

# BEARCAT™ BOLT

## DESCRIPTION

The Bearcat™ Bolt Multi-Use is a high strength, reusable 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.

## FEATURES & BENEFITS

- Reusable up to 20 times\*
- High capacity to maximize brace system
- 5" and 7" bolt lengths
- Compatible with 3/4" drilled holes
- Quick and clear installation
- Integrated cut-washer for anti-rotation

*\*With use of wear gauge*



## APPLICATION

- Designed specifically for use in 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.
- Better bite into concrete, no spinning or slipping in the hole
- Galvanized coating keeps the anchor from corroding between and during uses

## TECHNICAL DATA

Ultimate Capacity Reuse Chart <sup>1,2,3,4</sup>							
Screw Anchor Size	Concrete Thickness	Minimum Concrete Compressive Strength (psi)					
		2,500		4,000		6,000	
		Tension <sup>5</sup> (lbs.)	Shear <sup>6</sup> (lbs.)	Tension <sup>5</sup> (lbs.)	Shear <sup>6</sup> (lbs.)	Tension <sup>5</sup> (lbs.)	Shear <sup>6</sup> (lbs.)
5" Bearcat Bolt	3"	3,540	7,855	4,475	9,935	5,480	12,165
	4"	5,440	9,605	6,885	12,150	8,430	14,880
	5"	6,310	10,870	7,980	13,750	9,770	16,840
	6" and up	7,640	11,910	9,670	15,065	11,440	18,450
7" Bearcat Bolt	5"	8,890	16,845	11,245	21,310	13,775	26,100
	6"	11,035	18,900	13,955	23,905	17,095	27,000
	7"	13,655	20,410	17,270	25,820	21,155	27,000
	8" and up	15,540	21,820	19,660	27,000	23,260	27,000

1-A safety factor of 2:1 should be applied to ultimate capacities for the tilt-up industry standard SWL. 2-Linear interpolation of embedment depths and concrete strengths are not permitted. 3-Capacities were obtained through testing of anchors that passed the diameter requirements of the reusability gauge. 4-Ultimate capacities were obtained using a 1" mounting plate thickness. 5-Tension testing was conducted in 4000 and 6000 psi concrete. 6-Shear values were obtained through ACI 318-14 Chapter 17 calculations and validated with in-concrete testing. Maximum ultimate shear may not exceed 27,000 and 19,000 lbs. for the 7" and 5" anchors respectively.



Safe Working Load at Brace Angle <sup>1,2</sup>					
Screw Anchor Size	Slab Thickness	Minimum Concrete Compressive Strength (psi)			
		2,500	3,000	3,500	4,000
5" Bearcat Bolt	5"	5,072 lbs	5,556 lbs	6,001 lbs	6,420 lbs
	6" and up	6,012 lbs	6,585 lbs	7,112 lbs	7,605 lbs
7" Bearcat Bolt	7"	9,052 lbs	9,912 lbs	10,706 lbs	11,453 lbs
	8" and up	10,062 lbs	11,018 lbs	11,900 lbs	12,728 lbs

<sup>1</sup>Safe Working Load based on industry standard safety factor of 2 to 1.

<sup>2</sup>Load applied to the anchor at a brace angle of 53 degrees.

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

1-Ultimate capacities were obtained using a 1" plate thickness. Thicker plates will reduce the capacity. 2-Over-drill depth is assuming full anchor embedment in the concrete. With concrete thinner than the nominal full embedment, the anchor will protrude through the back of the concrete. Reference the loading chart for thin concrete capacities. 3-Over torquing can damage the anchor and/or reduce the capacities.