

Foundation Wall Anchor

FWAN-TZ

FWAN-TZ Foundation Wall Anchor is designed to transfer in-plane and out-of-plane foundation wall loads imposed by soil through the joist/blocking into the floor diaphragm. The unique design allows for installations that straddle the joist/blocking eliminating bending stresses in the rim board that result from offset installations.

The FWAN-TZ offers two methods of installation:

1. Centered Installation

- Compatible with joist/blocking up to 3-1/2" wide
- Highest load capacities for transfer of out-of-plane loads into floor framing
- Rim board splices allowed anywhere along the wall

2. Offset Installation

- Installs in the space between the joists/blocking
- Out-of-plane loads are transferred thru the rim board into the floor framing
- Offsets up to 4"

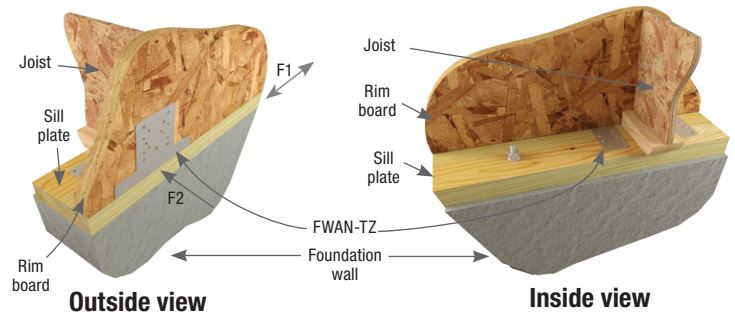
Features:

- Optional nailing when using 2x6 or larger sill plate for increased load carrying capacity
- Typical installation that straddles the joist/blocking allows for rim board splices anywhere along the wall

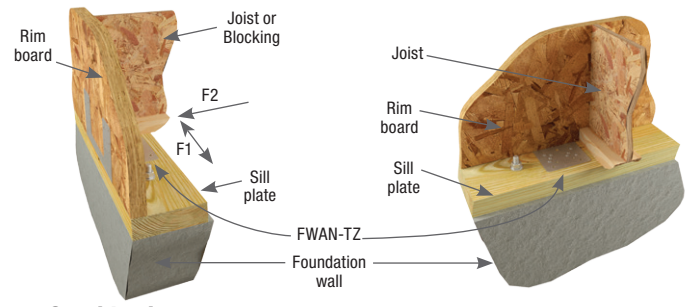
Materials: 16 gauge
Finish: G-185 galvanizing
Codes: ICC-ES ESR-3455, FL 17244, COLA RR 25745

Installation:

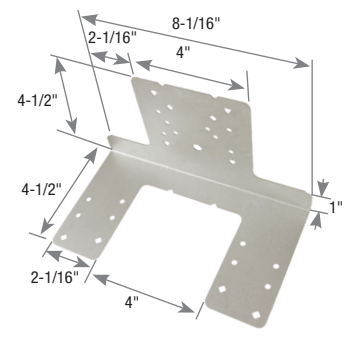
- **Centered Installation** - Fill only triangle holes when nailing to the rim board.
- **Offset Installation** - Fill only diamond holes when nailing to the rim board.
- FWAN-TZ must be installed tight to the outside face of the rim board.
- Minimum sill plate thickness is 1-1/2".
- Offset Installations require that the FWAN-TZ be installed within 4" of the joist/blocking.
- For Offset Installations, install with two narrow tabs against rim board. Splices in the rim board are not permitted in the space between the joist/blocking where the FWAN-TZ is installed.
- The designer must specify the anchor bolt size, spacing and embedment necessary to transfer the foundation loads into the sill plate. Stresses in the sill plate must be considered when determining the maximum spacing of the anchor bolts.



Centered Installation
Typical FWAN-TZ centered on joist/blocking



Offset Installation
Typical FWAN-TZ offset max 4" from joist/blocking



FWAN-TZ

USP Stock No.	Ref. No.	Sill Plate	Fastener Schedule ⁶				Rim Board Material	DF/SP Allowable Load (Lbs.) ^{1,2}						Hem-Fir Allowable Load (Lbs.) ^{1,2}						
			Sill Plate		Rim Board			F1 ^{3,4}			F2 ^{3,4}			F1 ^{3,4}			F2 ^{3,4}			
			Qty	Type	Qty	Type		90%	100%	160%	90%	100%	160%	90%	100%	160%	90%	100%	160%	
FWAN-TZ	FWANZ	Centered on Joist/Blocking																		
		2x4, 2-2x4, 3x4, 4x4	8	10d x 1-1/2	4	10d x 1-1/2	1-1/8" OSB	455	465	465	915	1000	1200	410	410	410	800	870	1055	
		2x4, 2-2x4, 3x4, 4x4	8	10d x 1-1/2	4	10d x 1-1/2	2x Rim	455	500	585	915	1000	1480	455	500	515	800	870	1300	
		2x4, 2-2x4, 3x4, 4x4	8	10d x 1-1/2	4	10d x 1-1/2	1-3/4" LVL	455	500	585	915	1000	1480	455	500	515	800	870	1300	
		2x6, 2-2x6, 3x6, 4x6	12	10d x 1-1/2	4	10d x 1-1/2	1-1/8" OSB	455	465	465	1370	1500	1610	410	410	410	1200	1310	1415	
		2x6, 2-2x6, 3x6, 4x6	12	10d x 1-1/2	4	10d x 1-1/2	2x Rim	455	500	585	1370	1500	1825	455	500	515	1200	1310	1605	
		2x6, 2-2x6, 3x6, 4x6	12	10d x 1-1/2	4	10d x 1-1/2	1-3/4" LVL	455	500	585	1370	1500	1825	455	500	515	1200	1310	1605	
		Offset from Joist Blocking (Max Offset 4")																		
		2x4, 2-2x4, 3x4, 4x4	8	10d x 1-1/2	4	10d x 1-1/2	1-1/8" OSB	455	460	460	560	560	560	410	410	410	500	500	500	
		2x4, 2-2x4, 3x4, 4x4	8	10d x 1-1/2	4	10d x 1-1/2	2x Rim	455	500	580	915	1000	1090	455	500	515	800	870	965	
		2x4, 2-2x4, 3x4, 4x4	8	10d x 1-1/2	4	10d x 1-1/2	1-3/4" LVL	455	500	580	915	1000	1090	455	500	515	800	870	965	
		2x6, 2-2x6, 3x6, 4x6	12	10d x 1-1/2	4	10d x 1-1/2	1-1/8" OSB	455	460	460	560	560	560	410	410	410	500	500	500	
2x6, 2-2x6, 3x6, 4x6	12	10d x 1-1/2	4	10d x 1-1/2	2x Rim	455	500	580	1090	1090	1090	455	500	515	965	965	965			
2x6, 2-2x6, 3x6, 4x6	12	10d x 1-1/2	4	10d x 1-1/2	1-3/4" LVL	455	500	580	1090	1090	1090	455	500	515	965	965	965			

1) Allowable loads have been reduced 10% for permanent sustained loads, no further reduction is required.
2) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
3) F1 loads are parallel to the sill plate.
4) F2 loads are perpendicular to the sill plate.
5) The designer must specify the type, size and spacing of fasteners connecting the sill plate to the foundation wall.
6) **NAILS:** 10d x 1-1/2" nails are 0.148" dia. x 1-1/2" long.