

Fluted Plastic Anchor[™] Plastic Wall Anchor

PRODUCT DESCRIPTION

The Fluted Plastic Anchor is designed for light duty fastening applications in concrete, block, brick or stone. The body of the Fluted Plastic anchor is injection molded from a ductile plastic and is designed to be used with sheet metal or wood screws.

The load capacities for this product depend on the integrity of the base material in which it is installed. The anchor is recommended for light duty static applications where holding power is not a critical factor. It should not be used overhead.

FEATURES AND BENEFITS

- Works in a variety of base materials
- Anchor body is resistant to corrosion

MATERIAL SPECIFICATIONS

Anchor Component	Component Material			
Anchor Shield	Engineered Plastic			

INSTALLATION SPECIFICATIONS

	Screw Size					
Dimension	#4-#6	#7-#9	#10-#12	#14		
ANSI Drill Bit Size, d _{bit} (in.)	3/16	7/32	1/4	5/16		
Screw Size Range (UNC)	#4-#6	#7-#9	#10-#12	#14		

Installation Guidelines

Drill a hole into the base material to the depth of embedment required. The tolerances of the drill bit used should meet the requirements of ANSI Standard B212.15.







Position the fixture. Insert the proper size screw through the fixture into the top of the anchor and tighten. Be sure screw thread fully engages the anchor body.





ANCHOR MATERIAL

Engineered Plastic

ANCHOR SIZE RANGE (TYP.)

No. 4-6 screw x 1" length to No. 14 screw x 1 1/2" length

SUITABLE BASE MATERIALS

Normal-Weight Concrete



PERFORMANCE DATA

Ultimate Load Capacities for Fluted Plastic Anchor in Normal-Weight Concrete^{1,2}

Screw Size	Minimum	Minimum Concrete Compressive Strength (f'c)					
Range	Embedment Depth	2,000 psi (13.8 MPa)		4,000 psi (27.6 MPa)		6,000 psi (41.4 MPa)	
d	h _v	Tension	Shear	Tension	Shear	Tension	Shear
	in.	Ibs.	Ibs.	Ibs.	Ibs.	Ibs.	Ibs.
	(mm)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)
#4-#6	3/4	120	200	140	215	160	215
	(19.1)	(0.5)	(0.9)	(0.6)	(1.0)	(0.7)	(1.0)
#7-#9	7/8	220	230	235	240	250	240
	(22.2)	(1.0)	(1.0)	(1.1)	(1.1)	(1.1)	(1.1)
#10-#12	1	440	280	490	350	540	350
	(25.4)	(2.0)	(1.3)	(2.2)	(1.6)	(2.4)	(1.6)
#10-#12	1 1/4	490	280	540	350	590	350
	(31.8)	(2.2)	(1.3)	(2.4)	(1.6)	(2.7)	(1.6)
#10-#12	1 1/2	520	280	610	350	680	350
	(38.1)	(2.3)	(1.3)	(2.7)	(1.6)	(3.1)	(1.6)
#14	1	520	530	570	575	620	575
	(25.4)	(2.3)	(2.4)	(2.6)	(2.6)	(2.8)	(2.6)
#14	1 1/2 (38.1)	540 (2.4)	530 (2.4)	615 (2.8)	575 (2.6)	690 (3.1)	575 (2.6)

1. The values listed above are ultimate load capacities which should be reduced by a minimum safety factor of 4.0 or greater to determine the allowable working load. 2. Linear interpolation may be used to determine ultimate loads for intermediate compressive strengths.

Allowable Load Capacities for Fluted Plastic Anchor in Normal-Weight Concrete^{1,2}

Screw Size	Minimum	Minimum Concrete Compressive Strength (f'c)					
Range	Embedment Depth	2,000 psi (13.8 MPa)		4,000 psi (27.6 MPa)		6,000 psi (41.4 MPa)	
d	<i>h</i> ν	Tension	Shear	Tension	Shear	Tension	Shear
	in.	Ibs.	Ibs.	Ibs.	Ibs.	Ibs.	Ibs.
	(mm)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)
#4-#6	3/4	30	60	35	55	40	55
	(19.1)	(0.1)	(0.3)	(0.2)	(0.2)	(0.2)	(0.2)
#7-#9	7/8	55	60	60	60	65	60
	(22.2)	(0.2)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
#10-#12	1	110	70	125	90	135	90
	(25.4)	(0.5)	(0.3)	(0.6)	(0.4)	(0.6)	(0.4)
#10-#12	1 1/4	125	70	135	90	150	90
	(31.8)	(0.6)	(0.3)	(0.6)	(0.4)	(0.7)	(0.4)
#10-#12	1 1/2	130	70	155	90	170	90
	(38.1)	(0.6)	(0.3)	(0.7)	(0.4)	(0.8)	(0.4)
#14	1	130	135	145	145	155	145
	(25.4)	(0.6)	(0.6)	(0.7)	(0.7)	(0.7)	(0.7)
#14	1 1/2	135	135	155	145	175	145
	(38.1)	(0.6)	(0.6)	(0.7)	(0.7)	(0.8)	(0.7)

Allowable load capacities listed are calculated using an applied safety factor of 4.0.
Linear interpolation may be used to determine allowable loads for intermediate compressive strengths.

ORDERING INFORMATION

Fluted Plastic Anchor (Not packaged with screws)

Cat. No.	Anchor Size	Color	Drill Diameter	Std. Box	Std. Carton	Wt./100
7500	#4-#6 x 1"	White	3/16"	100	1,000	1
7505	#7-#9 x 1"	Red	7/32"	100	1,000	2
7510	#10-#12 x 1"	Green	1/4"	100	1,000	2
7515	#10-#12 x 1 1/4"	Green	1/4"	100	1,000	2
7520	#10-#12 x 1 1/2"	Green	1/4"	100	1,000	3
7525	#14 x 1"	Blue	5/16"	100	1,000	2
7530	#14 x 1 1/2"	Blue	5/16"	100	1,000	4



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