MiTek® Z4 Tie-Down Systems

MiTek® Z4 Tie-Down Systems utilize CNX-Series Cinch Nuts to compensate for wood shrinkage and building settlement that cause connections to loosen over time. The Cinch Nut uses a self-ratcheting action that permits the cinch nut to move (the rod doesn’t move) or “travel” perpetually in one direction only down the rod. Available for installation with threaded rods that are 3/8” through 1-1/2” diameter in 1/8” increments, the CNX Cinch Nut has been code evaluated and published in ESR-2190.

1. Place the specified Bearing Plate Washer onto the bottom plate of a wood framed wall.
2. With the “wings” oriented downward, place Cinch Nut over the Z-Rod extending from below and push down until it seats firmly on the Bearing Plate Washer.
3. Install 1/4” diameter MiTek® Pro-Series™ Screws through the wings, penetrating 1-1/2” (minimum) into the wood bottom plate.
4. Model numbers BPW5 and BPW6 fit in-between the screws fastening the wings.
5. Model numbers BPW7 (3-1/4 x 4-3/8) and larger are provided with two screw holes. Align the wing and the Bearing Plate Washer screw holes to allow installation of 1/4” diameter MiTek® Pro-Series™ Screws.

MiTek® Z4 Tie-Down System for Lateral Load

To resist tension loads due to overturning moments in multi-story buildings the CNX Cinch Nut is installed over a Bearing Plate Washer at each level in a fast and easy application. At the upper-most level a Cinch Nut is installed over a Bearing Plate Washer above the top plates. At walls below that bear on wood floor systems, the Cinch Nut and Bearing Plate Washer are installed over the bottom plate. Tension loads are gathered at each level and transferred into the foundation through a continuous system of Cinch Nuts, Bearing Plate Washers, Z-Rods/ATRs and Couplers all are available lines of MiTek®, USA.

MiTek® Z4 Tie-Down System for Wind Uplift

For resisting roof uplift loads resulting from wind the Z4 Cinch Nut is installed over a Bearing Plate Washer above the top plates with roof framing above to create a tie-down system. Uplift forces are transferred into a continuous system of Z-Rods/ATRs and Couplers that form a load path to the foundation.

BPW5, BPW6 Installation

BPW7 and larger Installation