

technical specifications

WEDGE ANCHORS // LARGE DIAMETER CONCRETE SCREWS

Last updated 6.15.23

Conquest Wedge Anchors // Carbon Steel

Diameter	Minimum Embedment Depth	Tension Load (single section)				Shear Force (single section)			
		(lbs)		(kN)		(lbs)		(kN)	
		Ultimate	Allowable	Ultimate	Allowable	Ultimate	Allowable	Ultimate	Allowable
1/4"	1 1/8"	1,078	270	4.8	1.2	1,558	390	6.9	1.7
	1 3/4"	1,947	487	8.7	2.2				
3/8"	1 5/8"	2,143	536	9.5	2.4	5,781	1,445	25.7	6.4
	2 3/8"	3,051	763	13.6	3.4				
1/2"	2 1/4"	5,106	1,277	22.7	5.7	9,616	2,404	42.7	10.7
	3 3/8"	5,723	1,431	25.4	6.4				
	4 1/2"	7,942	1,986	35.3	8.8				
5/8"	2 3/4"	5,987	1,497	26.6	6.7	13,678	3,420	60.8	15.2
	3 3/8"	6,929	1,732	30.8	7.7				
	5 1/8"	7,800	1,950	34.7	8.7				
3/4"	3 3/8"	11,084	2,771	49.3	12.3	21,549	5,387	95.8	24.0

Allowable values based on 4:1 safety factor. Values represent the shear force of the anchor alone, not installed in concrete. For highly corrosive environments and/or continuous extreme low temperature applications, use stainless steel.

Conquest Wedge Anchors // 304 and 316 Stainless Steel

Diameter	Minimum Embedment Depth	Tension Load (single section)				Shear Force (single section)			
		(lbs)		(kN)		(lbs)		(kN)	
		Ultimate	Allowable	Ultimate	Allowable	Ultimate	Allowable	Ultimate	Allowable
1/4"	1 1/8"	1,452	363	6.5	1.6	2,673	668	11.9	3.0
	1 3/4"	1,904	476	8.5	2.1				
3/8"	1 5/8"	2,466	616	11.0	2.7	4,938	1,235	21.9	5.5
	2 3/8"	3,183	795	14.1	3.5				
1/2"	2 1/4"	4,240	1,060	18.8	4.7	11,039	2,760	49.1	12.3
	3 3/8"	4,264	1,066	19.0	4.7				
	4 1/2"	7,840	1,960	34.8	8.7				
5/8"	2 3/4"	7,139	1,784	31.7	7.9	16,848	4,212	74.9	18.7
	3 3/8"	9,558	2,389	42.5	10.6				
3/4"	3 3/8"	12,337	3,084	54.8	13.7	29,458	7,365	131	32.8

Allowable values based on 4:1 safety factor. Values represent the shear force of the anchor alone, not installed in concrete. For highly corrosive environments and/or continuous extreme low temperature applications, use stainless steel.



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Conquest Wedge Anchors (continued)

HEAD MARKINGS

Head Marking	LENGTH	
	From	Up to, but not including
A	1 1/2"	2"
B	2"	2 1/2"
C	2 1/2"	3"
D	3"	3 1/2"
E	3 1/2"	4"
F	4"	4 1/2"
G	4 1/2"	5"
H	5"	5 1/2"
I	5 1/2"	6"
J	6"	6 1/2"
K	6 1/2"	7"
L	7"	7 1/2"
M	7 1/2"	8"
N	8"	8 1/2"
O	8 1/2"	9"
P	9"	9 1/2"
Q	9 1/2"	10"
R	10"	10 1/2"



WEDGE-ALL ANCHOR INSTALLATION

Wedge-All Diameter	Drill Bit Size (in.)	Min. Fixture Hole (in.)	Wrench Size (in.)
1/4"	1/4"	5/16"	7/16"
3/8"	3/8"	7/16"	9/16"
1/2"	1/2"	9/16"	3/4"
5/8"	5/8"	11/16"	15/16"
3/4"	3/4"	7/8"	1 1/8"
7/8"	7/8"	1"	1 5/16"
1"	1"	1 1/8"	1 1/2"
1 1/4"	1 1/4"	1 3/8"	1 7/8"

Conquest Large Diameter Concrete Screw // Hardened Carbon Steel

Diameter	Minimum Embedment Depth	Tension Load (single section)				Shear Force (single section)			
		(lbs)		(kN)		(lbs)		(kN)	
		Ultimate	Allowable	Ultimate	Allowable	Ultimate	Allowable	Ultimate	Allowable
1/4"	1 5/8"	3,465	866	15.4	3.9	4,871	1,218	21.6	5.4
3/8"	3 1/4"	8,219	2,055	36.5	9.1	13,150	3,288	58.5	14.6
	2"	10,838	2,710	48.2	12.0				
1/2"	3 1/2"	4,365	1,091	19.4	4.9	21,428	5,357	95.3	23.8
	4 1/2"	9,202	2,301	40.9	10.2				
	3 1/2"	15,304	3,826	68.0	17.0				
5/8"	2 3/4"	8,945	2,236	39.8	9.9	30,537	7,634	135.8	34.0

