

The Fire Wall Hanger is designed for attaching truss, I-joist, solid sawn lumber, or engineered wood floor framing members to double wall top plates or minimum 2-ply 2x solid sawn header fire rated wood frame walls. The advanced design allows the installation of the FWH **before** the 5/8" gypsum wallboard (drywall) is attached and permits the building project to be completely framed-up, and weather-tight before the gypsum wallboard sheathing work starts.

**Materials:** 14 gauge

**Finish:** G90 galvanizing

**Options:** See Specialty Options chart on page 195

**Codes:** IBC, FL, LA

**Patents:** U.S. Patent No. 10,316,510

**Installation:**

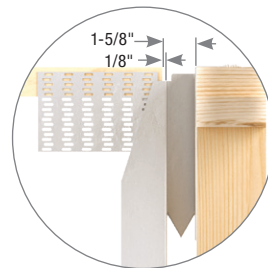
- Install the face of hanger flanges tight to stud wall framing.
- For typical installations, the FWH does not need to be installed at stud locations. An increase in capacity can be achieved by installing the FWH at a stud. See the Allowable Load Table on page 195.
- The end of the truss/joist should measure 1-5/8" from the face of the supporting wall. See Figure 1.
- The truss/joist should bear fully on the FWH seat with a gap no greater than 1/8" between the end of the supported member and the hanger. See Figure 1.
- **Gypsum Wallboard Installation** – Use the FWH-T template to slot cut the gypsum wallboard. See FWH-T Template Sequence. Slide the gypsum wallboard into position and fasten to the framing members meeting the minimum requirements specified by code.

**Geometry Table**

Joist Size (in)	MiTek USP Stock No.	Ref. No.	Dimensions (in)		Code Ref.
			W	H	
2 x 8	FWH28	--	1-9/16	7-1/8	IBC, FL, LA
2 x 10	FWH210	--	1-9/16	9-1/8	
2 x 12	FWH212	--	1-9/16	11-1/8	
1-3/4 x 9-1/2	FWH1795	DGHF1.81/9.5	1-13/16	9-7/16	
1-3/4 x 11-7/8	FWH1718	DGHF1.81/11.88	1-13/16	11-13/16	
1-3/4 x 14	FWH1714	DGHF1.81/14	1-13/16	13-15/16	
1-3/4 x 16	FWH1716	DGHF1.81/16	1-13/16	15-15/16	
2 - 2-1/8 x 9-1/2	FWH2095	DGHF2.1/9.5	2-1/8	9-7/16	
2 - 2-1/8 x 11-7/8	FWH20118	DGHF2.1/11.88	2-1/8	11-13/16	
2 - 2-1/8 x 14	FWH2014	DGHF2.1/14	2-1/8	13-15/16	
2 - 2-1/8 x 16	FWH2016	DGHF2.1/16	2-1/8	15-15/16	
2-5/16 x 9-1/2	FWH2395	DGHF2.37/9.5	2-3/8	9-7/16	
2-5/16 x 11-7/8	FWH23118	DGHF2.37/11.88	2-3/8	11-13/16	
2-5/16 x 14	FWH2314	DGHF2.37/14	2-3/8	13-15/16	
2-5/16 x 16	FWH2316	DGHF2.37/16	2-3/8	15-15/16	
2-5/16 x 18	FWH2318	DGHF2.37/18	2-3/8	17-15/16	
2-5/16 x 20	FWH2320	DGHF2.37/20	2-3/8	19-15/16	
2-1/2 x 9-1/2	FWH2595	DGHF2.56/9.5	2-9/16	9-7/16	
2-1/2 x 11-7/8	FWH25118	DGHF2.56/11.88	2-9/16	11-13/16	
2-1/2 x 14	FWH2514	DGHF2.56/14	2-9/16	13-15/16	
2-1/2 x 16	FWH2516	DGHF2.56/16	2-9/16	15-15/16	
2-1/2 x 18	FWH2518	DGHF2.56/18	2-9/16	17-15/16	
2-1/2 x 20	FWH2520	DGHF2.56/20	2-9/16	19-15/16	
3-1/2 x 9-1/2	FWH3595	DGHF3.62/9.5	3-9/16	9-7/16	
3-1/2 x 11-7/8	FWH35118	DGHF3.62/11.88	3-9/16	11-13/16	
3-1/2 x 14	FWH3514	DGHF3.62/14	3-9/16	13-15/16	
3-1/2 x 16	FWH3516	DGHF3.62/16	3-9/16	15-15/16	
3-1/2 x 18	FWH3518	DGHF3.62/18	3-9/16	17-15/16	
3-1/2 x 20	FWH3520	DGHF3.62/20	3-9/16	19-15/16	
3-1/2 x 22	FWH3522	DGHF3.62/22	3-9/16	21-15/16	
3-1/2 x 24	FWH3524	DGHF3.62/24	3-9/16	23-15/16	

