

# 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

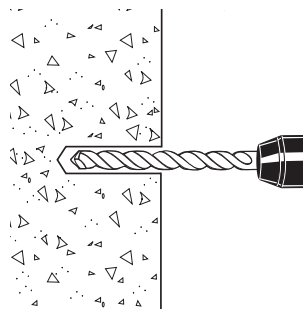
Anchor Component	Component Material
Anchor Shield	Engineered Plastic

## INSTALLATION SPECIFICATIONS

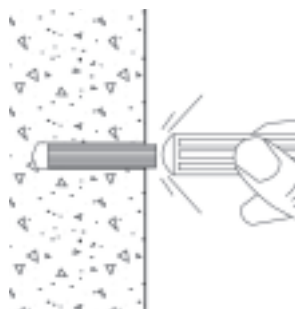
Dimension	Screw Size			
	#4-#6	#7-#9	#10-#12	#14
ANSI Drill Bit Size, $d_{bit}$ (in.)	3/16	7/32	1/4	5/16
Screw Size Range (UNC)	#4-#6	#7-#9	#10-#12	#14

### Installation Guidelines

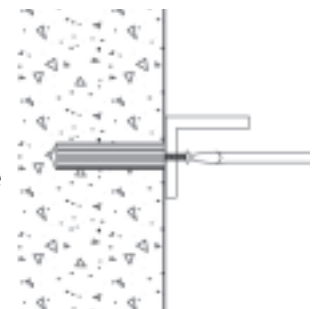
Drill a hole into the base material to the depth of embedment required. The tolerances of the drill bit used should meet the requirements of ANSI Standard B212.15.



Blow the hole clean of dust and other material. Insert the anchor into the hole until it is flush with the surface of the base material.



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.



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Fluted Plastic Anchor

## 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<sup>1,2</sup>**

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

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

1. Allowable load capacities listed are calculated using an applied safety factor of 4.0.  
 2. 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



WALL ANCHORS