

Fire Wall Hangers

FWH series



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.

Features:

- Hangers can be installed before gypsum wallboard is attached
- Code Evaluated
- 2-hour tested fire rating per ASTM E814
- No additional connectors required to prevent top plate rotation typical of other fire wall hangers.
- Skewed Specialty Option up to 70°

Materials: 14 gauge Finish: G90 galvanizing

Options: See Specialty Options chart on back, See product catalog for Nailer Options

Codes: IBC, FL, LABC

Patents: U.S. Patent No. 10,316,510, U.S. Patent No. 11,021,867 B2,

U.S. Patent No. 11,649,626 B2

Installation:

- Install the face of hanger flanges tight to stud wall framing.
- For wall framing, hangers do NOT need to be installed at stud locations for full design values.
- 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 Installation Sequence on next page. Slide the gypsum wallboard into position and fasten to the framing members meeting minimum requirements specified by code.



FWH-T template (must be ordered separately)

FWH-T Template Installation Sequence



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



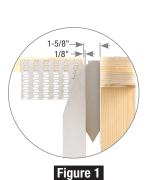
2) Rotate the template and press down on the end to engage the corner prongs



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

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.



2-5/8"

W
FWH

Typical FWH Side View

Joist	MiTek		Dimen	sions (in)	Code
Size (in)	Stock No.	Ref. No.	W	Н	Ref.
2 x 8	FWH28		1-9/16	7-1/8	
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	FWH17118	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	IBC,
2-5/16 x 18	FWH2318	DGHF2.37/18	2-3/8	17-15/16	FL,
2-5/16 x 20	FWH2320	DGHF2.37/20	2-3/8	19-15/16	LA
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	

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

DGHF3.62/24

FWH3524

3-1/2 x 24

23-15/16

3-9/16



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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

	Fastener Schedule ⁵			DF Allowable Loads (Lbs.)							
		Heade	er		Joist	Solid Sawn Header		2-Ply, 2x Wall Top Plate		2-Ply 2x Wall Top Plate with Stud Below	
Installation Type	Top Qty	Face Qty	Туре	Qty	Туре	Download (100/115/125%)	Uplift ¹ 160%	Download (100/115/125%)	Uplift ¹ 160%	Download ² (100/115/125%)	Uplift ¹ 160%
Without 5/8" gypsum						2240	180	2045	180		
wallboard or structural	6	2	10d	6	10d x 1-1/2	2625	380		380		
sheathing		4				2023	300		300	2980 ³	380
After (4) Investor of E/OII						2400	180	2400	180		
After (1) layer of 5/8" gypsum wallboard is installed	6	2	10d	6	10d x 1-1/2	2625	380		380		
gypouri transcal a 10 motanoa		4				2023	300		300	2980 ³	380
After (2) layers of 5/8"						2400	180		180		
gypsum wallboard are	6	2	10d	6	10d x 1-1/2	2625	380	2400	380		
installed		4				2023	300		300	2980 ³	380
Two-sided after (2) layers of						2400	180		180	180	
5/8" gypsum wallboard	6	2	10d	6	10d x 1-1/2	2625	380	2400	380		
are installed (min. 2x6 wall)		4				2023	300		300	2980 ³	380
After (1) layer of structural						2400	180		180		
sheathing & (1) layer of 5/8"	6	2	10d	6	10d x 1-1/2	2625	380	2400	380		
gypsum wallboard is installed		4				2023	300		300	2980 ³	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) Web stiffeners are required on I-Joist applications. Install per I-Joist manufacturer specifications.
- 5) **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.

Specialty Options Chart

Option	Skewed ¹	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_OSR

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