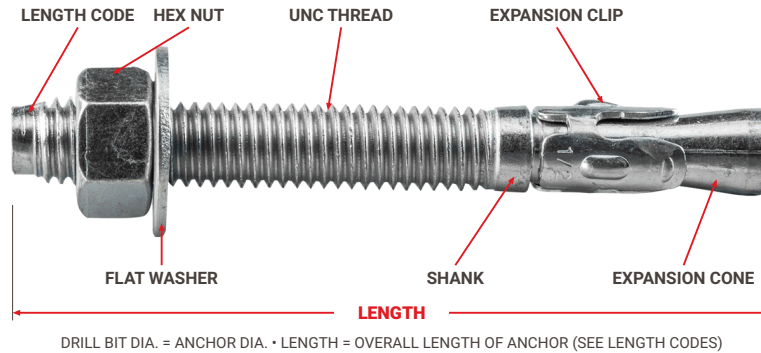


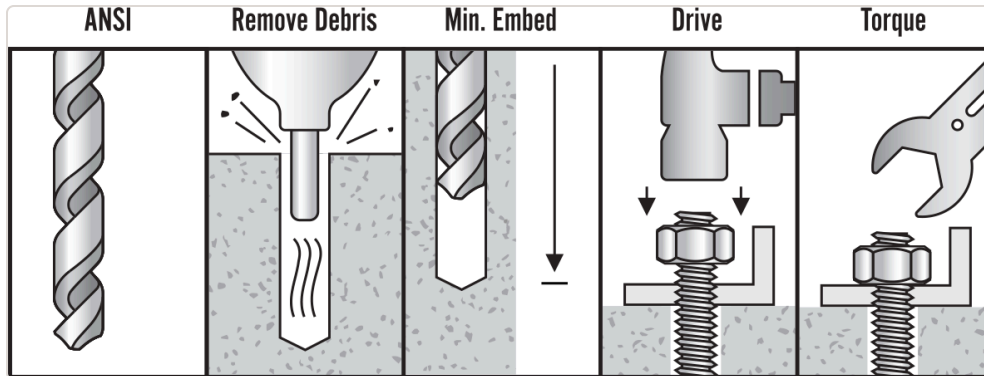
PRODUCT DATA SHEET

Zinc Plated Concrete Wedge Anchors

1.0 Product Torque-controlled expansion anchor • "Bolt size = hole size"



2.0 Installation



1. Drill a hole the same diameter as the anchor, perpendicular to the work surface, deeper than the intended embedment (but not closer than two diameters to the opposite face). Use carbide-tipped bits meeting ANSI B212.15.
2. Clean the hole with a nylon brush and compressed air.
3. Assemble the nut and washer onto the anchor and drive it through the fixture to the required embedment depth.
4. Tighten the nut 3–5 turns past hand tight; a torque wrench set to the recommended setting torque is recommended.

Anchor Dia.	Drill Bit Dia.	Fixture Clearance Hole	Thread (UNC)	Wrench Size	Setting Torque (ft-lbs)*	Spacing & Edge Distance		
						Nominal Embed.	Min. Spacing	Min. Edge Dist.
1/4"	1/4"	5/16"	1/4-20	7/16"	6–8	1-1/2"	2-1/2"	1-1/4"
3/8"	3/8"	7/16"	3/8-16	9/16"	20–25	2-7/16"	3-3/4"	1-7/8"
1/2"	1/2"	9/16"	1/2-13	3/4"	50–55	2-9/16"	5"	2-1/2"
5/8"	5/8"	11/16"	5/8-11	15/16"	90–95	3-3/8"	6-1/4"	3-1/8"
3/4"	3/4"	13/16"	3/4-10	1-1/8"	165–175	4-5/8"	7-1/2"	3-3/8"
7/8"	7/8"	15/16"	7/8-9	1-5/16"	240–250	4"	8-3/4"	4-3/8"
1"	1"	1-1/8"	1-8	1-1/2"	290–300	4-1/2"	10"	5"
1-1/4"	1-1/4"	1-3/8"	1-1/4-7	1-7/8"	400–410	6-1/2"	12-1/2"	6-1/4"

* Setting torque for anchors installed in normal-weight concrete. Spacing & edge distances apply at nominal embedment.

3.0 Material & Specifications

Property	Specification
Anchor Body	Carbon steel, AISI 1035 (UNS G10350)
Expansion Clip	Carbon steel, ASTM A108 Grade 1018
Nut	Carbon steel hex nut, ASME B18.2.2
Washer	Carbon steel flat washer, ASME B18.22.1
Finish	Zinc plated, ASTM B633 Type III
Base Material	Normal-weight concrete, lightweight concrete and grouted concrete masonry
Applications	Railings, base plates, shelving & racking, machinery, sill plates & ledgers, lighting standards, structural connections