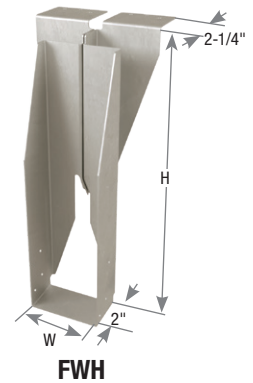
**2 Hour Fire-Rating**

FWH hangers are tested per ASTM E814 standards. When installed on one side of a maximum 2 hour fire-rated wall assembly, the penetration of the MiTek FWH Fire Wall Hanger through the gypsum wallboard will not reduce the fire resistive rating of the 2 hour fire resistive assembly.

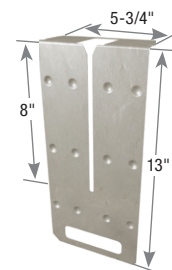


**Figure 1**

**Typical FWH Side View**

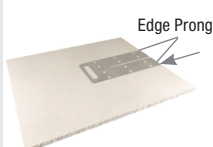


**FWH**

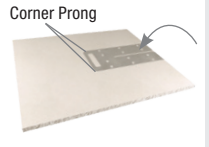


**FWH-T template**  
(must be ordered separately)

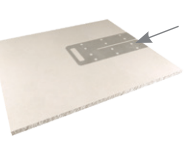
**FWH-T Template Installation Sequence**



Edge Prong



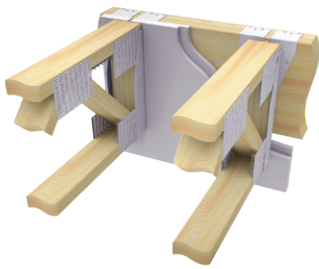
Corner Prong



- 1) Align the FWH-Template slot with the mark in the gypsum wallboard and engage the prongs into edge of gypsum wallboard
- 2) Rotate the template and press down on the end to engage the corner prongs
- 3) Run the gypsum wallboard cutter down the template to cut the slot

