Titen HD® Rod Coupler

The Titen HD rod coupler is designed to be used in conjunction with a single or multi-story rod tie-down system. This anchor provides a fast and simple way to attach threaded rod to a concrete stem wall or thickened slab footing. Unlike adhesive anchors, the installation requires no special tools, cure time or secondary setting process; just drill a hole and drive the anchor.

Features

- The serrated cutting teeth and patented thread design enable the Titen HD rod voupler to be installed quickly and easily. Less installation time translates to lower installed cost
- The specialized heat treating process creates tip hardness to facilitate cutting while the body remain ductile
- No special setting tools are required. The Titen HD rod coupler installs with regular or hammer drill, ANSI size bits and standard sockets
- Compatible with threaded rods in ⅜" and ½" diameters

Material: Carbon steel

Coating: Zinc plated

Installation

Caution: Oversized holes in the base material will reduce or eliminate the mechanical interlock of the threads with base material and will reduce the anchor's load capacity. Use a Titen HD Rod Coupler one time only. Installing the anchor multiple times may result in excessive thread wear and reduce load capacity.

1. Drill a hole using the specified diameter carbide bit into the base material to a depth of at least ½" deeper than the required embedment.
2. Blow the hole clean of dust and debris using compressed air. Overhead application need not be blown clean.
3. Tighten the anchor with appropriate size socket until the head sits flush against base material.

Titen HD Rod Coupler
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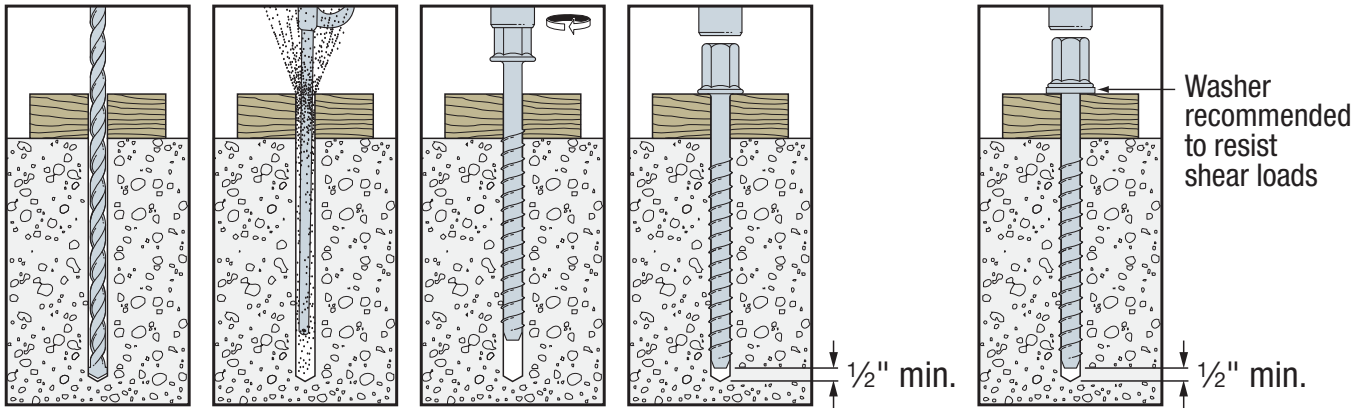
Installation Sequence



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Titen HD Rod Coupler Product Data

Size (in)	Model No.	Accepts Rod Diameter (in.)	Drill Bit Diameter (in)	Wrench Size (in)	Quantity	
					Box	Carton
⅜ x 6¾	THD37634RC	⅜	⅜	9⁄16	50	100
½ x 9¾	THD50934RC	½	½	¾	20	40

Titen HD Rod Coupler Allowable Tension Loads in Normal-Weight Concrete Stemwall

Size in. (mm)	Drill Bit Diameter in.	Embed. Depth in. (mm)	Stemwall Width in. (mm)	Minimum Edge Distance in. (mm)	Minimum End Distance in. (mm)	Minimum Spacing Distance in. (mm)	Tension Load Based on Concrete Strength		Tension Load Based on Connected Rod Strength
							$f'_c \geq$ 2,500 psi (17.2 MPa) Concrete		A307 (SAE 1018)
							Ultimate lb. (kN)	Allowable lb. (kN)	Allowable lb. (kN)
⅜ (9.5)	⅜	5 (127)	8 (203)	1¾ (45)	10 (254)	20 (508)	8,900 (39.6)	2,225 (9.9)	2,105 (9.4)
½ (12.7)	½	8 (203)	8 (203)	1¾ (45)	16 (406)	32 (813)	15,540 (69.1)	3,885 (17.3)	3,750 (16.7)

1. Allowable load must be the lesser of the concrete or steel strength.
2. The allowable loads based on concrete strength are based on a factor of safety of 4.0.
3. The allowable load based on steel strength is limited by the strength of the coupler nut supplied with this anchor. Use of higher-strength rod will not increase allowable loads.
4. The minimum concrete thickness is 1.5 times the embedment depth.
5. Tension and shear loads may be combined using the straight-line interaction equation (n = 1).

Titen HD Rod Coupler Allowable Shear Loads in Normal-Weight Concrete Stemwall, Load Applied Parallel to Concrete Edge

Size in. (mm)	Drill Bit Diameter in.	Embed. Depth in. (mm)	Stemwall Width in. (mm)	Minimum Edge Distance in. (mm)	Minimum End Distance in. (mm)	Minimum Spacing Distance in. (mm)	Shear Load Based on Concrete Edge Distance	
							$f'_c \geq$ 2,500 psi (17.2 MPa) Concrete	
							Ultimate lb. (kN)	Allowable lb. (kN)
½ (12.7)	½	8 (203)	8 (203)	1¾ (45)	16 (406)	32 (813)	6,200 (27.6)	1,550 (6.9)

1. Install with a washer (not supplied with anchor) when used to resist shear loads.
2. The allowable load based on concrete edge distance is based on a factor of safety of 4.0. Steel strength does not control.
3. The minimum concrete thickness is 1.5 times the embedment depth.
4. Tension and shear loads may be combined using the straight-line interaction equation (n = 1).

* See p. 13 for an explanation of the load table icons.