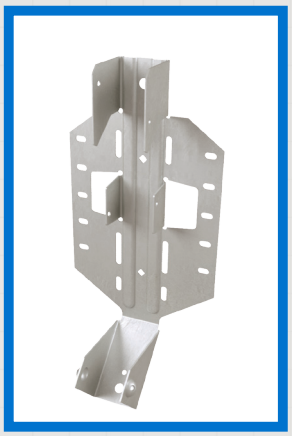
EWP PRODUCT GUIDE

For Use With Products Manufactured by

INTERNATIONAL BEAMS

THFI2514



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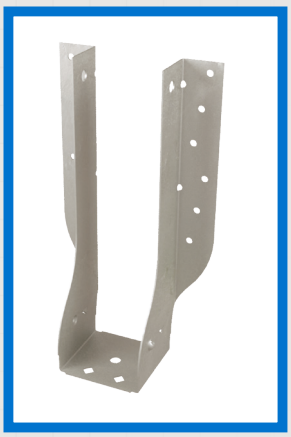

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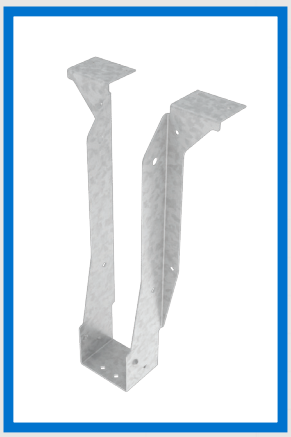


TFL25118

MiTek®

1-800-328-5934
MiTek-US.com

General Notes

MiTek®

Follow these instructions to ensure the proper installation of MiTek products.

- See current MiTek USP 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 as well as joist/hanger limitations assuming header material is Douglas Fir-Larch (DF-L), Spruce Pine Fir (S-P-F), or LVL. 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.
- If hanger height is less than 60% of joist height, joist rotation may occur; therefore supplemental lateral restraints are required, 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 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 (U.S. only).
- **Multiple Joist Plies:** Fasten together multiple plies of wood I-Joist's, in accordance with International Beam's installation guidelines, such that the joists act as a single unit.
- **Sloped 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 Joist's 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 Joist's acting as the header, or supporting member. Install in accordance with the I-Joist manufacturer's installation guidelines. The nails used to install hangers mounted to a I-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

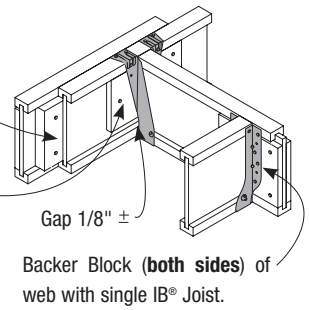
Filler and Backer Block sizes

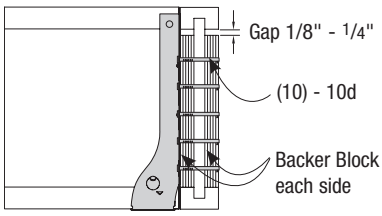
Flange Width	Joist Series	Depth	Backer Block		Filler Block Size
			Thickness Required	Minimum[1] Depth	
2-1/2"	IB400	9-1/2"	1"	(note 1)	2-1/8" x 6"
		11-7/8"			2-1/8" x 8"
		14"			2-1/8" x 10"
		16"			2-1/8" x 12"
2-1/2"	IB600	9-1/2"	1"	(note 1)	2-1/8" x 6"
		11-7/8"			2-1/8" x 8"
		14"			2-1/8" x 10"
		16"			2-1/8" x 12"
		18"			2-1/8" x 14"
		20"			2-1/8" x 16"
3-1/2"	IB800	9-1/2"	1-1/2"	(note 1)	3-1/8" x 6"
		11-7/8"			3-1/8" x 8"
		14"			3-1/8" x 10"
		16"			3-1/8" x 12"
		18"			3-1/8" x 14"
		20"			3-1/8" x 16"
3-1/2"	IB900	11-7/8"	1-1/2"	(note 1)	3-1/8" x 8"
		14"			3-1/8" x 10"
		16"			3-1/8" x 12"
		18"			3-1/8" x 14"
		20"			3-1/8" x 16"

1) For face-mount or top-mount hangers use joist depth minus 4". For example, for 9-1/2" I-joist, use 5-1/2" minimum depth.

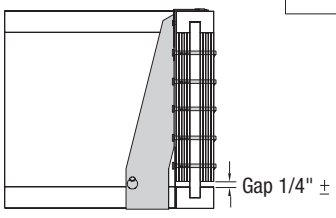
Filler Block Installation:
Nail filler blocks per IB® design manual

Backer Block Installation:
Install tight to top flange (tight to bottom flange with face mount hangers). Attach with twelve 10d (3") common nails, clinched when possible.



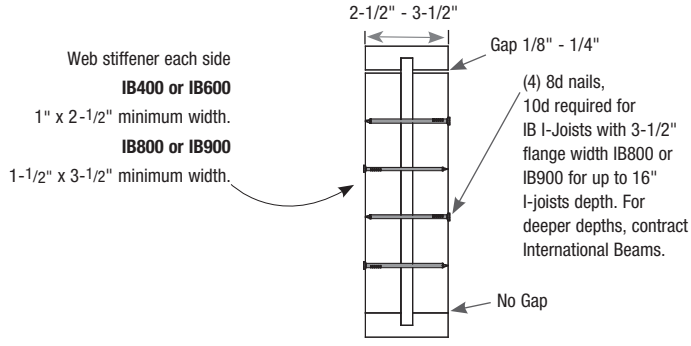


Typical THF backer block installation



Typical THO backer block installation

Bearing/Web Stiffener Attachment



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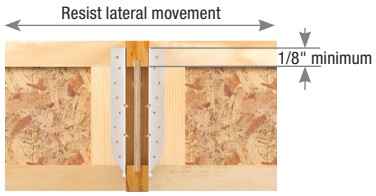
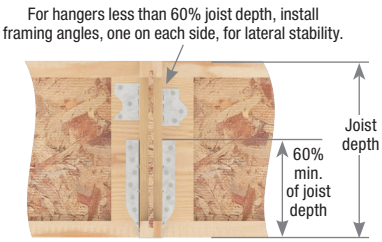
EWP Installation

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.

MiTek recommends that hangers for joist **with web stiffeners** should be 60% of the joist height for stability during construction. If this cannot be accomplished, potential joist rotation must be resolved by other means.



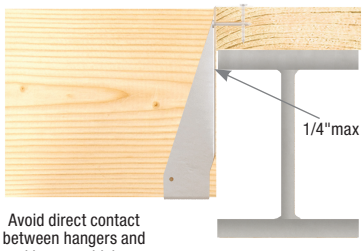


(Top flange support requirements can be verified in EWP Top Mount Hangers charts under Web stiffener Reqd. column) of MiTek's USP Product Catalog.

Nailer Installations

Correct Hanger Attachment to Nailer

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.



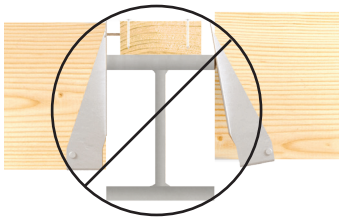
Avoid direct contact between hangers and steel beams which may cause squeaks

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.

