

Ultimate Load Capacities for 316 Stainless Steel Wedge Anchor in Normal-Weight Concrete^{1,2,3,4,5}

Nominal Anchor Diameter (in.)	Minimum Embedment Depth (in.)	Concrete Compressive Strength			
		4,000 psi		6,000 psi	
		Ultimate Tension Load Capacity (lbs.)	Ultimate Shear Load Capacity (lbs.)	Ultimate Tension Load Capacity (lbs.)	Ultimate Shear Load Capacity (lbs.)
1/4"	1-1/8"	1,107	2,615	1,391	2,615
	1-3/4"	1,233	2,615	1,933	2,615
3/8"	1-5/8"	2,136	5,510	3,158	5,510
	2-3/8"	3,923	5,510	5,565	5,510
1/2"	2-1/4"	3,084	7,116	3,492	7,116
	3-3/4"	4,587	7,116	4,909	7,116
5/8"	2-3/4"	6,054	9,043	7,125	9,043
	4-5/8"	9,155	9,043	12,004	9,043
3/4"	3-3/8"	7,971	15,723	7,397	15,723
	5-5/8"	8,304	15,723	9,703	15,723

1. Ultimate load capacities must be reduced by a minimum factor of safety of 4.0 to determine allowable loads.
2. Consideration of safety factors of 10 or higher may be necessary depending on application, such as life safety or overhead.
3. Tabulated load values are for anchors installed in uncracked concrete.
4. The concrete compressive strength must be at the specified minimum at the time of installation.
5. To determine which grade of stainless steel may be more appropriate for your application, please consult a design professional.

Allowable Load Capacities for 316 Stainless Steel Wedge Anchor in Normal-Weight Concrete^{1,2,3,4,5}

Nominal Anchor Diameter (in.)	Minimum Embedment Depth (in.)	Concrete Compressive Strength			
		4,000 psi		6,000 psi	
		Allowable Tension Load Capacity (lbs.)	Allowable Shear Load Capacity (lbs.)	Allowable Tension Load Capacity (lbs.)	Allowable Shear Load Capacity (lbs.)
1/4"	1-1/8"	277	654	348	654
	1-3/4"	308	654	483	654
3/8"	1-5/8"	534	1,378	790	1,378
	2-3/8"	981	1,378	1,391	1,378
1/2"	2-1/4"	771	1,779	873	1,779
	3-3/4"	1,147	1,779	1,227	1,779
5/8"	2-3/4"	1,514	2,261	1,781	2,261
	4-5/8"	2,289	2,261	3,001	2,261
3/4"	3-3/8"	1,993	3,931	1,849	3,931
	5-5/8"	2,076	3,931	2,426	3,931

1. Allowable load capacities in this table are calculated using a factor of safety of 4.0.
2. Consideration of safety factors of 10 or higher may be necessary depending on application, such as life safety or overhead.
3. Tabulated load values are for anchors installed in uncracked concrete.
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5. To determine which grade of stainless steel may be more appropriate for your application, please consult a design professional.

Anchor Spacing and Edge Distance for Wedge Anchors

Anchor Diameter in.	Wedge Anchors		
	Nominal Embedment	Min. Anchor Spacing	Min. Edge Distance
1/4"	1-1/2"	2-1/2"	1-1/4"
3/8"	2-7/16"	3-3/4"	1-7/8"
1/2"	2-9/16"	5"	2-1/2"
5/8"	3-3/8"	6-1/4"	3-1/8"
3/4"	4-5/8"	7-1/2"	3-3/8"

Wedge Anchor Length Identification Codes

Mark	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
From	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"	6-1/2"	7"	7-1/2"	8"	8-1/2"
Up to but not including	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"	6-1/2"	7"	7-1/2"	8"	8-1/2"	9"
Length identification mark indicates overall length of anchor.															