

TECHNICAL DATA SHEET

DESCRIPTION

The Dayton Superior Single-Use Bearcat Bolt is a high strength drill-in screw anchor. This anchor utilizes a pre-drilled hole and self-taps into the concrete, creating a mechanical connection between the concrete and the anchor threads. This screw anchor, unlike other competitor screw anchors, was designed specifically for use in tilt-up construction applications. The high strength carbon steel allows for quick and easy installation. This one-time-use bolt is available in a blue electro galvanized zinc finish to prevent rust and corrosion.

APPLICATION

The primary use of the Single-Use Bearcat Bolt is for anchoring tilt-up wall braces to floor slabs during panel erection. Additional uses include lift brackets/plates as well as permanent or temporary fixation of racking, rails, guards, etc. Reuse of this bolt is not recommended or supported.



FEATURES

- High capacity to maximize brace system
- 5" and 7" bolt lengths
- Compatible with 3/4" drilled holes
- Integrated cut-washer for anti-rotation

BENEFITS

- Quick and clear installation
- Works in a wide variety of applications
- Better bite into concrete
- No spinning or slipping in hole
- One-time-use eliminates the need to restock used bolts

TECHNICAL DATA

Bearcat Bolt Setting Detail	5" Bearcat Bolt	7" Bearcat Bolt
Maximum Mounting Plate Thickness ¹	1"	
Minimum Mounting Plate Hole Diameter	15/16"	
Total Shank Length	5.25	7.25"
Nominal Full Embedment ¹	4.25"	6.25"
Minimum Edge Distance	10"	15"
Over-drill Depth ²	0.50"	
Nominal Drill Bit Diameter	3/4"	
Socket/Hex-head Size	1-1/8"	
Setting Torque ³	200 ft-lbs.	

¹Ultimate capacities were obtained using a 1" plate thickness. Thicker plates will reduce the capacity.

²Over-drill depth is assuming full anchor embedment in the panel. With panels thinner than the nominal full embedment, the anchor will protrude through the back of the panel. Reference the loading chart for thin panel capacities.

³Over torquing can damage the anchor and/or reduce the capacities.

TECHNICAL DATA

Ultimate In-Concrete Single-Use Capacity ^{1,2,3}							
Screw Anchor Size	Concrete Thickness	Minimum Concrete Compressive Strength (psi)					
		2,500		4,000		6,000	
		Tension ⁴ (lbs.)	Shear ⁵ (lbs.)	Tension ⁴ (lbs.)	Shear ⁵ (lbs.)	Tension ⁴ (lbs.)	Shear ⁵ (lbs.)
5" Bearcat Bolt	4"	8,317	7,327	10,520	9,268	12,884	11,351
	5"	10,376	10,872	13,125	13,752	16,074	16,843
	6"	12,012	11,909	15,194	15,064	18,609	18,449
	7"	12,012	12,863	15,194	16,271	18,609	19,927
	8"	12,012	13,752	15,194	17,395	18,609	21,305
	9"	12,012	14,586	15,194	18,450	18,609	22,597
	10"	12,012	15,375	15,194	19,448	18,609	23,819
7" Bearcat Bolt	6"	13,298	16,621	16,821	21,024	20,601	25,749
	7"	18,363	20,414	23,228	25,822	28,448	31,625
	8"	20,374	21,823	25,772	27,604	31,564	33,808
	9"	20,374	23,147	25,772	29,279	31,564	35,859
	10"	20,374	24,399	25,772	30,863	31,564	37,799
	11"	20,374	25,590	25,772	32,369	31,564	39,644
	12"	20,374	26,728	25,772	33,809	31,564	41,407

¹A safety factor of 2:1 should be applied to ultimate capacities for the tilt-up industry standard SWL.

²Linear interpolation of embedment depths and concrete strengths are not permitted.

³Ultimate capacities were obtained using a 1" mounting plate thickness.

⁴Tension testing was conducted in 4900 psi concrete.

⁵Shear values were obtained through ACI 318-14 Chapter 17 calculations and validated with in-concrete testing

TECHNICAL DATA SHEET**INSTALLATION**

1. Drill a 3/4" hole per the setting chart. These screw anchors can work in bottomless holes when it is necessary to drill through the thickness of the concrete. Caution must be taken when drilling through slabs to minimize blowout at the bottom of the hole. Blowout of the concrete at the back of the slab can reduce the SWL of the anchor.
2. Thoroughly clean the drilled hole with compressed air or suction to rid the hole of debris.
3. Insert the Bearcat Bolt through the foot plate of the brace (or plate of the object to be anchored) and guide the tip of the bolt into the pre-drilled hole. Drive the anchor down until the integrated washer contacts the base plate.
4. Torque to 200 ft. lbs. to complete the install and ensure a secure connection. The base plate should be firmly in place. Be sure not to over-torque the bolt during installation once contact with the base plate is made, excessive torque could damage the threads cut into the concrete.

To Remove: Simply back the Single-Use Bearcat Bolt out with a wrench or impact drive.

ORDERING INFORMATION**BEARCAT™ BOLT - SINGLE-USE**

Product Code	Description	Weight
101165	5" SINGLE-USE BEARCAT BOLT	0.91 LB
101166	7" SINGLE- USE BEARCAT BOLT	1.14 LB

MANUFACTURER

Dayton Superior Corporation
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Miamisburg, OH 45342
Customer Service: 888-977-9600
Technical Services: 877-266-7732
Website: www.daytonsuperior.com

WARRANTY (ACCESSORIES)

Limited Warranty. Dayton warrants, for a period of 60 days from the date of shipment (three years from the date of shipment in the case of formwork, excluding any consumable Products included with such formwork), that Products and any associated application drawings and engineering services provided by Dayton ("Ancillary Services") will be free from defects in material and workmanship and, in the case of custom designed formwork, that the formwork will meet the specifications set forth in the design drawings approved by Dayton and Customer. Any claim under this warranty must be made in writing within such warranty period. If any Product and/or Ancillary Service covered by a timely claim are found to be defective, Dayton will, within a reasonable time, make any necessary repairs or corrections or, at Dayton's option, replace the Product. Unless pre-authorized by Dayton in writing, Dayton will not accept any charges for correcting defects or accept the return of any Product. This warranty will not apply to any Products that have been subjected to misuse, neglect, storage damage, misapplication, accident or any other damage caused by any person other than Dayton, or that have not been maintained in accordance with Dayton's specifications. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES AS TO THE PRODUCTS AND ANCILLARY SERVICES. DAYTON MAKES NO OTHER WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. THE REMEDIES SET FORTH IN THIS SECTION ARE CUSTOMER'S EXCLUSIVE REMEDY FOR BREACH OF WARRANTY.