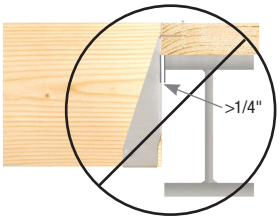
The nailer must be sized to fit the support width as shown and be of sufficient thickness to satisfy recommended top flange nailing requirements. A design professional must specify nailer attachment to steel beams.

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.

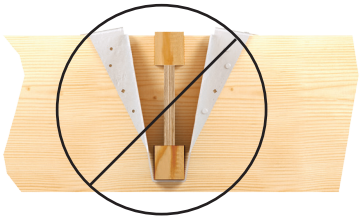
Too Thin

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.

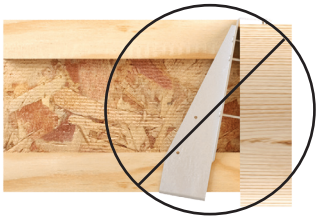
Top Flange Hangers

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

Single International Beam® I-Joists U.S./Allowable Load (Lbs.)

MiTek®

Joist Height	Top Mount Hangers[4]										Face Mount Hangers									
			Fastener Schedule[5]				DF		S-P-F				Fastener Schedule[5]					DF		S-P-F	
			Header		Joist									Header		Joist					
	USP Stock No.[1]	D Dim[6]	Qty	Type	Qty	Type	Uplift[3] 100%	Down[2] 100%	Uplift[3] 100%	Down[2] 100%	USP Stock No.[1]	D Dim[6]	Min/ Max	Qty	Type	Qty	Type	Uplift[3] 100%	Down[2] 100%	Uplift[3] 100%	Down[2] 100%
IB400 or IB600	**Joist Width = 2-1/2"**																				
9-1/2	TFL2595	2	6	10d	2	10d x 1-1/2	130	1585	100	1215	THFI2595	2-1/2	--	8	10d	--	--	120	960	95	845
11-7/8	TFL25118	2	6	10d	2	10d x 1-1/2	130	1585	100	1215	THFI25118	2-1/2	--	10	10d	--	--	120	1200	95	950
14	TFL2514	2	6	10d	2	10d x 1-1/2	130	1585	100	1215	THFI2514	2-1/2	Min	12	10d	--	--	120	1440	95	1265
													Max	14	10d	--	--		1680		1480
16	TFL2516	2	6	10d	2	10d x 1-1/2	130	1585	100	1215	IHFL2516	2-1/2	Min	14	10d	--	--	50	1680	40	1455
													Max	16	10d				1920		1660
18	TFI318	2-1/2	6	16d	2	10d x 1-1/2	215	2715	165	2080	IHFL2516	2-1/2	Min	14	10d	--	--	50	1680	40	1455
													Max	16	10d				1920		1660
20	TFI320	2-1/2	6	16d	2	10d x 1-1/2	215	2715	165	2080	IHFL2516	2-1/2	Min	14	10d	--	--	50	1680	40	1455
													Max	16	10d				1920		1660
IB800	**Joist Width = 3-1/2"**																				
9-1/2	THO35950	2-3/8	10	10d	2	10d x 1-1/2	230	2370	175	2370	IHFL35925	2-1/2	--	10	10d	--	--	50	1200	40	1040
11-7/8	THO35118	2-3/8	10	10d	2	10d x 1-1/2	230	2525	175	2265	IHFL35112	2-1/2	Min	10	10d	--	--	50	1200	40	1040
													Max	12	10d				1440		1245
14	THO35140	2-3/8	12	10d	2	10d x 1-1/2	230	2400	175	1835	IHFL3514	2-1/2	Min	12	10d	--	--	50	1440	40	1245
													Max	14	10d				1680		1455
16	THO35160	2-3/8	12	10d	2	10d x 1-1/2	230	2400	175	1835	IHFL3516	2-1/2	Min	14	10d	--	--	50	1680	40	1455
													Max	16	10d				1920		1660
18	TFI418	2-1/2	6	16d	2	10d x 1-1/2	215	2715	165	2075	IHFL3516	2-1/2	Min	14	10d	--	--	50	1680	40	1455
													Max	16	10d				1920		1660
20	TFI420	2-1/2	6	16d	2	10d x 1-1/2	215	2715	165	2075	IHFL3516	2-1/2	Min	14	10d	--	--	50	1680	40	1455
													Max	16	10d				1920		1660
IB900	**Joist Width = 3-1/2"**																				
11-7/8	THO35118	2-3/8	10	10d	2	10d x 1-1/2	230	2525	175	2265	IHFL35112	2-1/2	Min	10	10d	--	--	50	1200	40	1040
													Max	12	10d				1440		1245
14	THO35140	2-3/8	12	10d	2	10d x 1-1/2	230	2400	175	1835	IHFL3514	2-1/2	Min	12	10d	--	--	50	1440	40	1245
													Max	14	10d				1680		1455
16	THO35160	2-3/8	12	10d	2	10d x 1-1/2	230	2400	175	1835	IHFL3516	2-1/2	Min	14	10d	--	--	50	1680	40	1455
													Max	16	10d				1920		1660
18	TFI418	2-1/2	6	16d	2	10d x 1-1/2	215	2715	165	2075	IHFL3516	2-1/2	Min	14	10d	--	--	50	1680	40	1455
													Max	16	10d				1920		1660
20	TFI420	2-1/2	6	16d	2	10d x 1-1/2	215	2715	165	2075	IHFL3516	2-1/2	Min	14	10d	--	--	50	1680	40	1455
													Max	16	10d				1920		1660

1) Web stiffeners may be required for hangers by joist manufacturer.
2) Loads listed are based on hanger attachment to a DF or S-P-F species solid sawn 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 width for THO series hangers; 3-1/2" minimum header thickness for all other stock numbers.
5) 10d x 1-1/2 nails are 0.148" dia. x 1-1/2" long, 10d nails are 0.148" dia. x 3" long, and 16d nails are 0.162" dia. x 3-1/2" long.
16d sinkers are 0.148" dia. x 3-1/4" long and may be used where 10d commons are specified.
6) D Dim is the length of the hanger seat.

THO

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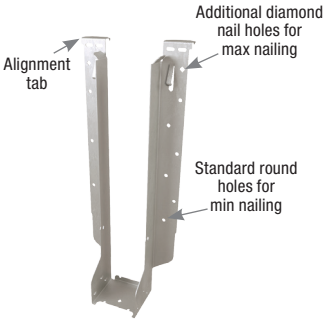

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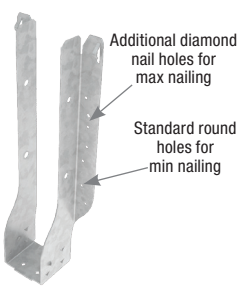

IHFL

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Single International Beam® I-Joists U.S./Allowable Load (Lbs.)

