General information

WALL-DOG™

Universal Light Duty Anchor

Section contents

Product Description

The Wall-Dog is an all steel, one-piece screw anchor, which features high-profile threads for easy fastening into wallboard and other masonry base materials. The deep cutting, corkscrew-like threads provide for smooth entry and a powerful hold. When removed, the Wall-Dog leaves a much smaller hole than toggles or other systems. For aesthetic appearances, the Wall-Dog is available in several color finishes and head styles.

For fastening into wallboard or wood, no pre-drilling is required – the anchor is inserted through the fixture and screwed in with an ordinary Phillips screwdriver (Robertson head style also available). Fastening into concrete, hollow or grout-filled concrete masonry, brick and plaster requires a pre-drilled hole using a 3/16"ANSI bit. Typical applications include lightweight fixtures, drapery supports, as well as electrical, telephone and cable accessories.


COMBO HEX WASHER HEAD


PHILLIPS WAFER HEAD


ROBERTSON HEAD


PHILLIPS OVAL HEAD


PHILLIPS PAN HEAD

Features And Benefits

+ Installs in a variety of base materials.
+ Installs directly through fixtures into wallboard – no second step or hole spotting required
+ When removed the anchor leaves a much smaller hole than toggles or other systems
+ Thread design prevents spinning and stripping
+ Heat treated point penetrates wood studs and thin metal
+ Several finished head styles to match application
+ No pilot hole required for wallboard
+ Can be easily backed out of hole

Material Specifications

Anchor Component	Component Material
Anchor Body	Carbon Steel
Plating / Finish	Zinc, White, Black, Bronze or Brass

Installation Specifications

ANSI Drill Bit Size (in.)	3/16 (Required for concrete, masonry and plaster)
Head Size	No. 8
Driver	No. 2 Phillips

Anchor Materials

- Carbon Steel

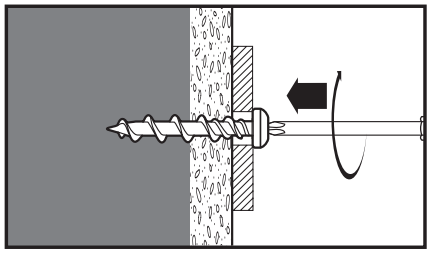
Anchor Size Range (TYP.)

- 1/4" Diameter with No. 8 Head

Suitable Base Materials

- Concrete
- Grout-Filled Concrete Masonry
- Hollow Concrete Masonry
- Brick Masonry
- Wallboard
- Plywood
- Plaster

Installation Specifications and Guidelines



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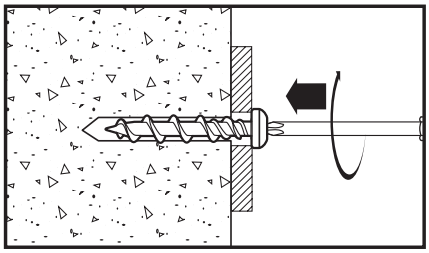

Fastening into concrete, grout-filled or hollow block, brick or plaster requires a 3/16" pre-drilled hole using a carbide tipped drill bit.

PERFORMANCE DATA

Ultimate and Allowable Load Capacities for Wall-Dog in Normal-Weight Concrete[1,2]

Anchor Diameter in.	Minimum Embedment in. (mm)	Minimum Concrete Compressive Strength f'c ≥ 4,000 psi (27.6 MPa)			
		Ultimate Load		Allowable Load	
		Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4	3/4 (19.1)	350 (1.6)	1,030 (4.6)	90 (0.4)	260 (1.2)
	1 (25.4)	700 (3.2)	1,070 (4.8)	175 (0.8)	270 (1.2)

1. Allowable load capacities listed are calculated using an applied safety factor of 4.0.
2. These fasteners are not recommended for use overhead or applications where holding values are critical.

Ultimate Load Capacities for Wall-Dog in Wallboard and Plywood[1,2]

Anchor Diameter in.	1/2" Wallboard		5/8" Wallboard		3/4" Plywood	
	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4	85 (0.4)	245 (1.1)	135 (0.6)	360 (1.6)	255 (1.1)	600 (2.7)

1. Ultimate load capacities are provided for reference and must be reduced by a minimum safety factor of 4.0 or greater to determine allowable working loads.
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Anchor Diameter in.	1/2" Wallboard		5/8" Wallboard		3/4" Plywood	
	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4	20 (0.1)	60 (0.3)	35 (0.2)	90 (0.4)	65 (0.3)	150 (0.7)

1. Allowable load capacities listed are calculated using an applied safety factor of 4.0.
2. These fasteners are not recommended for use overhead or applications where holding values are critical.

