Wall-Dog[™] Universal Light Duty Anchor

PRODUCT DESCRIPTION

FASTENERS

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 two color finishes: white and chrome; and in two head styles: pan and oval. 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. Fastening into concrete, hollow or grout-filled concrete masonry, brick and plaster requires a pre-drilled hole using a 3/16" ANSI bit. Wall-Dog anchors are ideal for light to medium duty anchoring. Typical applications include lightweight fixtures, drapery supports, as well as electrical, telephone and cable accessories.

FEATURES AND BENEFITS

- Installs in a variety of base materials.
- Installs directly through fixtures into wallboard no second step is required
- When removed the Wall-Dog leaves a much smaller hole than toggles or other systems
- Thread design prevents spinning and stripping
- Heat treated point penetrates metal and wood studs
- Two finished heads, oval and pan
- Two colors, chrome & white head
- No pilot hole required for wallboard
- Can be easily backed out of hole
- No hole spotting required

MATERIAL SPECIFICATIONS

Anchor Component	Component Material			
Anchor Component	Chrome Wall-Dog	White Head Wall-Dog		
Anchor Body	Carbon Steel – AISI 1018	Carbon Steel – AISI 1018		
Plating	Decorative Chrome	Screw Head – White Screw Body – Zinc		

INSTALLATION SPECIFICATIONS

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

Installation Guidelines

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.



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



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Wall-Dog Chrome, Oval Head



Wall-Dog White, Pan Head



Wall-Dog White, Oval Head

ANCHOR MATERIALS

Carbon Steel

ANCHOR SIZE RANGE (TYP.)

1/4" Diameter with No. 8 Head

SUITABLE BASE MATERIALS

Normal-Weight Concrete Grout-Filled Concrete Masonry Hollow Concrete Masonry **Brick Masonry** Wallboard Plywood Plaster



PERFORMANCE DATA

Ultimate and Allowable Load Capacities for Wall-Dog in Normal-Weight Concrete¹

Anchor Diameter	Minimum Embedment	Minimum Concrete Compressive Strength $f'_c \ge 4,000 \text{ psi } (27.6 \text{ MPa})$				
Diameter	Depth	Ultimat	e Load	Allowable Load		
d in. (mm)	h _ν in. (mm)	Tension Ibs. (kN)	Shear Ibs. (kN)	Tension Ibs. (kN)	Shear Ibs. (kN)	
1/4	3/4 (19.1)	350 (1.6)	1,030 (4.6)	90 (0.4)	260 (1.2)	
(6.4)	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.

Ultimate Load Capacities for Wall-Dog in Wallboard and Plywood¹

Anchor Diameter	1/2" Wallboard		5/8" Wallboard		3/4" Plywood	
d in. (mm)	Tension Ibs. (kN)	Shear Ibs. (kN)	Tension Ibs. (kN)	Shear Ibs. (kN)	Tension lbs. (kN)	Shear Ibs. (kN)
1/4 (6.4)	85 (0.4)	245 (1.1)	135 (0.6)	360 (1.6)	255 (1.1)	600 (2.7)

^{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 Wall-Dog in Wallboard and Plywood¹

Anchor Diameter	1/2" Wallboard		5/8" Wa	allboard	3/4" Plywood	
d in. (mm)	Tension Ibs. (kN)	Shear Ibs. (kN)	Tension Ibs. (kN)	Shear Ibs. (kN)	Tension Ibs. (kN)	Shear Ibs. (kN)
1/4 (6.4)	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.

Ultimate Load Capacities for Wall-Dog in Grout-Filled, Hollow Concrete Masonry and Structural Brick Masonry

Anchor Diameter	Minimum Embedment Depth	Anchor Location	Grout-Filled Concrete Masonry ASTM C 90		Hollow Concrete Masonry ASTM C 90		Brick Masonry	
d in. (mm)	ἡ ν in. (mm)		Tension Ibs. (kN)	Shear Ibs. (kN)	Tension lbs. (kN)	Shear Ibs. (kN)	Tension Ibs. (kN)	Shear Ibs. (kN)
	3/4 (19.1)	Center of Masonry Unit	-	-	-	-	400 (1.8)	650 (2.9)
1/4	3/4 (19.1)	T-Joint	-	_	-	_	350 (1.6)	600 (2.7)
(6.4)	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)	T-Joint	290 (1.3)	915 (4.1)	290 (1.3)	915 (4.1)	380 (1.7)	825 (3.7)

^{1.} The values listed above are ultimate load capacities which should be reduced by a minimum safety factor of 5.0 or greater to determine the allowable working load.



PERFORMANCE DATA

Allowable Load Capacities for Wall-Dog in Grout-Filled, Hollow Concrete Masonry and Structural Brick Masonry

SPECIFICATION & DESIGN MANUAL

Anchor Diameter	Minimum Embedment Depth	Anchor Location	Grout-Filled Concrete Masonry ASTM C 90		Hollow Concrete Masonry ASTM C 90		Brick Masonry	
d in. (mm)	ἡ ν in. (mm)		Tension Ibs. (kN)	Shear Ibs. (kN)	Tension Ibs. (kN)	Shear Ibs. (kN)	Tension Ibs. (kN)	Shear Ibs. (kN)
	3/4 (19.1)	Center of Masonry Unit	-	-	-	-	80 (0.4)	130 (0.6)
1/4	3/4 (19.1)	T-Joint	-	-	-	_	70 (0.3)	120 (0.5)
(6.4)	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)	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.

ORDERING INFORMATION

Wall-Dog Light Duty Anchor

Catalog Number			Standard	Standard
Oval Head Pan Head		Description	Box	Carton
2314	2316	Wall-Dog Chrome	100	1,000
2328	2330	Wall-Dog White Head	100	1,000



Wall-Dog Master Pack

Catalog	Number		Standard
Oval Head Pan Head		Description	Box
2317	2315	Wall-Dog Chrome Master Pack	5,000
2329	2331	Wall-Dog White Head Master Pack	5,000

Wall-Dog Kit (Screwdriver)

Catalog Number	Description	Standard Box	Standard Carton
2289	Wall-Dog Kit with Screwdriver	1	10

Screwdriver packaged with 50 Chrome Pan Head anchors and one No. 2 Phillips Screwdriver

Wall-Dog Kit (Bit)

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Catalog Number	Description	Standard Box	Standard Carton	
2332	Wall-Dog Kit with Drill Bit	1	10	

Bit packaged with 50 Chrome Pan Head anchors and 3/16" Straight Shank Bit