MiTek®

Joist Height	Adjustable Height Hangers								Skewed 45° Hangers									
	USP Stock No.[1,5]	D Dim[8]	Fastener Schedule[4]				DF	S-P-F	USP Stock No.[1,5]	D Dim[8]	Fastener Schedule[4]					DF		S-P-F	
			Header		Joist		Down[2] 100%	Down[2] 100%			Min / Max	Header		Joist		Uplift[3] 100%	Down[2] 100%	Uplift[3] 100%	Down[2] 100%
			Qty	Type	Qty	Type						Qty	Type	Qty	Type				
IB400 or IB600	**Joist Width = 2-1/2"**																		
9-1/2	MSH322 [9]	1-3/4	6	10d	4	10d x 1-1/2	2175	1720	SKH2520L/R	1-7/8	--	14	10d	10	10d x 1-1/2	1530	1650	1205	1380
11-7/8	MSH322	1-3/4	6	10d	4	10d x 1-1/2	2175	1720	SKH2520L/R	1-7/8	--	14	10d	10	10d x 1-1/2	1530	1650	1205	1380
14	MSH322	1-3/4	6	10d	4	10d x 1-1/2	2175	1720	SKH2524L/R	1-7/8	--	16	10d	10	10d x 1-1/2	1530	1890	1205	1635
16	MSH322	1-3/4	6	10d	4	10d x 1-1/2	2175	1720	SKH2524L/R	1-7/8	--	16	10d	10	10d x 1-1/2	1530	1890	1205	1635
18	MSH322	1-3/4	6	10d	4	10d x 1-1/2	2175	1720	--	--	--	--	--	--	--	--	--	--	--
20	MSH322	1-3/4	6	10d	4	10d x 1-1/2	2175	1720	--	--	--	--	--	--	--	--	--	--	--
IB800	**Joist Width = 3-1/2"**																		
9-1/2	MSH422	1-3/4	6	10d	6	10d	2355	1865	HD410_SK45L/R_BV [5,10]	2-1/2	Min	14	16d	6	10d	880	2155	775	1895
											Max	20		10		1465	3080	1285	2710
11-7/8	MSH422	1-3/4	6	10d	6	10d	2355	1865	HD410_SK45L/R_BV [5,10]	2-1/2	Min	14	16d	6	10d	880	2155	775	1895
											Max	20		10		1465	3080	1285	2710
14	MSH422	1-3/4	6	10d	6	10d	2355	1865	HD414_SK45L/R_BV [5,10]	2-1/2	Min	18	16d	8	10d	1165	2770	925	2440
											Max	26		12		1755	4005	1545	3520
16	MSH422	1-3/4	6	10d	6	10d	2355	1865	HD414_SK45L/R_BV [5,10]	2-1/2	Min	18	16d	8	10d	1165	2770	925	2440
											Max	26		12		1755	4005	1545	3520
18	MSH422	1-3/4	6	10d	6	10d	2355	1865	HD414_SK45L/R_BV [5,10]	2-1/2	Min	18	16d	8	10d	1165	2770	925	2440
											Max	26		12		1755	4005	1545	3520
20	MSH422	1-3/4	6	10d	6	10d	2355	1865	HD414_SK45L/R_BV [5,10]	2-1/2	Min	18	16d	8	10d	1165	2770	925	2440
											Max	26		12		1755	4005	1545	3520
IB900	**Joist Width = 3-1/2"**																		
11-7/8	MSH422	1-3/4	6	10d	6	10d	2355	1865	HD410_SK45L/R_BV [5,10]	2-1/2	Min	14	16d	6	10d	880	2155	775	1895
											Max	20		10		1465	3080	1285	2710
14	MSH422	1-3/4	6	10d	6	10d	2355	1865	HD414_SK45L/R_BV [5,10]	2-1/2	Min	18	16d	8	10d	1165	2770	925	2440
											Max	26		12		1755	4005	1545	3520
16	MSH422	1-3/4	6	10d	6	10d	2355	1865	HD414_SK45L/R_BV [5,10]	2-1/2	Min	18	16d	8	10d	1165	2770	925	2440
											Max	26		12		1755	4005	1545	3520
18	MSH422	1-3/4	6	10d	6	10d	2355	1865	HD414_SK45L/R_BV [5,10]	2-1/2	Min	18	16d	8	10d	1165	2770	925	2440
											Max	26		12		1755	4005	1545	3520
20	MSH422	1-3/4	6	10d	6	10d	2355	1865	HD414_SK45L/R_BV [5,10]	2-1/2	Min	18	16d	8	10d	1165	2770	925	2440
											Max	26		12		1755	4005	1545	3520

1) Shaded hangers require web stiffeners at joist ends. Web stiffeners may be required for non-shaded hangers by joist manufacturer.
2) Loads listed are based on hanger attachment to a DF or S-P-F species solid sawn 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. x 1-1/2" long, 10d nails are 0.148" dia. x 3" long, and 16d nails are 0.162" dia. x 3-1/2" long.
5) For additional sizes, stock numbers, and modifications not shown, refer to MiTek's Product Catalog.
6) Bevel cut required on end of joist to achieve design loads.
7) 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.
8) D Dim is the length of the hanger seat.
9) Flanges on the bucket of the hanger may extend above the top of the joist.

MSH

SKH_L
left shown

Double International Beam® I-Joists U.S./Allowable Load (Lbs.)

