

## Strap-Toggle™ Hollow Wall Anchor

### PRODUCT DESCRIPTION

The Strap-Toggle is a heavy duty hollow wall anchor designed for use in base materials such as plaster, wallboard, concrete block or hollow tile. The Strap-Toggle is a pre-assembled anchor consisting of a carbon steel wing and a locking cap/ratchet leg assembly molded from engineered plastic. It is available in 3/16", 1/4", 3/8" and 1/2" sizes. When compared to traditional toggles, this unique anchor can be installed in a smaller hole and does not require a fixture or screw to set it. The anchor can be easily adjusted to accommodate a wall thickness of up to 2 1/2" while using a shorter bolt. The bolt and fixture may be installed and removed as often as necessary.

### FEATURES AND BENEFITS

- Adjustable to accommodate various wall thickness up to 2 1/2"
- Allows for fixture and bolt/screw removal and re-anchoring
- Federal GSA Specification – Meets the descriptive requirements of FF-B-588D, Type V for a captive toggle (superseded)

### MATERIAL SPECIFICATIONS

| Anchor Component | Component Material                  |
|------------------|-------------------------------------|
| