

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

 $\textbf{Codes and Evaluation:} \ \ \text{ESR-2761 (IBC, LABC), FL17231 (FBC) - WSF}$

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 ± 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.

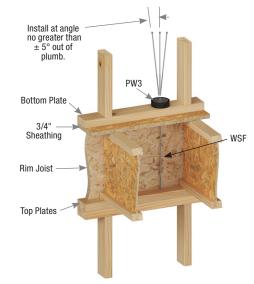
WSF Selection Table

		Dimensions (in)		in)	1-Ply	2-Ply	
					Wall Bottom Plate	Wall Bottom Plate	
Size (in)	MiTek Stock No.	L	SH	Т	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

	Allowable Tension	on Load (Lbs.) ¹	Seating	Applied	Deflection
MiTek Product ³	0.42 ≤ SG < 0.5	SG ≥ 0.5	Increment Δ_{R} (in)	Load (Lbs.)	At Applied Load (in) ²
				600	0.0666
				800	0.0723
WSF-PW3	1195	1365	0.0351	1000	0.0781
				1200	0.0817
				1400	0.0849

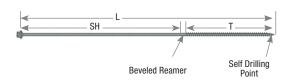
- Allowable load of the WSF-PW3 assembly is the lesser of the PW3 maximum allowable load and the adjusted allowable withdrawal load of the WSF screw.
- 2) Deflection at applied load is the total movement of the device and includes the seating increment \(\Delta_R \). Interpolation of the deflection for 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.



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



WSF Head



WSF Floor-to-Floor Screw



PW3 Puck Washer