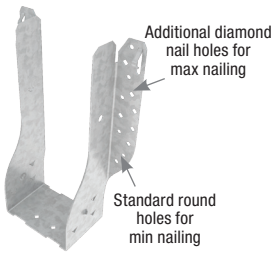
MiTek®

Joist Height	Top Mount Hangers[4]										Face Mount Hangers									
	USP Stock No.[1,6]	D Dim[7]	Fastener Schedule[5]				DF		S-P-F		USP Stock No.[1,6]	D Dim[7]	Fastener Schedule[5]					DF		S-P-F	
			Header		Joist		Uplift[3] 100%	Down[2] 100%	Uplift[3] 100%	Down[2] 100%			Min/ Max	Header		Joist		Uplift[3] 100%	Down[2] 100%	Uplift[3] 100%	Down[2] 100%
			Qty	Type	Qty	Type								Qty	Type	Qty	Type				
Double IB400 or IB600							**Joist Width = 5"**														
9-1/2	THO25950-2	3	10	16d	6	10d	1145	3640	880	2790	IHF25925-2	2-1/2	Min	10	10d	2	10d x 1-1/2	330	1250	260	1100
													Max	24	16d				3530		3105
11-7/8	THO25118-2	3	10	16d	6	10d	1145	3640	880	2790	IHF25112-2	2-1/2	Min	10	10d	2	10d x 1-1/2	330	1250	260	1100
													Max	24	16d				3530		3105
14	THO25140-2	3	12	16d	6	10d	1145	4420	880	3390	THF25140-2	2-1/2	--	20	10d	6	10d	1235	2660	975	2340
16	THO25160-2	3	12	16d	6	10d	1145	4420	880	3390	THF25160-2	2-1/2	--	24	10d	6	10d	1235	3190	975	2810
18	THO25180-2	3	14	16d	6	10d	1145	5660	880	3720	THF25160-2	2-1/2	--	24	10d	6	10d	1235	3190	975	2810
20	THO25200-2	3	14	16d	6	10d	1145	5660	880	3720	THF25160-2	2-1/2	--	24	10d	6	10d	1235	3190	975	2810
Double IB800							**Joist Width = 7"**														
9-1/2	BPH7195	3	10	16d	6	10d	1275	3100	1105	2370	HD7100	2-1/2	Min	14	16d	6	16d	1305	2155	1035	1895
													Max	18		8		1845	2770	1585	2440
11-7/8	BPH71118	3	10	16d	6	10d	1275	3075	1105	2350	HD7120	2-1/2	Min	16	16d	6	16d	1305	2465	1035	2165
													Max	22		8		1845	3390	1620	2980
14	BPH7114	3	10	16d	6	10d	1275	3075	1105	2350	HD7140	2-1/2	Min	20	16d	8	16d	1845	3080	1585	2710
													Max	26		12		2765	4005	2430	3520
16	BPH7116	3	10	16d	6	10d	1275	3075	1105	2350	HD7160	2-1/2	--	24	16d	8	10d	1560	3695	1375	3250
18	BPH7118	3	10	16d	6	10d	1275	3075	1105	2350	HD7160	2-1/2	--	24	16d	8	10d	1560	3695	1375	3250
20	BPH7120	3	10	16d	6	10d	1275	3075	1105	2350	HD7160	2-1/2	--	24	16d	8	10d	1560	3695	1375	3250
Double IB900							**Joist Width = 7"**														
11-7/8	BPH71118	3	10	16d	6	10d	1275	3075	1105	2350	HD7120	2-1/2	Min	16	16d	6	16d	1305	2465	1035	2165
													Max	22		8		1845	3390	1620	2980
14	BPH7114	3	10	16d	6	10d	1275	3075	1105	2350	HD7140	2-1/2	Min	20	16d	8	16d	1845	3080	1585	2710
													Max	26		12		2765	4005	2430	3520
16	BPH7116	3	10	16d	6	10d	1275	3075	1105	2350	HD7160	2-1/2	--	24	16d	8	10d	1560	3695	1375	3250
18	BPH7118	3	10	16d	6	10d	1275	3075	1105	2350	HD7160	2-1/2	--	24	16d	8	10d	1560	3695	1375	3250
20	BPH7120	3	10	16d	6	10d	1275	3075	1105	2350	HD7160	2-1/2	--	24	16d	8	10d	1560	3695	1375	3250

1) Shaded hangers require web stiffeners at joist ends. Web stiffeners may be required for non-shaded hangers by joist manufacturer.
2) Loads listed are based on hanger attachment to a DF or S-P-F species solid sawn 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 width for THO series hangers; 3-1/2" minimum header thickness for all other stock numbers.
5) 10d nails are 0.148" dia. x 3" long, and 16d nails are 0.162" dia. x 3-1/2" long.
16d sinkers are 0.148" dia. x 3-1/4" long and may be used where 10d commons are specified.
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.

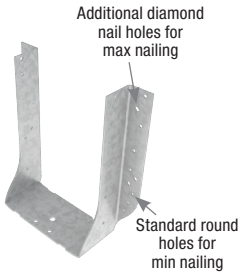
THO Double

BPH



IHF

THF Double



HD

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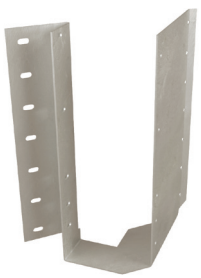
Double International Beam® I-Joists U.S./Allowable Load (Lbs.)

MiTek®

Joist Height	Adjustable Height Hangers								Skewed 45° Hangers									
	USP Stock No.[1]	D Dim[8]	Fastener Schedule[4] Header Qty	Header Type	Joist Qty	Joist Type	DF Down[2] 100%	S-P-F Down[2] 100%	USP Stock No.[1]	D Dim[8]	Min/ Max	Fastener Schedule[4] Header Qty	Header Type	Joist Qty	Joist Type	DF Uplift[3] 100%	DF Down[2] 100%	S-P-F Uplift[3] 100%	S-P-F Down[2] 100%
Double IB400 or IB600									**Joist Width = 5"**										
9-1/2	MSH2622-2	1-3/4	6	10d	4	10d	2355	1865	SKH2520L/R-2 [7]	3-1/2	--	14	10d	10	10d	1645	1710	1265	1480
11-7/8	MSH2622-2	1-3/4	6	10d	4	10d	2355	1865	SKH2520L/R-2 [7]	3-1/2	--	14	10d	10	10d	1645	1710	1265	1480
14	MSH2622-2	1-3/4	6	10d	4	10d	2355	1865	SKH2524L/R-2 [7]	3-1/2	--	16	10d	10	10d	1680	1950	1295	1690
16	MSH2622-2	1-3/4	6	10d	4	10d	2355	1865	SKH2524L/R-2 [7]	3-1/2	--	16	10d	10	10d	1680	1950	1295	1690
18	MSH2622-2	1-3/4	6	10d	4	10d	2355	1865	SKH2524L/R-2 [7]	3-1/2	--	16	10d	10	10d	1680	1950	1295	1690
20	MSH2622-2	1-3/4	6	10d	4	10d	2355	1865	--	--	--	--	--	--	--	--	--	--	--
Double IB900									**Joist Width = 7"**										
9-1/2	MSH422-2 [9]	2	8	16d	6	16d	3740	2665	HD7100_SK45L/R_BV [7,8]	2-1/2	Min	14	16d	6	16d	980	2155	775	1895
											Max	18		8		1385	2770	1190	2440
11-7/8	MSH422-2	2	8	16d	6	16d	3740	2665	HD7120-SK45L/R_BV [7,8]	2-1/2	Min	16	16d	6	16d	980	2465	775	2165
											Max	22		8		1385	3390	1215	2980
14	MSH422-2	2	8	16d	6	16d	3740	2665	HD7140-SK45L/R_BV [7,8]	2-1/2	Min	20	16d	8	16d	1385	3080	1190	2710
											Max	26		12		2075	4005	1825	3520
16	MSH422-2	2	8	16d	6	16d	3740	2665	HD7140-SK45L/R_BV [7,8]	2-1/2	Min	20	16d	8	16d	1385	3080	1190	2710
											Max	26		12		2075	4005	1825	3520
18	MSH422-2	2	8	16d	6	16d	3740	2665	HD7140-SK45L/R_BV [7,8]	2-1/2	Min	20	16d	8	16d	1385	3080	1190	2710
											Max	26		12		2075	4005	1825	3520
20	MSH422-2	2	8	16d	6	16d	3740	2665	HD7140-SK45L/R_BV [7,8]	2-1/2	Min	20	16d	8	16d	1385	3080	1190	2710
											Max	26		12		2075	4005	1825	3520
Double IB900									**Joist Width = 7"**										
11-7/8	MSH422-2	2	8	16d	6	16d	3740	2665	HD7120-SK45L/R_BV [7,8]	2-1/2	Min	16	16d	6	16d	980	2465	775	2165
											Max	22		8		1385	3390	1215	2980
14	MSH422-2	2	8	16d	6	16d	3740	2665	HD7140-SK45L/R_BV [7,8]	2-1/2	Min	20	16d	8	16d	1385	3080	1190	2710
											Max	26		12		2075	4005	1825	3520
16	MSH422-2	2	8	16d	6	16d	3740	2665	HD7140-SK45L/R_BV [7,8]	2-1/2	Min	20	16d	8	16d	1385	3080	1190	2710
											Max	26		12		2075	4005	1825	3520
18	MSH422-2	2	8	16d	6	16d	3740	2665	HD7140-SK45L/R_BV [7,8]	2-1/2	Min	20	16d	8	16d	1385	3080	1190	2710
											Max	26		12		2075	4005	1825	3520
20	MSH422-2	2	8	16d	6	16d	3740	2665	HD7140-SK45L/R_BV [7,8]	2-1/2	Min	20	16d	8	16d	1385	3080	1190	2710
											Max	26		12		2075	4005	1825	3520

