10	16d	2705	6185	HD7180	2-1/2	--	28	16d	8	10d	1560	4310
	HLBH7122	6	15	NA16D-RS	6	16d	1580	10045	THDH7214 <sup>5</sup>	4	--	66	16d	16	16d	5305	11325
24	HBPH7124	3-1/2	22	16d	10	16d	2705	6185	HD7180	2-1/2	--	28	16d	8	10d	1560	4310
	HLBH7124	6	15	NA16D-RS	6	16d	1580	10045	THDH7214 <sup>5</sup>	4	--	66	16d	16	16d	5305	11325



**HBPH**



**HLBH**



**THD**



**THDH**

- 1) Loads listed are based on hanger attachment to a DF or SP species solid sawn, LVL, PSL, or LSL header. Contact your local BlueLinX or MiTek Technical Representative for additional duration of load values.
- 2) Uplift loads have been increased 60% for wind and seismic loading; no further increase shall be permitted.
- 3) Top Mount Hangers require a minimum 3" header width for THO series hangers; 3-1/2" minimum header thickness for all other stock numbers.
- 4) 10d nails are 0.148" diameter x 3" long, and 16d nails are 0.162" diameter x 3-1/2" long. 16d sinkers are 0.148" diameter x 3-1/4" long and may be used where 10d nails (0.148" diameter x 3" long) are specified.
- 5) Joist nails need to be toe nailed at a 30° to 45° angle with the carried member to achieve listed loads for THDH models.
- 6) For additional sizes, stock numbers, and modifications not shown, refer to MiTek's Product Catalog.
- 7) D Dim is the length of the hanger seat.
- 8) Hangers are special order. Consult MiTek for pricing and lead times.
- 9) Supplemental lateral support connection recommended when hanger height is less than 60% of joist height.

# Slope/Skew Hangers

The LSSH series connects rafters to ridge beams in vaulted roof structures. This series is field adjustable to meet a variety of skew and/or slope applications. Slopes and skews 0° to 45°.

### Installation:

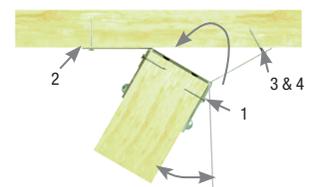
- Use all specified fasteners.

### Steps: (See LSSH Figure 1)

1. Position LSSH connector against plumb-cut end of joist. Fasten joist side flanges on both sides with 10d (0.148") x 1-1/2" HDG nails. Bend seat up to fit against joist bottom and drive (1) 10d (0.148") x 1-1/2" HDG nail through bottom seat into joist bottom flange. Drive (2) 10d (0.148") x 1-1/2" HDG nails at downward angle through dimpled nailing guides.
  2. Lean connector and rafter end against ridge beam at desired position. Install 10d (0.148" x 3") HDG or 16d (0.162" x 3-1/2") HDG nails through nail holes into ridge beam at right 90° angle. If skewing the rafter, only drive nails into ridge beam on inside flange.
  3. Bend flange to desired angle.
  4. Hammer outside flange until edge touches header. Fasten outside flange to ridge by driving 10d (0.148" x 3") HDG or 16d (0.162" x 3-1/2") HDG nails through nail holes.
- Bearing stiffeners are required for all wood I-Joist installations.
  - Designer may consider adding a tension restraint for the supported member for roof slopes exceeding 6/12.

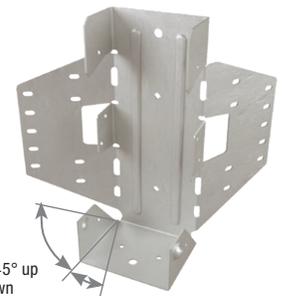


**Typical LSSH installation**



Skew to 45° maximum

**LSSH Figure 1**



**LSSH**

Joist Height	MiTek Stock No. <sup>1,6</sup>	Installation Type	Fastener Schedule <sup>4</sup>				DF	
			Header		Joist		Uplift <sup>3</sup> 160%	Down <sup>2</sup> 100%
			Qty	Type	Qty	Type		
<b>BLI 40</b>			<b>Joist Width = 2-1/2"</b>					
9-1/2 – 16	LSSH25-TZ	Sloped Only	18	16d	12	10d x 1-1/2	945	2095
		Skewed Only <u>or</u> Sloped & Skewed	14	16d	12	10d x 1-1/2	945	1610
<b>BLI 40, BLI 60</b>			<b>Joist Width = 2-1/2"</b>					
11-7/8 – 16	LSSH25-TZ	Sloped Only	18	16d	12	10d x 1-1/2	945	2095
		Skewed Only <u>or</u> Sloped & Skewed	14	16d	12	10d x 1-1/2	945	1610
<b>BLI 65, BLI 80, BLI 90</b>			<b>Joist Width = 3-1/2"</b>					
11-7/8 – 18	LSSH35-TZ	Sloped Only	18	16d	12	10d x 1-1/2	1310	2645
		Skewed Only <u>or</u> Sloped & Skewed	14	16d	12	10d x 1-1/2	1310	1610
<b>BLI 700</b>			<b>Joist Width = 2-5/16"</b>					
11-7/8 – 16	LSSH23-TZ	Sloped Only	10	10d	7	10d x 1-1/2	795	1200
		Skewed Only <u>or</u> Sloped & Skewed	10	10d	7	10d x 1-1/2	795	1200
<b>BLI 900</b>			<b>Joist Width = 3-1/2"</b>					
11-7/8 – 16	LSSH35-TZ	Sloped Only	18	16d	12	10d x 1-1/2	1310	2645
		Skewed Only <u>or</u> Sloped & Skewed	14	16d	12	10d x 1-1/2	1310	1610

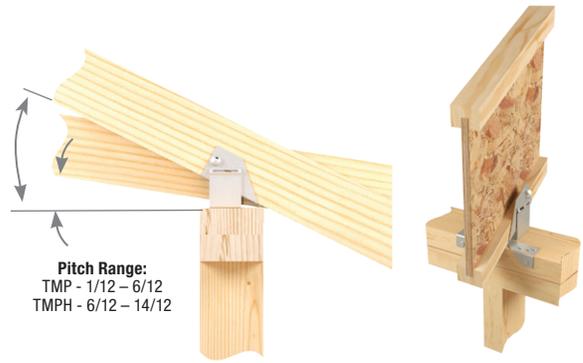
- 1) Shaded hangers require bearing stiffeners at joist ends.
- 2) Loads listed are based on hanger attachment to a DF or SP species solid sawn or LVL header. Loads are governed by test results; no further increase shall be permitted.
- 3) Uplift loads have been increased 60% for wind and seismic loading; no further increase shall be permitted.
- 4) 10d x 1-1/2 HDG nails are 0.148" dia. x 1-1/2" long, 10d HDG nails are 0.148" dia. x 3" long, and 16d HDG nails are 0.162" dia. x 3-1/2" long.
- 5) Hangers utilizing 16d nails are not compatible with I-joist headers.
- 6) Supplemental lateral support connection recommended when hanger height is less than 60% of joist height.

# Variable Pitch Connectors

The **TMP** and **TMPH** are designed to make rafter-to-plate connections and eliminate time-consuming bird's-mouth notching or bevel plate installation.

### Installation:

- Use all specified fasteners.
- Position connector on top plate. Fasten connector to outside of top plate with specified nails. Insert rafter into rafter pocket. Adjust rafter and pocket to correct pitch. Fasten rafter to connector with specified nails. Installing the **TMP** require driving specified nails through the opposing slots in the pocket. **TMPH** installation involves sliding the fulcrum until it supports the pocket at the desired pitch and nailing down through the fulcrum base into the top plate to lock the fulcrum into position.



Typical TMP installation

### TMP chart

Joist Height	MiTek Stock No.	Fastener Schedule <sup>4</sup>				DF	
		Plate		Rafter		Uplift <sup>3</sup> 160%	Down <sup>2</sup> 100%
		Qty	Type	Qty	Type		
<b>BLI 40, BLI 60</b>		<b>Joist Width = 2-1/2"</b>					
All	TMP25	6	10d	4	10d x 1-1/2	245	1705
<b>BLI 65, BLI 80, BLI 90, BLI 900</b>		<b>Joist Width = 3-1/2"</b>					
All	TMP4	6	10d	4	10d x 1-1/2	245	1705
<b>BLI 700</b>		<b>Joist Width = 2-5/16"</b>					
All	TMP23	6	10d	4	10d x 1-1/2	245	1705

- 1) Bearing stiffeners may be required for hangers by BlueLinX.
- 2) Loads listed are based on hanger attachment to a DF or SP species solid sawn or LVL header. Loads are governed by test results; no further increase shall be permitted.
- 3) Uplift loads have been increased 60% for wind and seismic loading; no further increase shall be permitted.
- 4) 10d x 1-1/2 nails are 0.148" dia. x 1-1/2" long, 10d nails are 0.148" dia. x 3" long.



