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Submitted By:

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Products

Anchoring Systems

Titen HD® Heavy-Duty Screw Anchor

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Notes



Anchoring Systems

Titen HD® Heavy-Duty Screw Anchor 3

 Product Overview 3

Titen HD® Heavy-Duty Screw Anchor



A high-strength screw anchor for use in cracked and uncracked concrete, as well as uncracked masonry. The Titen HD offers low installation torque and outstanding performance. The Titen HD screw anchor is designed for a wide variety of applications such as sill plates, ledgers, post bases, seating, and other holdown applications. The screw anchor is easy to remove when used in temporary applications such as bracing and formwork, or when a fixture needs to be relocated.

The stainless-steel Titen HD is the optimal choice for applications in corrosive or extreme environments such as salt water, or when chemical or corrosive solutions are present. See Stainless-Steel Titen HD for more information.

Key Features

- Tested in accordance with ACI 355.2, AC193 and AC106
- Qualified for static, wind and seismic loading conditions
- Thread design undercuts to efficiently transfer the load to the base material
- Standard fractional sizes
- Specialized heat-treating process creates tip hardness for better cutting without compromising the ductility
- No special drill bit required — designed to install using standard-sized ANSI tolerance drill bits
- Hex-washer head requires no separate washer, unless required by code, and provides a clean installed appearance
- Removable — ideal for temporary anchoring (e.g., formwork, bracing) or applications where fixtures may need to be moved
- Use in dry interior environments only

Material

- Carbon steel

Finish

- Zinc plated
- Not recommended for permanent exterior use or highly corrosive environments

Installation

1. Drill a hole in the base material using a carbide drill bit the same diameter as the nominal diameter of the anchor to be installed. Drill the hole to the specified embedment depth plus minimum hole depth overdrill (see table below) to allow the thread tapping dust to settle, and blow it clean using compressed air. (Overhead installations need not be blown clean.) Alternatively, drill the hole deep enough to accommodate embedment depth and the dust from drilling and tapping.
2. Insert the anchor through the fixture and into the hole.
3. Tighten the anchor into the base material until the hex-washer head contacts the fixture.

Titen HD Diameter (in.)	Wrench Size (in.)	Recommended Fixture Hole Size (in.)	Min. Hole Depth Overdrill (in.)
1/4	3/8	3/8 to 7/16	1/8
3/8	9/16	1/2 to 9/16	1/4

Suggested fixture hole sizes are for structural steel thicker than 12 gauge only. Larger holes are not required for wood or thinner cold-formed steel members.

Product Submittal

Titen HD® Heavy-Duty Screw Anchor (Continued)



Titen HD Diameter (in.)	Wrench Size (in.)	Recommended Fixture Hole Size (in.)	Min. Hole Depth Overdrill (in.)
1/2	3/4	5/8 to 11/16	1/2
5/8	15/16	3/4 to 13/16	1/2
3/4	1 1/8	7/8 to 15/16	1/2
Suggested fixture hole sizes are for structural steel thicker than 12 gauge only. Larger holes are not required for wood or thinner cold-formed steel members.			

Disclaimer

Some specific models of this product might not be covered in the associated code reports. Please verify coverage for the models you wish to use

Product Submittal

Titen HD® Heavy-Duty Screw Anchor (Continued)

SIMPSON

Strong-Tie

Product Information Table

Model No.	Coating/Material	Size (in.)	Drill Bit Dia. (in.)	Wrench Size (in.)	Recommended Fixture Hole Size (in.)	Box Qty.	Carton Qty.
THD37134H	Zinc Plated / Carbon Steel	3/8 x 1 3/4	3/8	9/16	1/2 to 9/16	50	250
THD37212H	Zinc Plated / Carbon Steel	3/8 x 2 1/2	3/8	9/16	1/2 to 9/16	50	200
THD37300H	Zinc Plated / Carbon Steel	3/8 x 3	3/8	9/16	1/2 to 9/16	50	200
THD37400H	Zinc Plated / Carbon Steel	3/8 x 4	3/8	9/16	1/2 to 9/16	50	200
THD37500H	Zinc Plated / Carbon Steel	3/8 x 5	3/8	9/16	1/2 to 9/16	50	100
THD37600H	Zinc Plated / Carbon Steel	3/8 x 6	3/8	9/16	1/2 to 9/16	50	100
THD501200H	Zinc Plated / Carbon Steel	1/2 x 12	1/2	3/4	5/8 to 11/16	5	20
THD501300H	Zinc Plated / Carbon Steel	1/2 x 13	1/2	3/4	5/8 to 11/16	5	20
THD501400H	Zinc Plated / Carbon Steel	1/2 x 14	1/2	3/4	5/8 to 11/16	5	20
THD501500H	Zinc Plated / Carbon Steel	1/2 x 15	1/2	3/4	5/8 to 11/16	5	20
THD50300H	Zinc Plated / Carbon Steel	1/2 x 3	1/2	3/4	5/8 to 11/16	25	100
THD50400H	Zinc Plated / Carbon Steel	1/2 x 4	1/2	3/4	5/8 to 11/16	20	80
THD50500H	Zinc Plated / Carbon Steel	1/2 x 5	1/2	3/4	5/8 to 11/16	20	80
THD50600H	Zinc Plated / Carbon Steel	1/2 x 6	1/2	3/4	5/8 to 11/16	20	80
THD50612H	Zinc Plated / Carbon Steel	1/2 x 6 1/2	1/2	3/4	5/8 to 11/16	20	40
THD50800H	Zinc Plated / Carbon Steel	1/2 x 8	1/2	3/4	5/8 to 11/16	20	40
THD75100H	Zinc Plated / Carbon Steel	3/4 x 10	3/4	1 1/8	7/8 to 15/16	5	10
THD75400H	Zinc Plated / Carbon Steel	3/4 x 4	3/4	1 1/8	7/8 to 15/16	10	40
THD75500H	Zinc Plated / Carbon Steel	3/4 x 5	3/4	1 1/8	7/8 to 15/16	5	20
THD75700H	Zinc Plated / Carbon Steel	3/4 x 7	3/4	1 1/8	7/8 to 15/16	5	10
THD75812H	Zinc Plated / Carbon Steel	3/4 x 8 1/2	3/4	1 1/8	7/8 to 15/16	5	10
THDB25178H	Zinc Plated / Carbon Steel	1/4 x 1 7/8	1/4	3/8	3/8 to 7/16	100	500
THDB25234H	Zinc Plated / Carbon Steel	1/4 x 2 3/4	1/4	3/8	3/8 to 7/16	50	250
THDB25300H	Zinc Plated / Carbon Steel	1/4 x 3	1/4	3/8	3/8 to 7/16	50	250

Product Submittal

Titen HD® Heavy-Duty Screw Anchor (Continued)

SIMPSON

Strong-Tie

Model No.	Coating/Material	Size (in.)	Drill Bit Dia. (in.)	Wrench Size (in.)	Recommended Fixture Hole Size (in.)	Box Qty.	Carton Qty.
THDB25312H	Zinc Plated / Carbon Steel	1/4 x 3 1/2	1/4	3/8	3/8 to 7/16	50	250
THDB25400H	Zinc Plated / Carbon Steel	1/4 x 4	1/4	3/8	3/8 to 7/16	50	250
THDB62100H	Zinc Plated / Carbon Steel	5/8 x 10	5/8	15/16	3/4 to 13/16	10	20
THDB62400H	Zinc Plated / Carbon Steel	5/8 x 4	5/8	15/16	3/4 to 13/16	10	40
THDB62500H	Zinc Plated / Carbon Steel	5/8 x 5	5/8	15/16	3/4 to 13/16	10	40
THDB62600H	Zinc Plated / Carbon Steel	5/8 x 6	5/8	15/16	3/4 to 13/16	10	40
THDB62612H	Zinc Plated / Carbon Steel	5/8 x 6 1/2	5/8	15/16	3/4 to 13/16	10	40
THDB62800H	Zinc Plated / Carbon Steel	5/8 x 8	5/8	15/16	3/4 to 13/16	10	20
THDT75600H	Zinc Plated / Carbon Steel	3/4 x 6	3/4	1 1/8	7/8 to 15/16	5	20
<p>1. Models THD37134H and THD37212H do not meet minimum embedment depth requirements for strength design and require maximum installation torque of 25 ft. – lb. using a torque wrench, driver drill or cordless 1/4" impact driver with a maximum permitted torque rating of 100 ft. – lb.</p> <p>2. Length of anchor is measured from underside of head to end of anchor.</p>							