



**SPECIFICATION & DESIGN MANUAL**

**Wall-Dog™**

**Wall-Dog™ Universal Light Duty Anchor**

**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 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	
	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, $d_{bit}$ (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, Pan Head



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

## Wall-Dog™

## SPECIFICATION & DESIGN MANUAL



### PERFORMANCE DATA

#### Ultimate and Allowable Load Capacities for Wall-Dog in Normal-Weight Concrete<sup>1</sup>

Anchor Diameter <i>d</i> in. (mm)	Minimum Embedment Depth <i>h<sub>v</sub></i> in. (mm)	Minimum Concrete Compressive Strength <i>f'<sub>c</sub></i> ≥ 4,000 psi (27.6 MPa)			
		Ultimate Load		Allowable Load	
		Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4 (6.4)	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.

#### Ultimate Load Capacities for Wall-Dog in Wallboard and Plywood<sup>1</sup>

Anchor Diameter <i>d</i> in. (mm)	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 (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 Plywood<sup>1</sup>

Anchor Diameter <i>d</i> in. (mm)	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 (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<sup>1</sup>

Anchor Diameter <i>d</i> in. (mm)	Minimum Embedment Depth <i>h<sub>v</sub></i> in. (mm)	Anchor Location	Grout-Filled Concrete Masonry ASTM C 90		Hollow Concrete Masonry ASTM C 90		Brick Masonry	
			Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4 (6.4)	3/4 (19.1)	Center of Masonry Unit	–	–	–	–	400 (1.8)	650 (2.9)
	3/4 (19.1)	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)	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<sup>1</sup>

Anchor Diameter <i>d</i> in. (mm)	Minimum Embedment Depth <i>h<sub>v</sub></i> in. (mm)	Anchor Location	Grout-Filled Concrete Masonry ASTM C 90		Hollow Concrete Masonry ASTM C 90		Brick Masonry	
			Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4 (6.4)	3/4 (19.1)	Center of Masonry Unit	–	–	–	–	80 (0.4)	130 (0.6)
	3/4 (19.1)	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)	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.