1) Shaded hangers require web stiffeners at joist ends. Web stiffeners may be required for non-shaded hangers by joist manufacturer.
2) Loads listed are based on hanger attachment to a DF or S-P-F species solid sawn 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 nails are 0.148" dia. x 3" long and 16d nails are 0.162" dia. x 3-1/2" long.
16d sinkers are 0.148" dia. x 3-1/4" long and may be used where 10d commons are specified.
5) Hangers are special order. Consult MiTek for pricing and lead times.
6) Bevel cut required on end of joist to achieve design loads.
7) 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.
8) D Dim is the length of the hanger seat.
9) Flanges on the bucket of the hanger may extend above the top of the joist.



SKH_L Double
Left shown

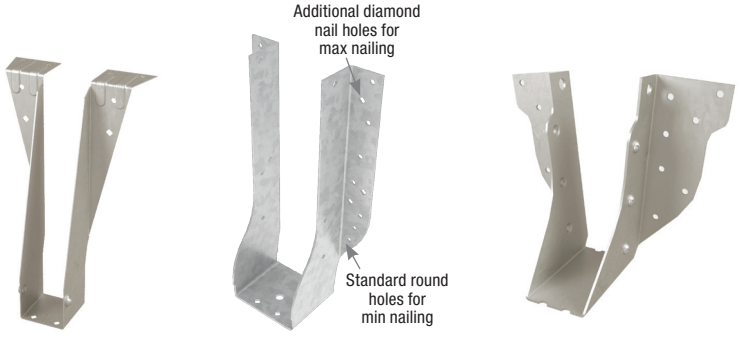
MSH

International Beam® LVL Beams & Headers

MiTek®

Joist Height	Top Mount Hangers[3]										Face Mount Hangers									
			Fastener Schedule[4]				DF		S-P-F				Fastener Schedule[4]					DF		S-P-F	
			Header		Joist									Header		Joist					
	USP Stock No.[6]	D Dim[8]	Qty	Type	Qty	Type	Uplift[2] 160%	Down[1] 100%	Uplift[2] 160%	Down[1] 100%	USP Stock No.[6]	D Dim[8]	Min/ Max	Qty	Type	Qty	Type	Uplift[2] 160%	Down[1] 100%	Uplift[2] 160%	Down[1] 100%
1-3/4" IB LVL																					
7-1/4	PHXU17725	3-1/4	8	16d	6	10d x 1-1/2	930	4350	710	3245	HD1770	2-1/2	Min	12	16d	4	10d x 1-1/2	760	1850	610	1625
													Max	16	16d	8	10d x 1-1/2	1180	2465	955	2165
9-1/4	BPH17925	2-3/8	10	16d	4	10d x 1-1/2	850	2970	665	2300	HD17925	2-1/2	Min	18	16d	6	10d x 1-1/2	1170	2770	950	2440
													Max	24	16d	10	10d x 1-1/2	1900	3695	1540	3020
	PHXU17925	3-1/4	8	16d	6	10d x 1-1/2	930	4350	710	3245	HUS179[5]	3	--	30	16d	10	16d	4110	5580	3390	4555
9-1/2	THO17950	2	6	10d	2	10d x 1-1/2	230	1235	180	950	HD17925	2-1/2	Min	18	16d	6	10d x 1-1/2	1170	2770	950	2440
													Max	24	16d	10	10d x 1-1/2	1900	3695	1540	3020
	PHXU1795	3-1/4	8	16d	6	10d x 1-1/2	930	4350	710	3245	HUS179[5]	3	--	30	16d	10	16d	4110	5580	3390	4555
11-1/4	BPH17112	2-3/8	10	16d	4	10d x 1-1/2	850	2970	665	2300	HD17112	2-1/2	Min	22	16d	6	10d x 1-1/2	1170	3390	950	2555
													Max	30	16d	12	10d x 1-1/2	1900	4320	1550	3255
	PHXU17112	3-1/4	8	16d	6	10d x 1-1/2	930	4350	710	3245	HUS179[5]	3	--	30	16d	10	16d	4110	5580	3390	4555
11-7/8	THO17118	2	6	10d	2	10d x 1-1/2	230	1235	180	950	HD17112	2-1/2	Min	22	16d	6	10d x 1-1/2	1170	3390	950	2555
													Max	30	16d	12	10d x 1-1/2	1900	4320	1550	3255
	PHXU17118	3-1/4	8	16d	6	10d x 1-1/2	930	4350	710	3245	HUS179[5]	3	--	30	16d	10	16d	4110	5580	3390	4555
14	BPH1714	2-3/8	10	16d	4	10d x 1-1/2	850	2970	665	2300	HD1714	2-1/2	Min	28	16d	8	10d x 1-1/2	1550	3790	1255	2790
													Max	36	16d	14	10d x 1-1/2	1900	4580	1555	3485
	PHXU1714	3-1/4	8	16d	6	10d x 1-1/2	930	4350	710	3150	HUS179[5]	3	--	30	16d	10	16d	4110	5580	3390	4555
2 Ply 1-3/4" IB LVL or 3-1/2" IB LVL																					
7-1/4	PHXU35725	3-1/4	8	16d	6	10d	1120	5910	860	4535	THD48	3	--	28	16d	16	10d	2595	4310	2080	3795
9-1/4	HBPH35925	3-1/2	22	16d	10	16d	2705	6310	2335	5035	THD410	3	--	38	16d	20	10d	3905	5850	3235	5145
	HLBH35925	6	15	NA16D-RS	6	16d	1420	10045	1090	7705	THDH410[5]	4	--	46	16d	12	16d	4445	9020	3545	7950
9-1/2	HBPH3595	3-1/2	22	16d	10	16d	2705	6310	2335	5035	THD410	3	--	38	16d	20	10d	3905	5850	3235	5145
	HLBH3595	6	15	NA16D-RS	6	16d	1420	10045	1090	7705	THDH410[5]	4	--	46	16d	12	16d	4445	9020	3545	7950
11-1/4	HBPH35112	3-1/2	22	16d	10	16d	2705	6310	2335	5035	THD410	3	--	38	16d	20	10d	3905	5850	3235	5145
	HLBH35112	6	15	NA16D-RS	6	16d	1420	10045	1090	7705	THDH412[5]	4	--	56	16d	14	16d	5260	9710	4205	7765
11-7/8	HBPH35118	3-1/2	22	16d	10	16d	2705	6310	2335	5035	THD410	3	--	38	16d	20	10d	3905	5850	3235	5145
	HLBH35118	6	15	NA16D-RS	6	16d	1420	10045	1090	7705	THDH412[5]	4	--	56	16d	14	16d	5260	9710	4205	7765
14	HBPH3514	3-1/2	22	16d	10	16d	2705	6310	2335	5035	THD410	3	--	38	16d	20	10d	3905	5850	3235	5145
	HLBH3514	6	15	NA16D-RS	6	16d	1420	10045	1090	7705	THDH414[5]	4	--	66	16d	16	16d	5655	11760	4530	9420
16	HBPH3516	3-1/2	22	16d	10	16d	2705	6310	2335	5035	THD412	3	--	48	16d	20	10d	3905	7045	3235	5680
	HLBH3516	6	15	NA16D-RS	6	16d	1420	10045	1090	7705	THDH414[5]	4	--	66	16d	16	16d	5655	11760	4530	9420
18	HBPH3518	3-1/2	22	16d	10	16d	2705	6310	2335	5035	THD412	3	--	48	16d	20	10d	3905	7045	3235	5680
	HLBH3518	6	15	NA16D-RS	6	16d	1420	10045	1090	7705	THDH414[5]	4	--	66	16d	16	16d	5655	11760	4530	9420

1) Loads listed are based on hanger attachment to a DF or S-P-F species LVL header. Some loads may be increased for duration of load adjustments. Refer to MiTek's Product Catalog for details.
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 thickness for THO series hangers; 3-1/2" minimum header thickness for all other stock numbers.
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, and 16d nails are 0.162" dia. x 3-1/2" long. 16d sinkers are 0.148" dia. x 3-1/4" long and may be used where 10d commons are specified.
5) Joist nails need to be toe nailed at a 30° to 45° angle 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) Supplemental lateral support connection recommended when hanger height is less than 60% of joist height.
8) D Dim is the length of the hanger seat.



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International Beam® LVL Beams & Headers

MiTek®

Joist Height	Top Mount Hangers[3]										Face Mount Hangers									
			Fastener Schedule[4]				DF		S-P-F				Fastener Schedule[4]					DF		S-P-F	
			Header		Joist									Header		Joist					
	USP Stock No.[6]	D Dim[8]	Qty	Type	Qty	Type	Uplift[2] 100%	Down[1] 100%	Uplift[2] 100%	Down[1] 100%	USP Stock No.[6]	D Dim[8]	Min/ Max	Qty	Type	Qty	Type	Uplift[2] 100%	Down[1] 100%	Uplift[2] 100%	Down[1] 100%
3 Ply 1-3/4" IB LVL																					
7-1/4	BPH55725	2-1/4	10	16d	6	10d	850	3065	735	2340	HD68	2-1/2	Min	10	16d	4	16d	920	1540	760	1355
													Max	14		6		1305	2155	1035	1895
9-1/4	HBPH55925	3-1/2	22	16d	10	16d	2705	6235	2325	4950	THD610	3	--	38	16d	20	10d	4010	6535	3210	5750
	HLBH55925	6	15	NA16D-RS	6	16d	1580	10045	1210	7680	THDH610[5]	4	--	46	16d	16	16d	5260	9020	4190	7930
9-1/2	HBPH5595	3-1/2	22	16d	10	16d	2705	6235	2325	4950	THD610	3	--	38	16d	20	10d	4010	6535	3210	5750
	HLBH5595	6	15	NA16D-RS	6	16d	1580	10045	1210	7680	THDH610[5]	4	--	46	16d	16	16d	5260	9020	4190	7930
11-1/4	HBPH55112	3-1/2	22	16d	10	16d	2705	6235	2325	4950	THD610	3	--	38	16d	20	10d	4010	6535	3210	5750
	HLBH55112	6	15	NA16D-RS	6	16d	1580	10045	1210	7680	THDH612[5]	4	--	56	16d	20	16d	5260	9740	4200	7775
11-7/8	HBPH55118	3-1/2	22	16d	10	16d	2705	6235	2325	4950	THD610	3	--	38	16d	20	10d	4010	6535	3210	5750
	HLBH55118	6	15	NA16D-RS	6	16d	1580	10045	1210	7680	THDH612[5]	4	--	56	16d	20	16d	5260	9740	4200	7775
14	HBPH5514	3-1/2	22	16d	10	16d	2705	6235	2325	4950	THD610	3	--	38	16d	20	10d	4010	6535	3210	5750
	HLBH5514	6	15	NA16D-RS	6	16d	1580	10045	1210	7680	THDH614[5]	4	--	66	16d	22	16d	5655	11760	4520	9400
16	HBPH5516	3-1/2	22	16d	10	16d	2705	6235	2325	4950	THD612	3	--	48	16d	20	10d	4010	8255	3210	7090
	HLBH5516	6	15	NA16D-RS	6	16d	1580	10045	1210	7680	THDH614[5]	4	--	66	16d	22	16d	5655	11760	4520	9400
18	HBPH5518	3-1/2	22	16d	10	16d	2705	6235	2325	4950	THD612	3	--	48	16d	20	10d	4010	8255	3210	7090
	HLBH5518	6	15	NA16D-RS	6	16d	1580	10045	1210	7680	THDH614[5]	4	--	66	16d	22	16d	5655	11760	4520	9400
4 Ply 1-3/4" IB LVL																					
9-1/4	HBPH71925	3-1/2	22	16d	10	16d	2705	6235	2320	4935	THD7210	3	--	38	16d	20	10d	4010	6535	3200	5750
	HLBH71925	6	15	NA16D-RS	6	16d	1580	10045	1205	7670	THDH7210[5]	4	--	46	16d	12	16d	4445	9020	3520	7890
9-1/2	HBPH7195	3-1/2	22	16d	10	16d	2705	6235	2320	4935	THD7210	3	--	38	16d	20	10d	4010	6535	3200	5750
	HLBH7195	6	15	NA16D-RS	6	16d	1580	10045	1205	7670	THDH7210[5]	4	--	46	16d	12	16d	4445	9020	3520	7890
11-1/4	HBPH71112	3-1/2	22	16d	10	16d	2705	6235	2320	4935	THD7210	3	--	38	16d	20	10d	4010	6535	3200	5750
	HLBH71112	6	15	NA16D-RS	6	16d	1580	10045	1205	7670	THDH7212[5]	4	--	56	16d	14	16d	5260	9020	4170	7900
11-7/8	HBPH71118	3-1/2	22	16d	10	16d	2705	6235	2320	4935	THD7210	3	--	38	16d	20	10d	4010	6535	3200	5750
	HLBH71118	6	15	NA16D-RS	6	16d	1580	10045	1205	7670	THDH7212[5]	4	--	56	16d	14	16d	5260	9020	4170	7900
14	HBPH7114	3-1/2	22	16d	10	16d	2705	6235	2320	4935	THD7210	3	--	38	16d	20	10d	4010	6535	3200	5750
	HLBH7114	6	15	NA16D-RS	6	16d	1580	10045	1205	7670	THDH7214[5]	4	--	66	16d	16	16d	5655	11760	4490	9335
16	HBPH7116	3-1/2	22	16d	10	16d	2705	6235	2320	4935	HD7120	2-1/2	Min	16	16d	6	16d	1305	2465	1035	2165
													Max	22	16d	8	16d	1845	3390	1620	2980
	HLBH7116	6	15	NA16D-RS	6	16d	1580	10045	1205	7670	THDH7214[5]	4	--	66	16d	16	16d	5655	11760	4490	9335
18	HBPH7118	3-1/2	22	16d	10	16d	2705	6235	2320	4935	HD7140	2-1/2	Min	20	16d	8	16d	1845	3080	1585	2710
													Max	26	16d	12	16d	2765	4005	2430	3520
	HLBH7118	6	15	NA16D-RS	6	16d	1580	10045	1205	7670	THDH7214[5]	4	--	66	16d	16	16d	5655	11760	4490	9335