4.0 Sizes Stocked Zinc plated carbon steel • supplied with nut & washer

Dia.	Length	Length Code	Min. Embed.	Thread Length	Qty / Box	Qty / Carton	Nutty Stock #
1/4"	1-3/4"	A	1-1/4"	3/4"	100	800	WEJ14134
1/4"	2-1/4"	B	1-1/4"	1-1/4"	100	800	WEJ14214
1/4"	3-1/4"	D	1-1/4"	2-1/4"	100	800	WEJ14314
3/8"	2-1/4"	B	1-3/4"	1"	50	400	WEJ38214
3/8"	2-3/4"	C	1-3/4"	1-1/2"	50	400	WEJ38234
3/8"	3"	D	1-3/4"	1-3/4"	50	400	WEJ383
3/8"	3-3/4"	E	1-3/4"	2-1/2"	50	400	WEJ38334
3/8"	5"	H	1-3/4"	3-1/4"	50	400	WEJ385
3/8"	7"	L	1-3/4"	4-1/2"	50	300	WEJ387
1/2"	2-3/4"	C	2-1/8"	1-1/8"	25	200	WEJ12234
1/2"	3-3/4"	E	2-1/8"	2-1/8"	25	200	WEJ12334
1/2"	4-1/4"	F	2-1/8"	2-5/8"	25	200	WEJ12414
1/2"	4-1/2"	G	2-1/8"	2-5/8"	25	200	WEJ12412
1/2"	5-1/2"	I	2-1/8"	3-3/4"	25	150	WEJ12512
1/2"	7"	L	2-1/8"	4-1/2"	25	150	WEJ127
1/2"	8-1/2"	O	2-1/8"	5"	10	40	WEJ12812
1/2"	10"	R	2-1/8"	5"	10	40	WEJ1210
5/8"	3-1/2"	E	2-5/8"	1-1/2"	10	80	WEJ58312
5/8"	4-1/4"	F	2-5/8"	2-3/8"	10	80	WEJ58414
5/8"	5"	H	2-5/8"	3-1/8"	10	80	WEJ585
5/8"	6"	J	2-5/8"	4"	10	80	WEJ586

Dia.	Length	Length Code	Min. Embed.	Thread Length	Qty / Box	Qty / Carton	Nutty Stock #
5/8"	7"	L	2-5/8"	4-1/2"	10	80	WEJ587
5/8"	8-1/2"	O	2-5/8"	5"	10	40	WEJ58812
5/8"	10"	R	2-5/8"	5"	10	40	WEJ5810
5/8"	12"	T	2-5/8"	5"	10	40	WEJ5812
3/4"	4-1/4"	F	3-1/4"	2"	10	80	WEJ34414
3/4"	4-3/4"	G	3-1/4"	2-1/2"	10	80	WEJ34434
3/4"	5-1/2"	I	3-1/4"	3-1/4"	10	60	WEJ34512
3/4"	6-1/4"	J	3-1/4"	3-3/4"	10	60	WEJ34614
3/4"	7"	L	3-1/4"	4-3/4"	10	60	WEJ347
3/4"	8-1/2"	O	3-1/4"	5"	10	40	WEJ34812
3/4"	10"	R	3-1/4"	5"	10	40	WEJ3410
3/4"	12"	T	3-1/4"	5"	5	20	WEJ3412
7/8"	6"	J	3-7/8"	3-1/2"	5	30	WEJ786
7/8"	8"	N	3-7/8"	5"	5	20	WEJ788
7/8"	10"	R	3-7/8"	5"	5	20	WEJ7810
1"	6"	J	4"	3"	5	30	WEJ16
1"	9"	P	4"	5"	5	20	WEJ19
1"	12"	T	4"	5"	5	20	WEJ112
1-1/4"	9"	P	5-5/8"	5"	4	12	WEJ1149
1-1/4"	12"	T	5-5/8"	5"	4	12	WEJ11412

5.0 Length Identification Codes Stamped on the end of each anchor

Code	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
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"	9"	9-1/2"	10"	11"	12"
Up to (not incl.)	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"	9-1/2"	10"	11"	12"	13"

Length identification mark indicates overall length of anchor.

6.0 Ultimate Load Capacities Normal-weight concrete

Anchor Dia.	Min. Embed. Depth	f'c = 4,000 psi Concrete		f'c = 6,000 psi Concrete	
		Tension (lbs)	Shear (lbs)	Tension (lbs)	Shear (lbs)
1/4"	1-1/8"	1,368	1,377	1,950	1,377
	1-3/4"	1,565	1,704	1,949	1,704
3/8"	1-5/8"	2,744	3,644	4,529	3,644
	2-3/8"	3,703	3,664	5,577	3,664
1/2"	2-1/4"	4,413	6,456	7,735	6,456
	3-3/4"	6,788	6,276	9,565	6,276
5/8"	2-3/4"	7,938	11,043	9,108	11,043
	4-5/8"	10,094	9,909	11,982	9,909
3/4"	3-3/8"	10,283	14,863	11,661	14,863
	5-5/8"	10,668	14,596	12,350	14,596
1"	4-1/2"	16,612	28,429	22,902	28,429
	8"	22,457	29,099	25,538	29,099

7.0 Allowable Load Capacities Normal-weight concrete • factor of safety 4.0

Anchor Dia.	Min. Embed. Depth	f'c = 4,000 psi Concrete		f'c = 6,000 psi Concrete	
		Tension (lbs)	Shear (lbs)	Tension (lbs)	Shear (lbs)
1/4"	1-1/8"	342	344	488	344
	1-3/4"	392	426	487	426
3/8"	1-5/8"	686	911	1,132	911
	2-3/8"	926	916	1,394	916
1/2"	2-1/4"	1,103	1,614	1,934	1,614
	3-3/4"	1,697	1,569	2,391	1,569
5/8"	2-3/4"	1,985	2,761	2,277	2,761
	4-5/8"	2,524	2,477	2,996	2,477
3/4"	3-3/8"	2,571	3,716	2,915	3,716
	5-5/8"	2,667	3,649	3,088	3,649
1"	4-1/2"	4,153	7,107	5,726	7,107
	8"	5,619	7,275	6,385	7,275

- Ultimate load capacities must be reduced by a minimum factor of safety of 4.0 to determine allowable loads.
- Safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.
- Tabulated load values are for anchors installed in uncracked concrete.
- Concrete compressive strength must be at the specified minimum at the time of installation.

Disclaimer: The above is a compilation of data from various industry standards. The Nutty Company, Inc. has made every effort to present the data accurately. However, The Nutty Company, Inc. cannot be held liable for any claim traceable to any errors, typographical or otherwise, contained herein.



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