Copyright © 2020 MiTek Industries, Inc. All Rights Reserved

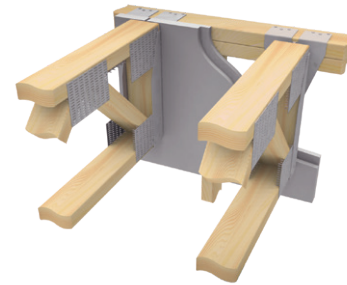
Continued on next page



**Typical FWH solid sawn header installation**



**Typical FWH stud wall installation**



**Typical FWH stud wall with (2) layers of 5/8" gypsum wallboard installation**

**Fastener / Allowable Load Table**

Installation Type	Fastener Schedule <sup>4</sup>					DF Allowable Loads (Lbs.)					
	Header			Joist		Solid Sawn Header		2-Ply, 2x Wall Top Plate		2-Ply 2x Wall Top Plate with Stud Below	
	Top Qty	Face Qty	Type	Qty	Type	Download (100/115/125%)	Uplift <sup>1</sup> 160%	Download (100/115/125%)	Uplift <sup>1</sup> 160%	Download <sup>2</sup> (100/115/125%)	Uplift <sup>1</sup> 160%
Without 5/8" gypsum wallboard or structural sheathing	6	--	10d	6	10d x 1-1/2	2240	180	2045	180	--	--
	6	2 4	10d	6	10d x 1-1/2	2625	380	2045	380	2980 <sup>3</sup>	380
After (1) layer of 5/8" gypsum wallboard is installed	6	--	10d	6	10d x 1-1/2	2400	180	2400	180	--	--
	6	2 4	10d	6	10d x 1-1/2	2625	380	2400	380	2980 <sup>3</sup>	380
After (2) layers of 5/8" gypsum wallboard are installed	6	--	10d	6	10d x 1-1/2	2400	180	2400	180	--	--
	6	2 4	10d	6	10d x 1-1/2	2625	380	2400	380	2980 <sup>3</sup>	380
Two-sided after (2) layers of 5/8" gypsum wallboard are installed (min. 2x6 wall)	6	--	10d	6	10d x 1-1/2	2400	180	2400	180	--	--
	6	2 4	10d	6	10d x 1-1/2	2625	380	2400	380	2980 <sup>3</sup>	380
After (1) layer of structural sheathing & (1) layer of 5/8" gypsum wallboard is installed	6	--	10d	6	10d x 1-1/2	2400	180	2400	180	--	--
	6	2 4	10d	6	10d x 1-1/2	2625	380	2400	380	2980 <sup>3</sup>	380

- 1) Uplift Loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
  - 2) Allowable downloads require at least one 2x stud at each hanger location and 4 face nails into 2-ply top plate.
  - 3) FWH 1-9/16" wide hangers have an allowable download of 2,665 lb. at 100%, 2,765 lb. at 115% and 2,830 lb. at 125%.
  - 4) **NAILS:** 10d x 1-1/2" nails are 0.148" dia. x 1-1/2" long, 10d nails are 0.148" dia. x 3" long.
- New products or updated product information are designated in **blue font**.

**Specialty Options Chart – Refer to Specialty Options pages 320 and 322 for additional details.**

Option	Skewed <sup>1</sup>	Top Flange Offset
Range	1° to 70°	--
Allowable Loads	80% of table load on skews up to 45°. 70% of table load on skews 46° to 70°.	70% of table download. 180 lbs. Max uplift.
Ordering	Add <i>SK</i> , angle required, right ( <i>R</i> ) or left ( <i>L</i> ), and square cut ( <i>SQ</i> ) to product number. Ex. FWH3514_SK45R_SQ	Add <i>OS</i> , and right ( <i>R</i> ) or left ( <i>L</i> ), to product number. Ex. FWH3595_OS

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

MiTek has expanded the FWH Fire Wall Hanger series to include the higher load carrying capacity FWHBP, the Fire Wall Hanger for Beams and Purlins. The FWHBP transfers the load into the supporting wall thru bearing on the top plates and directly attaching to the stud pack or post below. As with the FWH hanger, the advanced design allows you to install the hangers before the drywall is attached, allowing your project to be completely framed-up and weather-tight before the drywall sheathing shows up on site.

**Materials:** 12 gauge

**Finish:** Primer

**Options:** See Specialty Options chart on page 197

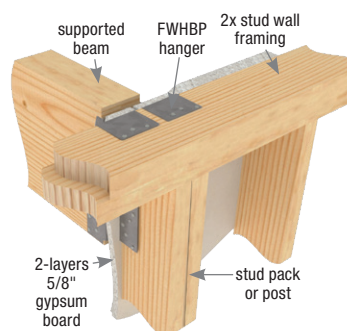
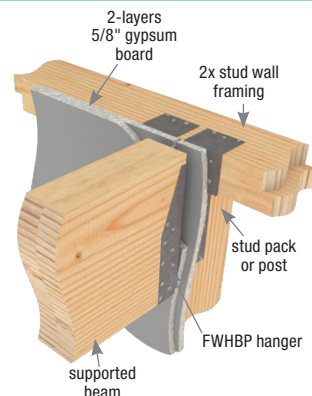
**Patents:** U.S. Patent No. 10,179,992

**Installation:**

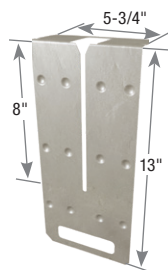
- Install the face of hanger flanges tight to stud wall framing.
- The end of the truss/joist should measure 1-5/8" from the face of the supporting wall.
- The truss/joist should bear fully on the FWH seat with a gap no greater than 1/8" between the end of the supported member and the hanger.
- **Gypsum Wallboard Installation** – Use the FWH-T template to slot cut the gypsum wallboard. See FWH-T Template Sequence. Slide the gypsum wallboard into position and fasten to the framing members meeting the minimum requirements specified by code.

**2 Hour Fire-Rating**

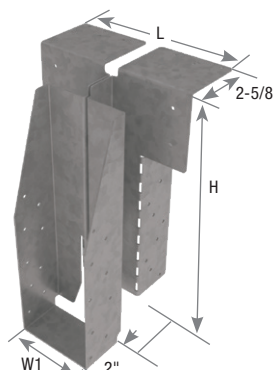
FWH hangers are tested per ASTM E814 standards. When installed on one side of a maximum 2 hour fire-rated wall assembly, the penetration of the MiTek FWH Fire Wall Hanger through the gypsum wallboard will not reduce the fire resistive rating of the 2 hour fire resistive assembly.



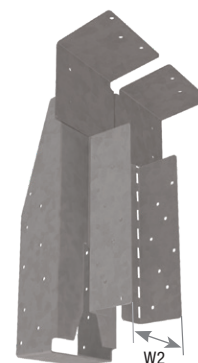
**Typical FWHBP attachment to top plate/beam and stud pack/post**



**FWH-T template**  
(must be ordered separately)



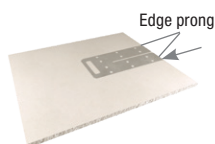
**FWHBP Hanger**



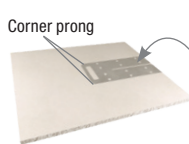
**FWHBP Stud Pack Width**

**FWH-T Template Installation Sequence**

1) Align the FWH-Template slot with the mark in the gypsum wallboard and engage the prongs into edge of gypsum wallboard



2) Rotate the template and press down on the end to engage the corner prongs



3) Run the gypsum wallboard cutter down the template to cut the slot



Continued on next page

Copyright © 2020 MiTek Industries, Inc. All Rights Reserved

Joist Size	MiTek USP Stock No.	Ref. No.	Steel Gauge	Dimensions (in)				Fastener Schedule <sup>4</sup>						DF/SP Allowable Loads (Lbs.)				Code Ref.
				W1	W2 <sup>3</sup>	H	L	Header			Joist			Download 2-Ply 2x Wall Top Plate <sup>1</sup>			Uplift 160% <sup>2</sup>	
								Top Qty	Face Qty	Stud Qty	Type	Qty	Type	100%	115%	125%		
3-1/2 x 11-7/8	FWHBP35118	--	12	3-9/16	Specify	11-7/8	7-1/8	6	4	16	10d	18	10d	7055	7355	7550	3025	
3-1/2 x 14	FWHBP3514					13-15/16												
3-1/2 x 16	FWHBP3516					15-15/16												
3-1/2 x 18	FWHBP3518					17-15/16												
3-1/2 x 20	FWHBP3520					19-15/16												
3-1/2 x 22	FWHBP3522					21-15/16												
3-1/2 x 24	FWHBP3524					23-15/16												
5-1/4 x 11-7/8	FWHBP52118	--	12	5-3/8	Specify	11-7/8	7-15/16	6	4	16	10d	18	10d	8015	8015	8015	3025	--
5-1/4 x 14	FWHBP5214					13-15/16												
5-1/4 x 16	FWHBP5216					15-15/16												
5-1/4 x 18	FWHBP5218					17-15/16												
5-1/4 x 20	FWHBP5220					19-15/16												
5-1/4 x 22	FWHBP5222					21-15/16												
5-1/4 x 24	FWHBP5224					23-15/16												
7 x 11-7/8	FWHBP71118	--	12	7-1/8	Specify	11-7/8	9-11/16	6	4	16	10d	18	10d	5695	5695	5695	3025	
7 x 14	FWHBP7114					13-15/16												
7 x 16	FWHBP7116					15-15/16												
7 x 18	FWHBP7118					17-15/16												
7 x 20	FWHBP7120					19-15/16												
7 x 22	FWHBP7122					21-15/16												
7 x 24	FWHBP7124					23-15/16												

- 1) Download allowable load is for a 2-Ply Top Plate with stud pack (or post) below without wall and floor sheathing attached.
- 2) Uplift loads have been increased 60% for wind or seismic loads. No further increase shall be permitted.
- 3) "Specify" denotes required stud pack/post width must be specified when ordering. Minimum 3" for a 2-ply 2x stud pack.
- 4) **NAILS:** 10d nails are 0.148" dia. x 3" long.