1) Loads listed are based on hanger attachment to a DF or S-P-F species LVL header. Some loads may be increased for duration of load adjustments. Refer to MiTek's Product Catalog for details.
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 thickness for THO series hangers; 3-1/2" minimum header thickness for all other stock numbers.
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, and 16d nails are 0.162" dia. x 3-1/2" long. 16d sinkers are 0.148" dia. x 3-1/4" long and may be used where 10d commons are specified.
5) Joist nails need to be toe nailed at a 30° to 45° angle 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) Supplemental lateral support connection recommended when hanger height is less than 60% of joist height.
8) D Dim is the length of the hanger seat.

PHXU

HLBH

THD

THDH

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:

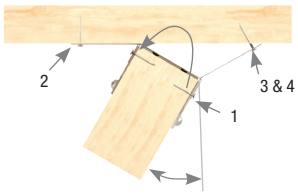
- Use all specified fasteners.

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" nails. Bend seat up to fit against joist bottom and drive (1) 10d (0.148") x 1-1/2" nail through bottom seat into joist bottom flange. Drive (2) 10d (0.148") x 1-1/2" nail 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") or 16d (0.162" x 3-1/2") 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") or 16d (0.162" x 3-1/2") nails through nail holes.

- Web 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.

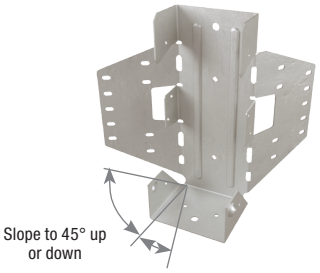
Typical LSSH installation



Skew to 45° maximum

LSSH Figure 1

Joist Height	USP Stock No.[1,5]	Installation Type	Fastener Schedule[4] Header Qty	Header Type	Joist Qty	Joist Type	DF Uplift[3] 160%	DF Down[2] 100%	S-P-F Uplift[3] 160%	S-P-F Down[2] 100%
IB400 or IB600		**Joist Width = 2-1/2"**								
9-1/2 – 16	LSSH25	Sloped Only	18	16d	12	10d x 1-1/2	945	2095	740	1640
		Skewed Only or Sloped & Skewed	14	16d	12	10d x 1-1/2		1610		1260
IB800 or IB900		**Joist Width = 3-1/2"**								
11-7/8 – 16	LSSH35	Sloped Only	18	16d	12	10d x 1-1/2	1310	2645	1020	2345
		Skewed Only or Sloped & Skewed	14	16d	12	10d x 1-1/2		1610		1255



LSSH

1) Shaded hangers require web stiffeners at joist ends.
2) Loads listed are based on hanger attachment to a DF or S-P-F species solid sawn or LVL header. Some loads may be increased for duration of load adjustments. Refer to MiTek USP 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. x 1-1/2" long and 16d nails are 0.162" dia. x 3-1/2" long.
5) Hangers utilizing 16d nails are not compatible with International Beam® joists.
6) Supplemental lateral support connection recommended when hanger height is less than 60% of joist height.

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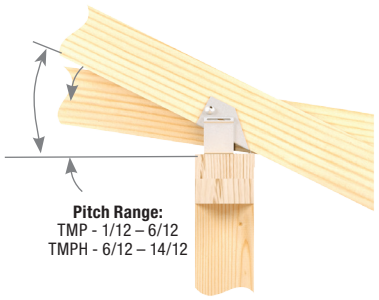
Variable Pitch Connectors

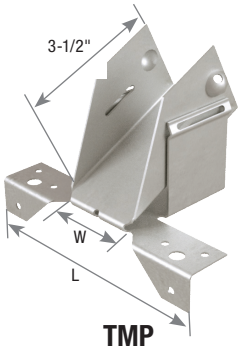
The TMP and TMPH are designed to make rafter-to-plate connections and eliminate time-consuming bird's-mouth notching or bevel plate installation.

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** requires 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



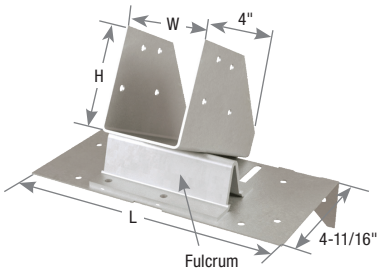
TMP

TMP chart

Joist Height	USP Stock No.	Fastener Schedule[4] Plate Qty	Plate Type	Rafter Qty	Rafter Type	DF Uplift[3] 160%	DF Down[2] 100%	S-P-F Uplift[3] 160%	S-P-F Down[2] 100%
IB400 or IB600					Joist Width = 2-1/2"				
All	TMP25	6	10d	4	10d x 1-1/2	250	1705	190	1705
IB800 or IB900					Joist Width = 3-1/2"				
All	TMP4	6	10d	4	10d x 1-1/2	250	1705	190	1705

1) Web stiffeners may be required for hanger by International Beams.
2) Loads listed are based on hanger attachment to a DF or S-P-F 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" diameter x 1-1/2" long, 10d nails are 0.148" diameter x 3" long.

Typical TMPH installation



TMPH

TMPH chart

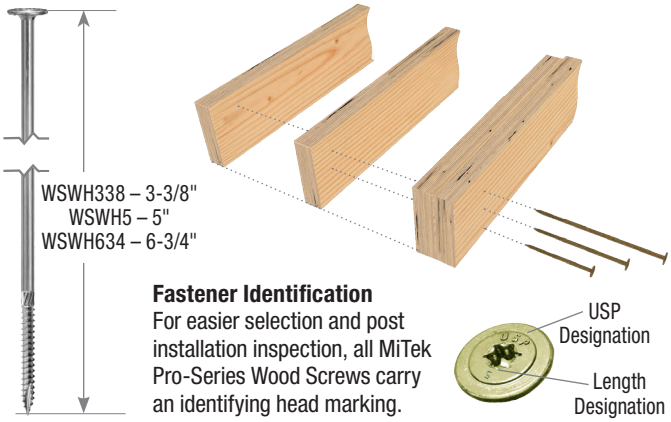
Joist Height	USP Stock No.[1]	Fastener Schedule[4] Plate Top Qty	Plate Side Qty	Plate Type	Rafter Qty	Rafter Type	Wood Species	According to Pitch[2] 6/12	7/12	8/12	9/12	10/12	11/12	12/12	13/12	14/12	Uplift[3] 160%
IB400 or IB600						Joist Width = 2-1/2"											
All	TMPH25	8	2	10d	8	10d x 1-1/2	DF	3190	3290	3390	3140	2900	2710	2520	2230	1950	260
							S-P-F	2535	2615	2695	2500	2305	2155	2000	1775	1545	205
IB800 or IB900						Joist Width = 3-1/2"											
All	TMPH4	8	2	10d	8	10d x 1-1/2	DF	3190	3290	3390	3140	2900	2710	2520	2230	1950	260
							S-P-F	2525	2605	2685	2495	2300	2150	1995	1770	1540	205

1) Web stiffeners are required for all Wood I-Joist installations.
2) Loads listed are based on hanger attachment to a DF or S-P-F 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" diameter x 1-1/2" long, 10d nails are 0.148" diameter x 3" long.