TMP



Typical TMPH installation



Fulcrum

TMPH

### TMPH chart

Joist Height	MiTek Stock No. <sup>1</sup>	Fastener Schedule <sup>4</sup>						DF										
		Plate			Rafter			According to Pitch <sup>2</sup>									Uplift <sup>3</sup> 160%	
		Top Qty	Side Qty	Type	Qty	Type	6/12	7/12	8/12	9/12	10/12	11/12	12/12	13/12	14/12			
<b>BLI 40, BLI 60</b>		<b>Joist Width = 2-1/2"</b>																
All	TMPH25	8	2	10d	8	10d x 1-1/2	3190	3290	3390	3140	2900	2710	2520	2230	1950	330		
<b>BLI 65, BLI 80, BLI 90, BLI 900</b>		<b>Joist Width = 3-1/2"</b>																
All	TMPH4	8	2	10d	8	10d x 1-1/2	3190	3290	3390	3140	2900	2710	2520	2230	1950	330		
<b>BLI 700</b>		<b>Joist Width = 2-5/16"</b>																
All	TMPH23	8	2	10d	8	10d x 1-1/2	3190	3290	3390	3140	2900	2710	2520	2230	1950	330		

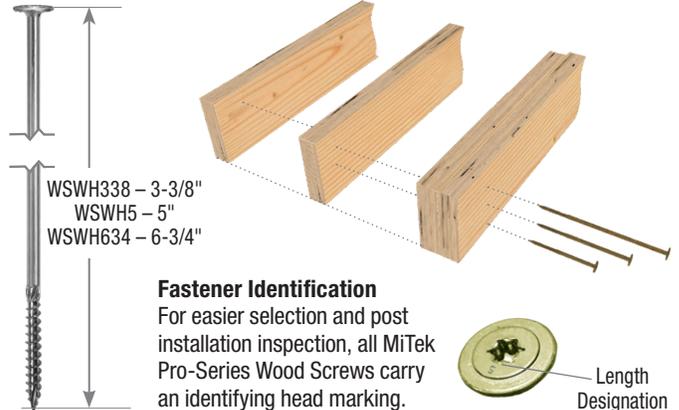
- 1) Bearing stiffeners are required for all Wood I-Joist installations.
- 2) Loads listed are based on hanger attachment to a DF or SP species solid sawn or LVL header. Loads are governed by test results; no further increase shall be permitted.
- 3) Uplift loads have been increased 60% for wind and seismic loading; no further increase shall be permitted.
- 4) 10d x 1-1/2 nails are 0.148" dia. x 1-1/2" long, 10d nails are 0.148" dia. x 3" long.

# WSWH Series Washer Head Screw Applications - Joining 2, 3, or 4 Ply onCENTER® LVL Members



## Installation:

- Using a standard 1/2" low speed/high torque drill, install screws into the side of the outermost ply. As the threads fully engage the final ply, allow the underside of the washer head to pull the plies firmly together. Washer head will install flush with the surface of the wood, but do not overdrive as this may damage the beam.
- Beams wider than 7" require special consideration by the design professional. The values in the table below do not apply.
- Excessively warped or curved LVL should never be forced into alignment by use of clamps, screws or bolts as splitting may occur, potentially decreasing the carrying capacity of the beam.
- A qualified designer or engineer should always be consulted for critical assemblies and fastening requirements.

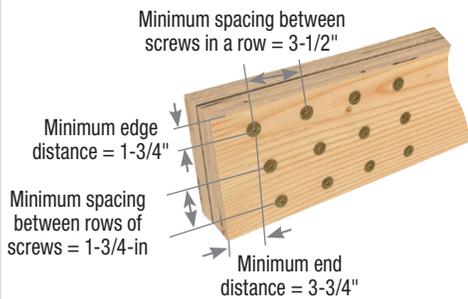


### Fastener Identification

For easier selection and post installation inspection, all MiTek Pro-Series Wood Screws carry an identifying head marking.

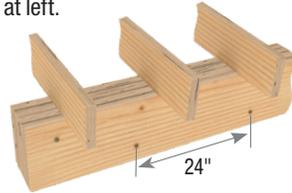


### Minimum Spacing Requirements:

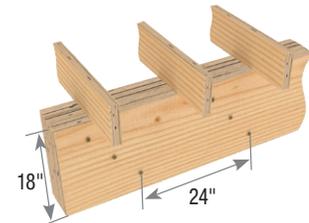


### Top Loaded Beams

Where floor joists rest on all plies of the beam, WSWH screws should be installed in two staggered rows at 24" O.C. spacing. Maintain the minimum end and edge distance as indicated at left.



For beam depths of 18" or more, this pattern should be increased to three staggered rows of WSWH screws at 24" on center.



**Side Loaded Beams** – Where floor joists are joined to the side of the beam (typically using a joist hanger), this load chart must be used to establish the proper pattern based on the design load as determined by the engineer and noted on the plans.

Length (in)	MiTek Stock No.	No. of Screws Vertical Column	Spacing Between Screws in a Row (in)	Allowable Uniform Load Applied to Either Outside Member by Assembly Type (lbs/lineal ft) (See Graphics) <sup>1,2,3,4,5</sup>		
				EWP Wood Specific Gravity $G \geq 0.50$		
				A	B	C
3-3/8	WSWH338	2	24	600	--	--
			19.2	755		
			16	905		
		3	24	905	--	--
			19.2	1130		
			16	1355		
5	WSWH5	2	24	--	430	535
			19.2		535	670
			16		645	805
		3	24	--	645	805
			19.2		805	1005
			16		965	1210
6-3/4	WSWH634	2	24	--	--	475
			19.2			595
			16			715
		3	24	--	--	715
			19.2			895
			16			1075
Head Side Multiplier <sup>6</sup>				1.06	1.25	1

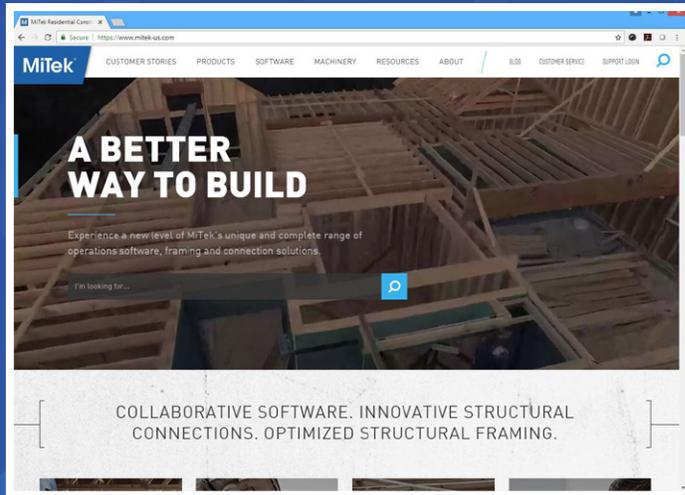
### Fastener Size Selection by Assembly Type



1) Allowable loads are derived from tested fastener values as reported in ICC-ES ESR-2761.  
 2) The uniform loads in this table relate only to the capacity of the fastener to transfer shear loads between plies. The equivalent specific gravity (SG) and the capacity of the EWP should be verified with manufacturer's literature.  
 3) Values listed reflect 100% load duration. ( $C_D=1.0$ ) The designer may apply adjustment factors to increase or decrease these loads per the NDS based on conditions for each assembly.  
 4) Load values depicted assume all uniform load is applied to the outermost ply.  
 5) To minimize rotation, 7" wide beams shall be side loaded only when loads are applied to both sides of the beam with the lesser loaded side bearing at least 25% of the overall design load.  
 6) When the uniform load is applied to the outermost ply with the screw head, listed allowable loads can be multiplied by this value.

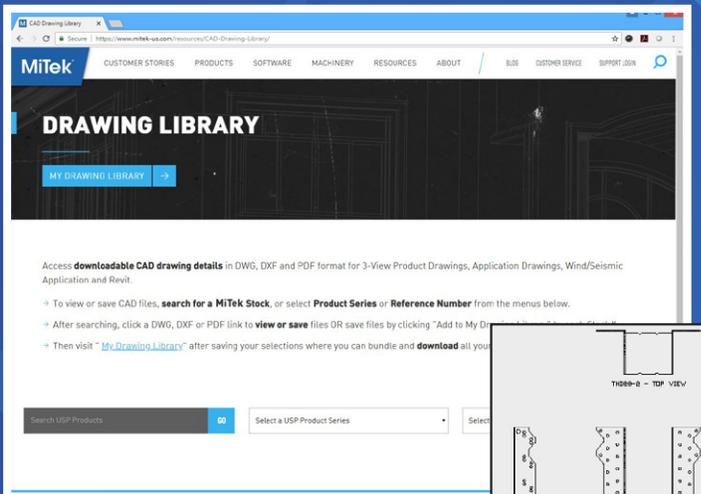
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