**Specialty Options Chart** – Refer to Specialty Options pages 320 and 322 for additional details.

Option	Skewed <sup>1</sup>
Range	1° to 70°
Allowable Loads	70% of table load
Ordering	Add <i>SK</i> , angle required, right ( <i>R</i> ) or left ( <i>L</i> ), and square cut ( <i>SQ</i> ) to product number. Ex. FWHBP3514_SK45L_SQ

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

# FWHH Heavy-Duty Fire Wall Hangers

# Fire Wall Hangers

The MiTek FWHH Heavy-Duty Fire Wall Hanger is designed to support beams and purlins at header locations. The higher capacity of the FWHH is achieved through top flange bearing along with added face and beam/purlin nailing. As with the FWH hanger, the advanced design allows you to install the hangers **before** the drywall is attached, allowing your project to be completely framed-up and weather-tight before the drywall sheathing shows up on site.

### 2 Hour Fire-Rating

FWH hangers are tested per ASTM E814 standards. When installed on one side of a maximum 2 hour fire-rated wall assembly, the penetration of the MiTek FWH Fire Wall Hanger through the gypsum wallboard will not reduce the fire resistive rating of the 2 hour fire resistive assembly.

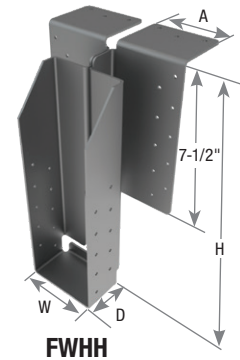
**Materials:** 12 gauge

**Finish:** Primer

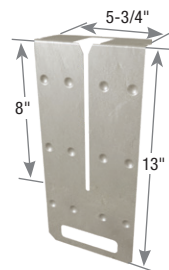
**Options:** See Specialty Options chart on page 199

### Installation:

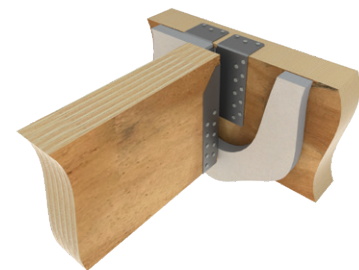
- Install the FWHH hanger flanges tight to the face of the header.
- A minimum 2-ply 2x10 header is required for proper installation.
- The beam/purlin should bear fully on the FWHH seat with a gap no greater than 1/8" between the end of the supported member and the hanger.
- Gypsum Wallboard Installation - Use the FWH-T template to slot cut the gypsum wallboard. See FWH-T Template Sequence. Slide the gypsum wallboard into position and fasten to the framing members meeting the minimum requirements specified by code.



FWHH



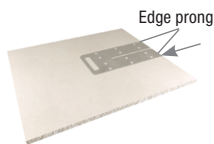
FWH-T template  
(must be ordered separately)



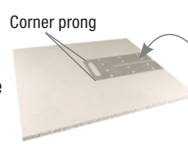
Typical FWHH installation

### FWH-T Template Installation Sequence

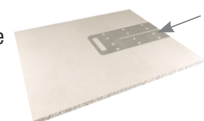
1) Align the FWH-Template slot with the mark in the gypsum wallboard and engage the prongs into edge of gypsum wallboard