WSWH Series Washer Head Screw Applications - Joining 2, 3, or 4 LVL Members or Parallam PSL Members

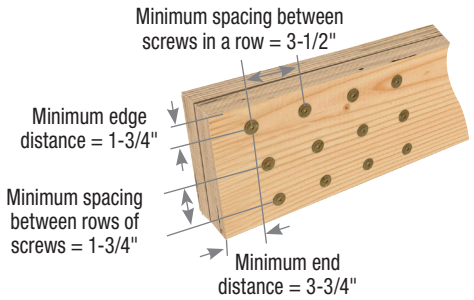
Installation:

- 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.



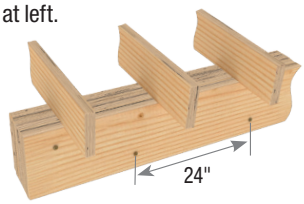
Fastener Identification
For easier selection and post installation inspection, all MiTek Pro-Series Wood Screws carry an identifying head marking.

Minimum Spacing Requirements:

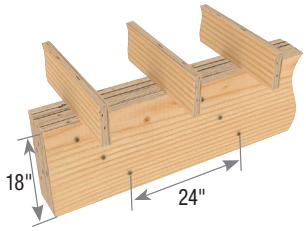


Top Loaded Beams

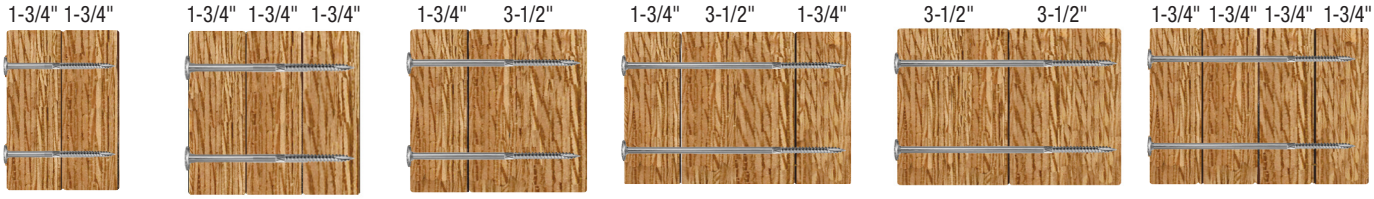
Where floor joists rest on all plies of the beam, WSWH screws should be installed in two staggered rows at 24" O.C. spacing. Maintain the minimum end and edge distance as indicated at left.



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



Fastener Size Selection by Assembly Type



A WSWH338 3-3/8" | **B** WSWH5 5" | **C** WSWH5 5" | **D** WSWH634 6-3/4" | **E** WSWH634 6-3/4" | **F** WSWH634 6-3/4"

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 USP Stock No.	No. of Rows	Spacing Between Screws in a Row (in)	Allowable Side Loads by Assembly Type (lbs/lineal ft) (See Graphics) [1,2,3,4]					
				A	B	C	D	E	F
3-3/8	WSWH338	2	24	640	--	--	--	--	--
			19.2	800					
			16	955					
		3	24	955	--	--	--	--	--
			19.2	1195					
			16	1435					
5	WSWH5	2	24	--	535	535	--	--	--
			19.2		670	670			
			16		805	805			
		3	24	--	805	805	--	--	--
			19.2		1005	1005			
			16		1210	1210			
6-3/4	WSWH634	2	24	--	--	--	475	715	475
			19.2				595	895	595
			16				715	1075	715
		3	24	--	--	--	715	1075	715
			19.2				895	1345	895
			16				1075	1610	1075

1) Allowable loads are derived from tested fastener values as reported in ICC-ES ESR #2761. (Visit icc-es.org)
2) The uniform loads in this table relate only to the capacity of the fastener to transfer shear loads between plies. The capacity of the EWP beam may be less and should be checked against the manufacturer's literature.
3) Values listed reflect 100% load duration. (CD=1.0) The designer may apply adjustment factors to increase or decrease these loads per the National Design Specification for Wood (NDS) based on conditions for each assembly.
4) Load values depicted assume all uniform load is applied to the outermost ply or point of entry for the screw.
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.

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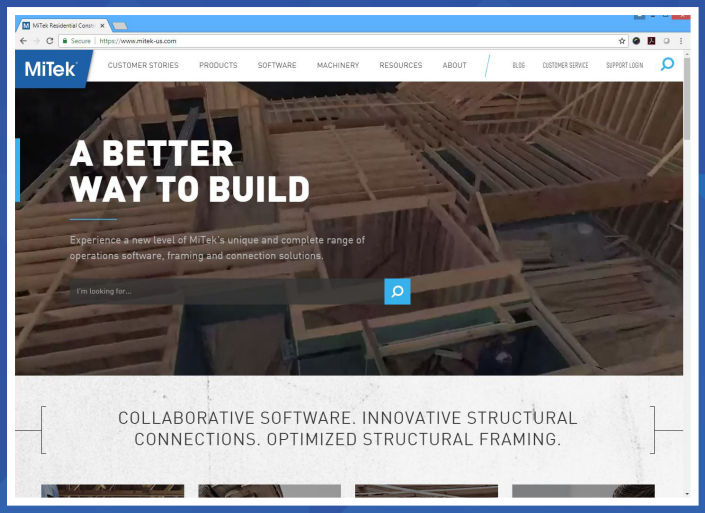
SPECIFICATION TOOLS

Available at MiTek-US.com



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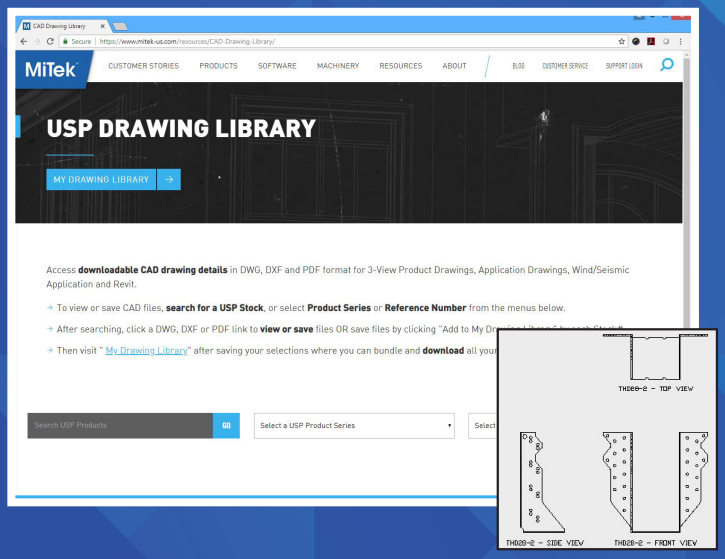
- Drawing Library downloads



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