

# WSF-PW3 FLOOR-TO-FLOOR CONNECTION SYSTEM

## WSF Floor-to-Floor Screw + PW3 Shrinkage Compensation Device

The floor-to-floor connection system, consists of two parts: the WSF Floor-to-Floor Screw and the PW3 Shrinkage Compensation Device. Used in combination, the system allows designers to resist uplift loads between floor levels, while compensating for up to 5/16" of wood shrinkage in the plate members over time.

**Materials:** 1/4" diameter Grade 5 steel (WSF);  
Glass Fiber Reinforced Polamide (PW3)

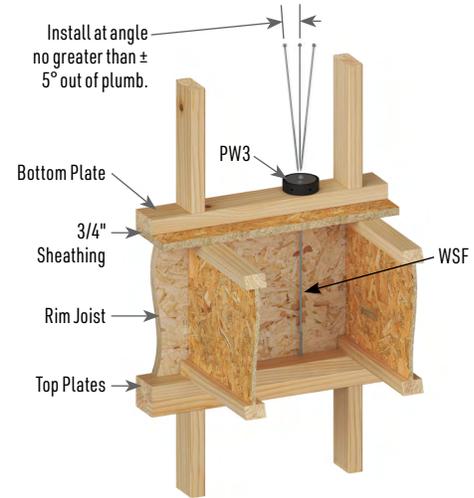
**Finish:** Silver Corrosion Resistant Finish

**Codes and Evaluation:** ESR-2761 (IBC, LABC), FL17231 (FBC) - WSF  
ESR-2190 (IBC, LABC), FL17546 (FBC) - PW3

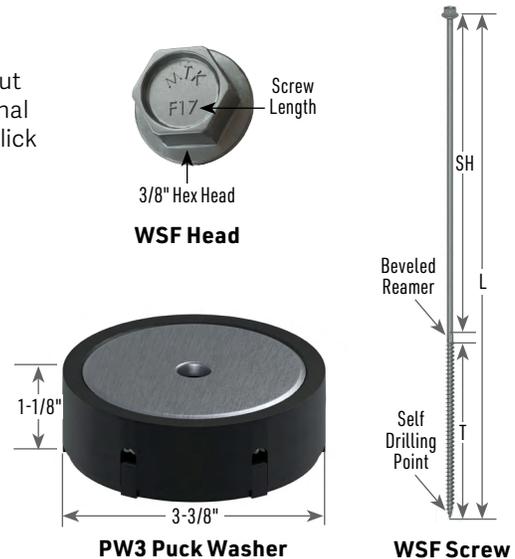
**Patent:** Pending (PW3)

### Installation:

- Place the PW3 Puck Washer on the wall bottom plate. The PW3 Puck Washer should be centered on the plate.
- Insert the screw through the hole in the PW3 Puck Washer and drill into the floor cavity. The WSF screw should be driven in vertically  $\pm 5$  degrees.
- Engage the WSF screw into the double top plate of the wall below. Tighten the WSF screw, compressing the puck washer which releases the internal expansion device. **DO NOT OVERDRIVE.**  
Note: **Minimum 3" thread penetration** into wall top plate required.
- Before installation, the cover of the PW3 Puck Washer is raised about 1/8". Compressing the puck washer triggers the release of the internal expansion device. In a quiet environment, you will hear an audible click when the expansion device releases. Installation is complete.
- For detailed installation instructions, refer to MiTek-US.com.**



**Typical WSF-PW3 Floor-to-Floor Connection System Installation**



### WSF Selection Table

Size (in)	MiTek Stock No.	Dimensions (in)			1-Ply Wall Bottom Plate		2-Ply Wall Bottom Plate	
		L	SH	T	Joist/Truss Depth (in)	Joist/Truss Depth (in)	Joist/Truss Depth (in)	Joist/Truss Depth (in)
1/4 x 17	WSF17	17	10-3/4	6	7-1/4 – 9-1/2	7-1/4		
1/4 x 19	WSF19	19	12-3/4	6	11-1/4 – 11-7/8	9-1/4 – 9-1/2		
1/4 x 21	WSF21	21	14-3/4	6	11-7/8 – 14	11-1/4 – 11-7/8		
1/4 x 25	WSF25	25	18-3/4	6	16 – 18	14 – 16		
1/4 x 29	WSF29	29	22-3/4	6	20 – 22	18 – 20		
1/4 x 33	WSF33	33	26-3/4	6	24 – 26	22 – 24		

### Specification Table

MiTek Product <sup>3</sup>	Allowable Tension Load (Lbs.) <sup>1</sup>		Seating Increment $\Delta_R$ (in)	Applied Load (Lbs.)	Deflection At Applied Load (in) <sup>2</sup>
	$0.42 \leq SG < 0.5$	$SG \geq 0.5$			
WSF-PW3	1195	1365	0.0351	600	0.0666
				800	0.0723
				1000	0.0781
				1200	0.0817
				1400	0.0849

- 1) Allowable load of the WSF-PW3 assembly is the lesser of the PW3 maximum allowable load and the adjusted allowable withdrawal load of the WSF screw.
- 2) Deflection at applied load is the total movement of the device and includes the seating increment  $\Delta_R$ . Interpolation of the deflection for applied loads between those listed is permitted. The tabulated deflections do not include movement attributed to the withdrawal and elongation of the WSF screw.
- 3) The WSF and PW3 components must be purchased separately.

Phone: 1-800-328-5934 | Fax: 1-952-898-8605 | Email: [customerservice@mii.com](mailto:customerservice@mii.com) | [MiTek-US.com](http://MiTek-US.com)

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