

Polly™ Hollow Wall Anchor

PRODUCT DESCRIPTION

The Polly is a sleeve type hollow wall anchor designed for use in base materials such as plaster, wallboard, concrete block or hollow tile. Once the anchor has been set, the screw may be removed as often as necessary without affecting the anchor.

FEATURES AND BENEFITS

- Allows for fixture and screw removal and re-anchoring
- Federal GSA Specification – The Polly meets the descriptive requirements of FF-B-588D, Type III, Class A (Standard Polly) and Class B (Drive Polly)

MATERIAL SPECIFICATIONS

Anchor Component	Component Material
Anchor Body	AISI 1010
Machine Screw	Carbon Steel – ANSI B18.6.3
Plating	ASTM B633, SC1, Type III, (Fe/Zn 5)

INSTALLATION SPECIFICATIONS

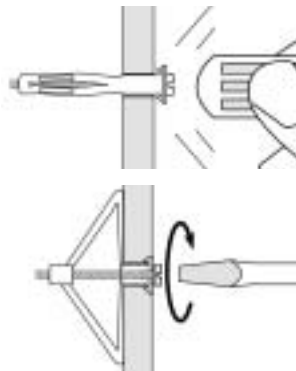
Dimension	Anchor Diameter, <i>d</i>		
	1/8"	3/16"	1/4"
ANSI Drill Bit Size, <i>d_{bit}</i> (in.)	5/16	3/8	7/16
Collar Diameter (in.)	1/2	5/8	11/16
Body Diameter (in.)	17/64	3/8	7/16
Thread Size (UNC)	6-32	10-24	1/4-20

Installation Guidelines

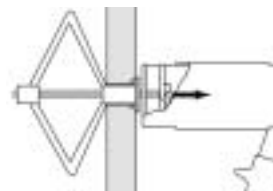
Drill a hole through the base material into the hollow area. The drive version of the Polly can be driven directly into the wallboard.



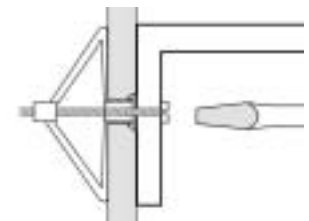
Insert the Polly and tap the head until the gripper prongs are embedded in the base material. Maintain pressure with the screwdriver while turning the screw until a definite resistance is felt, indicating the Polly is set.



For faster setting, use the Polly setting tool. Back screw head out 2-3 turns, slide the tool behind the screw head, then squeeze the tool to expand the Polly. This tool fits all sizes.



To complete the installation, remove the screw, line up mounting hole of item to be fastened, re-insert screw and tighten.



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Polly

ANCHOR MATERIAL

Carbon Steel

ANCHOR SIZE RANGE (TYP.)

1/8" Extra Short to 1/4" Extra Long

SUITABLE BASE MATERIALS

Wallboard
Plywood
Hollow Concrete Masonry

PERFORMANCE DATA

Ultimate Load Capacities for Polly in Wallboard¹

Anchor Diameter <i>d</i> in. (mm)	3/8" Wallboard		1/2" Wallboard		5/8" Wallboard		3/4" Wallboard	
	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/8 (3.2)	80 (0.4)	110 (0.5)	150 (0.7)	170 (0.8)	160 (0.7)	195 (0.9)	170 (0.8)	210 (0.9)
3/16 (4.8)	90 (0.4)	130 (0.6)	175 (0.8)	180 (0.8)	190 (0.9)	210 (0.9)	210 (0.9)	220 (1.0)
1/4 (6.4)	95 (0.4)	150 (0.7)	200 (0.9)	200 (0.9)	220 (1.0)	220 (1.0)	245 (1.1)	250 (1.1)

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.

Allowable Load Capacities for Polly in Wallboard¹

Anchor Diameter <i>d</i> in. (mm)	3/8" Wallboard		1/2" Wallboard		5/8" Wallboard		3/4" Wallboard	
	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/8 (3.2)	20 (0.1)	30 (0.1)	40 (0.2)	45 (0.2)	40 (0.2)	50 (0.2)	45 (0.2)	55 (0.2)
3/16 (4.8)	25 (0.1)	35 (0.2)	45 (0.2)	45 (0.2)	50 (0.2)	55 (0.2)	55 (0.2)	55 (0.2)
1/4 ² (6.4)	25 (0.1)	40 (0.2)	50 (0.2)	50 (0.2)	55 (0.2)	55 (0.2)	60 (0.3)	65 (0.3)

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

Ultimate Load Capacities for Polly in Plywood¹

Anchor Diameter <i>d</i> in. (mm)	1/8" Plywood		1/4" Plywood		3/8" Plywood		1/2" Plywood		5/8" Plywood	
	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/8 (3.2)	110 (0.5)	100 (0.5)	125 (0.6)	450 (2.0)	200 (0.9)	450 (2.0)	300 (1.4)	450 (2.0)	420 (1.9)	450 (2.0)
3/16 (4.8)	—	—	—	—	320 (1.4)	580 (2.6)	420 (1.9)	610 (2.7)	500 (2.3)	640 (2.9)
1/4 (6.4)	—	—	—	—	400 (1.8)	720 (3.2)	480 (2.2)	830 (3.7)	560 (2.5)	900 (4.1)

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.