2) Rotate the template and press down on the end to engage the corner prongs



3) Run the gypsum wallboard cutter down the template to cut the slot



Joist Size (in)	MiTek USP Stock No.	Ref. No.	Steel Gauge	Dimensions (in)					Fastener Schedule <sup>3</sup>					DF/SP Allowable Loads (Lbs.)				Code Ref.		
				W1	W2	H	D	A	Header		Joist			Download <sup>1</sup>			Uplift <sup>2</sup>			
									Top Qty	Face Qty	Type	Qty	Type	100%	115%	125%				
3-1/2 x 9-1/2	<a href="#">FWHH3595</a>					9-7/16														
3-1/2 x 11-7/8	<a href="#">FWHH35118</a>					11-13/16														
3-1/2 x 14	<a href="#">FWHH3514</a>					13-15/16														
3-1/2 x 16	<a href="#">FWHH3516</a>	--	12	3-9/16	Specify	15-15/16	2	3-1/4	6	20	10d	20	10d x 1-1/2	7355	7685	7715	3445	--	--	
3-1/2 x 18	<a href="#">FWHH3518</a>					17-15/16														
3-1/2 x 20	<a href="#">FWHH3520</a>					18-15/16														
3-1/2 x 22	<a href="#">FWHH3522</a>					21-15/16														
3-1/2 x 24	<a href="#">FWHH3524</a>					23-15/16														

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

2) **NAILS:** 10d x 1-1/2" nails are 0.148" dia. x 1-1/2" long, 10d nails are 0.148" dia. x 3" long.

New products or updated product information are designated in **blue font**.

Continued on next page

Joist Size (in)	MiTek USP Stock No.	Ref. No.	Steel Gauge	Dimensions (in)					Fastener Schedule <sup>3</sup>					DF/SP Allowable Loads (Lbs.)				Code Ref.	
				W1	W2	H	D	A	Header		Joist			Download <sup>1</sup>			Uplift 160% <sup>2</sup>		
									Top Qty	Face Qty	Type	Qty	Type	100%	115%	125%			
5-1/4 x 9-1/4	FWHH52925					9-1/8													
5-1/4 x 9-1/2	FWHH5295					9-7/16													
5-1/4 x 11-7/8	FWHH52118					11-13/16													
5-1/4 x 14	FWHH5214					13-15/16													
5-1/4 x 16	FWHH5216	--	12	5-3/8	Specify	15-15/16	2	4-3/16	6	20	10d	20	10d x 1-1/2	7715	7715	7715	3445		
5-1/4 x 18	FWHH5218					17-15/16													
5-1/4 x 20	FWHH5220					18-15/16													
5-1/4 x 22	FWHH5222					21-15/16													
5-1/4 x 24	FWHH5224					23-15/16													
5-1/2 x 9-1/4	FWHH55925					9-1/8													
5-1/2 x 9-1/2	FWHH5595					9-7/16													
5-1/2 x 11-7/8	FWHH55118					11-13/16													
5-1/2 x 14	FWHH5514					13-15/16													
5-1/2 x 16	FWHH5516	--	12	5-5/8	Specify	15-15/16	2	4-3/16	6	20	10d	20	10d x 1-1/2	7715	7715	7715	3445	--	
5-1/2 x 18	FWHH5518					17-15/16													
5-1/2 x 20	FWHH5520					18-15/16													
5-1/2 x 22	FWHH5522					21-15/16													
5-1/2 x 24	FWHH5524					23-15/16													
7 x 11-7/8	FWHH71118					11-13/16													
7 x 14	FWHH7114					13-15/16													
7 x 16	FWHH7116					15-15/16													
7 x 18	FWHH7118	--	12	7-1/8	Specify	17-15/16	2	5-1/16	6	20	10d	20	10d x 1-1/2	6005	6005	6005	3445		
7 x 20	FWHH7120					18-15/16													
7 x 22	FWHH7122					21-15/16													
7 x 24	FWHH7124					23-15/16													

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

2) **NAILS:** 10d x 1-1/2 nails are 0.148" dia. x 1-1/2" long, 10d nails are 0.148" dia. x 3" long.

New products or updated product information are designated in **blue font**.

**Specialty Options Chart – Refer to Specialty Options pages 320 and 322 for additional details.**

Option	Skewed <sup>1</sup>
Range	1° to 70°
Allowable Loads	70% of table load
Ordering	Add <i>SK</i> , angle required, right ( <i>R</i> ) or left ( <i>L</i> ), and square cut ( <i>SQ</i> ) to product number. Ex. FWHH3516_SK60R_SQ

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