Ultimate Load Capacities for Wall-Dog in Grout-Filled, Hollow Concrete Masonry and Brick Masonry[1,2]

Anchor Diameter in.	Minimum Embedment in. (mm)	Anchor Location	Grout-Filled Concrete Masonry		Hollow Concrete Masonry		Brick Masonry	
			Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4	3/4 (19.1)	Center of Masonry Unit	–	–	–	–	400 (1.8)	650 (2.9)
	3/4 (19.1)	Bed Joint or T-Joint	–	–	–	–	350 (1.6)	600 (2.7)
	1 (25.4)	Center of Masonry Unit	285 (1.3)	825 (3.7)	305 (1.4)	825 (3.7)	600 (2.7)	900 (4.1)
	1 (25.4)	Bed Joint or T-Joint	290 (1.3)	915 (4.1)	290 (1.3)	915 (4.1)	380 (1.7)	825 (3.7)

1. Ultimate load capacities are provided for reference and must be reduced by a minimum safety factor of 5.0 or greater to determine allowable working loads.
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Allowable Load Capacities for Wall-Dog in Grout-Filled, Hollow Concrete Masonry and Brick Masonry[1,2]

Anchor Diameter in.	Minimum Embedment in. (mm)	Anchor Location	Grout-Filled Concrete Masonry		Hollow Concrete Masonry		Brick Masonry	
			Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4	3/4 (19.1)	Center of Masonry Unit	–	–	–	–	80 (0.4)	130 (0.6)
	3/4 (19.1)	Bed Joint or T-Joint	–	–	–	–	70 (0.3)	120 (0.5)
	1 (25.4)	Center of Masonry Unit	55 (0.2)	165 (0.7)	60 (0.3)	165 (0.7)	120 (0.5)	180 (0.8)
	1 (25.4)	Bed Joint or T-Joint	60 (0.3)	185 (0.8)	60 (0.3)	185 (0.8)	75 (0.3)	165 (0.7)

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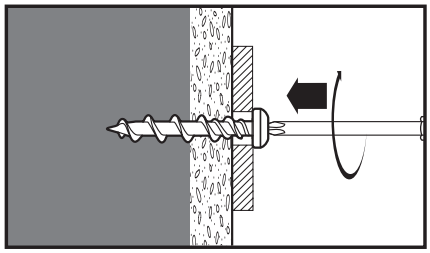

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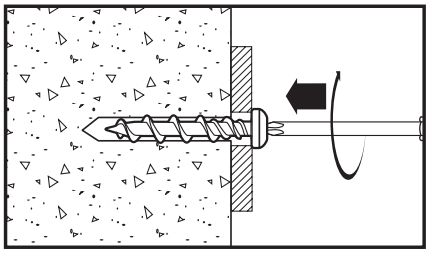

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1/4	3/4 (19.1)	350 (1.6)	1,030 (4.6)	90 (0.4)	260 (1.2)
	1 (25.4)	700 (3.2)	1,070 (4.8)	175 (0.8)	270 (1.2)

1. Allowable load capacities listed are calculated using an applied safety factor of 4.0.
2. These fasteners are not recommended for use overhead or applications where holding values are critical.

Ultimate Load Capacities for Wall-Dog in Wallboard and Plywood[1,2]

Anchor Diameter in.	1/2" Wallboard		5/8" Wallboard		3/4" Plywood	
	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4	85 (0.4)	245 (1.1)	135 (0.6)	360 (1.6)	255 (1.1)	600 (2.7)

1. Ultimate load capacities are provided for reference and must be reduced by a minimum safety factor of 4.0 or greater to determine allowable working loads.
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Anchor Diameter in.	1/2" Wallboard		5/8" Wallboard		3/4" Plywood	
	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4	20 (0.1)	60 (0.3)	35 (0.2)	90 (0.4)	65 (0.3)	150 (0.7)

1. Allowable load capacities listed are calculated using an applied safety factor of 4.0.
2. These fasteners are not recommended for use overhead or applications where holding values are critical.

Ultimate Load Capacities for Wall-Dog in Grout-Filled, Hollow Concrete Masonry and Brick Masonry[1,2]

Anchor Diameter in.	Minimum Embedment in. (mm)	Anchor Location	Grout-Filled Concrete Masonry		Hollow Concrete Masonry		Brick Masonry	
			Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4	3/4 (19.1)	Center of Masonry Unit	–	–	–	–	400 (1.8)	650 (2.9)
	3/4 (19.1)	Bed Joint or T-Joint	–	–	–	–	350 (1.6)	600 (2.7)
	1 (25.4)	Center of Masonry Unit	285 (1.3)	825 (3.7)	305 (1.4)	825 (3.7)	600 (2.7)	900 (4.1)
	1 (25.4)	Bed Joint or T-Joint	290 (1.3)	915 (4.1)	290 (1.3)	915 (4.1)	380 (1.7)	825 (3.7)

1. Ultimate load capacities are provided for reference and must be reduced by a minimum safety factor of 5.0 or greater to determine allowable working loads.
2. These fasteners are not recommended for use overhead or applications where holding values are critical.

Allowable Load Capacities for Wall-Dog in Grout-Filled, Hollow Concrete Masonry and Brick Masonry[1,2]

Anchor Diameter in.	Minimum Embedment in. (mm)	Anchor Location	Grout-Filled Concrete Masonry		Hollow Concrete Masonry		Brick Masonry	
			Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4	3/4 (19.1)	Center of Masonry Unit	–	–	–	–	80 (0.4)	130 (0.6)
	3/4 (19.1)	Bed Joint or T-Joint	–	–	–	–	70 (0.3)	120 (0.5)
	1 (25.4)	Center of Masonry Unit	55 (0.2)	165 (0.7)	60 (0.3)	165 (0.7)	120 (0.5)	180 (0.8)
	1 (25.4)	Bed Joint or T-Joint	60 (0.3)	185 (0.8)	60 (0.3)	185 (0.8)	75 (0.3)	165 (0.7)

1. Allowable load capacities listed are calculated using an applied safety factor of 5.0.
2. These fasteners are not recommended for use overhead or applications where holding values are critical.