Allowable Load Capacities for Polly in Plywood¹

Anchor Diameter <i>d</i> in. (mm)	1/8" Plywood		1/4" Plywood		3/8" Plywood		1/2" Plywood		5/8" Plywood	
	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/8 (3.2)	30 (0.1)	25 (0.1)	30 (0.1)	115 (0.5)	50 (0.2)	115 (0.5)	75 (0.3)	115 (0.5)	105 (0.5)	115 (0.5)
3/16 (4.8)	—	—	—	—	80 (0.4)	145 (0.7)	105 (0.5)	155 (0.7)	125 (0.6)	160 (0.7)
1/4 ² (6.4)	—	—	—	—	100 (0.5)	180 (0.8)	120 (0.5)	210 (0.9)	140 (0.6)	225 (1.0)

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

PERFORMANCE DATA

Ultimate and Allowable Load Capacities for Polly in Hollow Concrete Masonry^{1,2}

Anchor Size in. (mm)	Drill Bit Diameter d_{bit} in. (mm)	$f'_m \geq 1,500$ psi (10.4 MPa)			
		Ultimate Load		Allowable Load	
		Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/8" XL (3.2)	5/16 (7.9)	160 (0.7)	170 (0.8)	30 (0.1)	35 (0.2)
3/16" XL (4.8)	3/8 (9.5)	190 (0.9)	210 (0.9)	40 (0.2)	40 (0.2)
1/4" XL (6.4)	7/16 (11.1)	220 (1.0)	245 (1.1)	45 (0.2)	50 (0.2)

1. Tabulated load values are for anchors installed in minimum 6-inch wide, Grade N, Type II, medium and normal-weight concrete masonry units. Mortar must be minimum Type N.
2. Allowable loads are based on average ultimate values using a safety factor of 5.0.

ORDERING INFORMATION

Standard Polly with Combination Slotted Phillips Head

Cat. No.	Anchor Size	Screw Length	Drill Diameter	Wall Thickness	Standard Box	Standard Carton	Wt./ 100
2100	1/8" Ex. Short	1 1/16"	5/16"	1/8" to 1/4"	100	500	1
2101	1/8" Short	1 3/4"	5/16"	3/8" to 1/2"	100	500	1 1/2
2102	1/8" Long	2 1/4"	5/16"	5/8" to 1"	100	500	2
2103	1/8" Ex. Long	2 11/16"	5/16"	1 1/4" to 1 1/2"	50	250	2 1/2
2111	3/16" Short	2"	3/8"	3/8" to 5/8"	50	250	3 1/2
2112	3/16" Long	2 1/2"	3/8"	3/4" to 1 1/8"	50	250	4
2113	3/16" Ex. Long	3"	3/8"	1 1/4" to 1 3/4"	25	125	5 1/4
2121	1/4" Short	2 1/4"	7/16"	3/8" to 1/2"	50	250	5
2122	1/4" Long	2 3/4"	7/16"	5/8" to 1 1/8"	50	250	6 1/4
2123	1/4" Ex. Long	3 3/8"	7/16"	1 1/4" to 1 3/4"	25	125	7 1/2



WALL ANCHORS

Standard Polly with Slotted Hex Head

Cat. No.	Anchor Size	Screw Length	Drill Diameter	Wall Thickness	Standard Box	Standard Carton	Wt./ 100
2105	1/8" Short	1 3/4"	5/16"	3/8" to 1/2"	100	500	1 1/2



Drive Polly

Cat. No.	Anchor Size	Screw Length	Drill Diameter	Wall Thickness	Standard Box	Standard Carton	Wt./ 100
2180	1/8" Ex. Short	1 3/8"	—	1/8" to 1/4"	100	500	1
2182	1/8" Short	2"	—	3/8" to 1/2"	100	500	1 1/2
2184	1/8" Long	2 3/8"	—	1/2" to 3/4"	100	500	2



Polly Setting Tool (Fits All Sizes)

Cat. No.	Standard Box	Standard Carton	Wt./Each
2150	1	1	2

