

# TITEN HD® ROD HANGER *Masonry Threaded Rod Anchors*



The Titen HD® Rod Hanger is a high-strength screw anchor that provides a fast and convenient way to suspend threaded rod from concrete slabs and beams. The anchor's high load capacity and ease of installation make it ideal for hanging pipes, equipment and fixtures in overhead applications. Unlike traditional drop-in anchors, installation requires no special tool or secondary setting process; just drill a hole and drive the anchor. The serrated cutting teeth and patented thread design enable the Titen HD Rod Hanger to be installed quickly and with significantly less effort when compared to other screw type anchors.

### FEATURES:

- Compatible with 1/4", 3/8" and 1/2" diameter threaded rod
- High load capacity as a result of the full length threads that undercut the concrete and effectively transfer load into the base material
- Specialized heat treating process creates high hardness at the tip to facilitate cutting while the body remains ductile
- No special installation tools required. Holes can be drilled with a rotary hammer or hammer drill with ANSI size bit. Anchors are installed with standard size sockets.
- Less installation time translates to lower installed cost
- 1/2" size was designed for optimum performance in cracked and uncracked concrete, an IBC 2006 requirement.

**MATERIAL:** Carbon steel, heat treated

**FINISH:** 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 Hanger one time only. Installing the anchor multiple times may result in excessive thread wear and reduce load capacity

- Drill a hole using the specified diameter carbide bit into the base material to a depth of at least 1/2" deeper than the required embedment.
- Blow the hole clean of dust and debris using compressed air.
- **IMPORTANT:** Install with an applied torque of 15 ft-lbs for the 1/4" and 3/8" size Titen HD rod hangers using a torque wrench, driver drill, hammer drill or cordless 1/4" impact driver with a maximum permitted torque rating of 100 ft-lb.

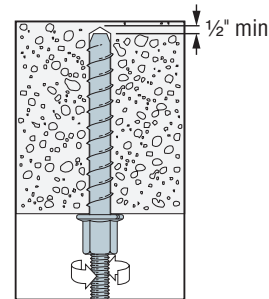
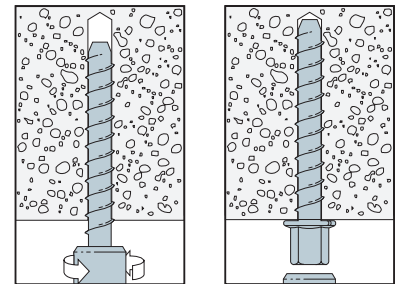
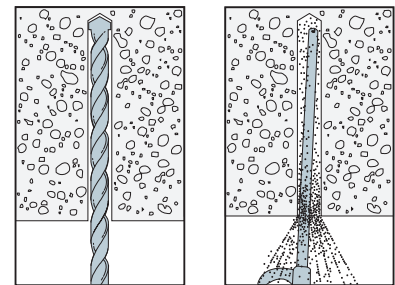
**CODES:** Factory Mutual 3031136 (THD37218RH and THD50234RH); ICC-ES pending (THD50234RH)

**⚠** The load tables list values based upon results from the most recent testing and may not reflect those in current code reports. Where code jurisdictions apply, consult the current reports for applicable load values.



U.S. Patent  
5,674,035 &  
6,623,228

### Installation Sequence



Mechanical Anchors

### Titen HD® Rod Hanger Product Data

Size	Model No.	Accepts Rod Dia. (in)	Drill Bit Dia. (in)	Wrench Size (in)	Min. Embed.	Quantity	
						Box	Ctn
1/4" x 1 1/2"	THD25112RH	1/4"	1/4"	3/8"	1 1/2"	100	500
3/8" x 2 1/8"	THD37218RH	3/8"	1/4"	1/2"	2 1/8"	50	250
1/2" x 2 3/4"	THD50234RH	1/2"	3/8"	1 1/16"	2 3/4"	50	100

### Tension Loads in Normal-Weight Concrete



Size in. (mm)	Drill Bit Dia. in.	Embed. Depth in. (mm)	Min. Spacing in. (mm)	Min. Edge Dist. in. (mm)	Tension Load			
					f'c ≥ 2000 psi Concrete		f'c ≥ 4000 psi Concrete	
					Ultimate lbs. (kN)	Allowable lbs. (kN)	Ultimate lbs. (kN)	Allowable lbs. (kN)
1/4 (6.4)	1/4	1 1/2 (38)	4 (102)	2 (51)	1,319 (5.9)	330 (1.5)	2,102 (9.4)	525 (2.3)
3/8 (9.5)	1/4	2 1/8 (54)	4 (102)	2 (51)	2,210 (9.8)	555 (2.5)	3,227 (14.4)	805 (3.6)
1/2 <sup>1</sup> (12.7)	3/8	2 3/4 (70)	8 (203)	4 (102)	4,297 (19.1)	1,075 (4.8)	6,204 (27.6)	1,550 (6.9)

\*See page 10 for an explanation of the load table icons

1. The allowable loads are based on a safety factor of 4.0.
2. The minimum concrete thickness is 1 1/2 times the embedment depth.
3. Mechanical and plumbing design codes may prescribe lower allowable loads. Verify with local codes.
4. For performance values in accordance with USD in both cracked and uncracked concrete, see pages 121–122.