

# 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<br>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, Oval Head



Wall-Dog Chrome, Pan Head



Wall-Dog White, Oval Head



Wall-Dog White, Pan 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 Concrete<sup>1</sup>**

| Anchor Diameter<br><i>d</i><br>in.<br>(mm) | Minimum Embedment Depth<br><i>h<sub>v</sub></i><br>in.<br>(mm) | Minimum Concrete Compressive Strength<br><i>f'<sub>c</sub></i> ≥ 4,000 psi (27.6 MPa) |                       |                         |                       |
|--------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------|-------------------------|-----------------------|
|                                            |                                                                | Ultimate Load                                                                         |                       | Allowable Load          |                       |
|                                            |                                                                | Tension<br>lbs.<br>(kN)                                                               | Shear<br>lbs.<br>(kN) | Tension<br>lbs.<br>(kN) | Shear<br>lbs.<br>(kN) |
| 1/4<br>(6.4)                               | 3/4<br>(19.1)                                                  | 350<br>(1.6)                                                                          | 1,030<br>(4.6)        | 90<br>(0.4)             | 260<br>(1.2)          |
|                                            | 1<br>(25.4)                                                    | 700<br>(3.2)                                                                          | 1,070<br>(4.8)        | 175<br>(0.8)            | 270<br>(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<br><i>d</i><br>in.<br>(mm) | 1/2" Wallboard          |                       | 5/8" Wallboard          |                       | 3/4" Plywood            |                       |
|--------------------------------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|
|                                            | Tension<br>lbs.<br>(kN) | Shear<br>lbs.<br>(kN) | Tension<br>lbs.<br>(kN) | Shear<br>lbs.<br>(kN) | Tension<br>lbs.<br>(kN) | Shear<br>lbs.<br>(kN) |
| 1/4<br>(6.4)                               | 85<br>(0.4)             | 245<br>(1.1)          | 135<br>(0.6)            | 360<br>(1.6)          | 255<br>(1.1)            | 600<br>(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<br><i>d</i><br>in.<br>(mm) | 1/2" Wallboard          |                       | 5/8" Wallboard          |                       | 3/4" Plywood            |                       |
|--------------------------------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|
|                                            | Tension<br>lbs.<br>(kN) | Shear<br>lbs.<br>(kN) | Tension<br>lbs.<br>(kN) | Shear<br>lbs.<br>(kN) | Tension<br>lbs.<br>(kN) | Shear<br>lbs.<br>(kN) |
| 1/4<br>(6.4)                               | 20<br>(0.1)             | 60<br>(0.3)           | 35<br>(0.2)             | 90<br>(0.4)           | 65<br>(0.3)             | 150<br>(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<br><i>d</i><br>in.<br>(mm) | Minimum Embedment Depth<br><i>h<sub>v</sub></i><br>in.<br>(mm) | Anchor Location        | Grout-Filled Concrete Masonry<br>ASTM C 90 |                       | Hollow Concrete Masonry<br>ASTM C 90 |                       | Brick Masonry           |                       |
|--------------------------------------------|----------------------------------------------------------------|------------------------|--------------------------------------------|-----------------------|--------------------------------------|-----------------------|-------------------------|-----------------------|
|                                            |                                                                |                        | Tension<br>lbs.<br>(kN)                    | Shear<br>lbs.<br>(kN) | Tension<br>lbs.<br>(kN)              | Shear<br>lbs.<br>(kN) | Tension<br>lbs.<br>(kN) | Shear<br>lbs.<br>(kN) |
| 1/4<br>(6.4)                               | 3/4<br>(19.1)                                                  | Center of Masonry Unit | –                                          | –                     | –                                    | –                     | 400<br>(1.8)            | 650<br>(2.9)          |
|                                            | 3/4<br>(19.1)                                                  | T-Joint                | –                                          | –                     | –                                    | –                     | 350<br>(1.6)            | 600<br>(2.7)          |
|                                            | 1<br>(25.4)                                                    | Center of Masonry Unit | 285<br>(1.3)                               | 825<br>(3.7)          | 305<br>(1.4)                         | 825<br>(3.7)          | 600<br>(2.7)            | 900<br>(4.1)          |
|                                            | 1<br>(25.4)                                                    | T-Joint                | 290<br>(1.3)                               | 915<br>(4.1)          | 290<br>(1.3)                         | 915<br>(4.1)          | 380<br>(1.7)            | 825<br>(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.

**WALL ANCHORS**

**PERFORMANCE DATA**

**Allowable Load Capacities for Wall-Dog in Grout-Filled, Hollow Concrete Masonry and Structural Brick Masonry<sup>1</sup>**

| Anchor Diameter<br><i>d</i><br>in.<br>(mm) | Minimum Embedment Depth<br><i>h<sub>v</sub></i><br>in.<br>(mm) | Anchor Location        | Grout-Filled Concrete Masonry<br>ASTM C 90 |                       | Hollow Concrete Masonry<br>ASTM C 90 |                       | Brick Masonry           |                       |
|--------------------------------------------|----------------------------------------------------------------|------------------------|--------------------------------------------|-----------------------|--------------------------------------|-----------------------|-------------------------|-----------------------|
|                                            |                                                                |                        | Tension<br>lbs.<br>(kN)                    | Shear<br>lbs.<br>(kN) | Tension<br>lbs.<br>(kN)              | Shear<br>lbs.<br>(kN) | Tension<br>lbs.<br>(kN) | Shear<br>lbs.<br>(kN) |
| 1/4<br>(6.4)                               | 3/4<br>(19.1)                                                  | Center of Masonry Unit | –                                          | –                     | –                                    | –                     | 80<br>(0.4)             | 130<br>(0.6)          |
|                                            | 3/4<br>(19.1)                                                  | T-Joint                | –                                          | –                     | –                                    | –                     | 70<br>(0.3)             | 120<br>(0.5)          |
|                                            | 1<br>(25.4)                                                    | Center of Masonry Unit | 55<br>(0.2)                                | 165<br>(0.7)          | 60<br>(0.3)                          | 165<br>(0.7)          | 120<br>(0.5)            | 180<br>(0.8)          |
|                                            | 1<br>(25.4)                                                    | T-Joint                | 60<br>(0.3)                                | 185<br>(0.8)          | 60<br>(0.3)                          | 185<br>(0.8)          | 75<br>(0.3)             | 165<br>(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 |          | Description         | Standard Box | Standard Carton |
|----------------|----------|---------------------|--------------|-----------------|
| Oval Head      | Pan Head |                     |              |                 |
| 2314           | 2316     | Wall-Dog Chrome     | 100          | 1,000           |
| 2328           | 2330     | Wall-Dog White Head | 100          | 1,000           |



**Wall-Dog Master Pack**

| Catalog Number |          | Description                     | Standard Box |
|----------------|----------|---------------------------------|--------------|
| Oval Head      | Pan Head |                                 |              |
| 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)**

| 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



WALL ANCHORS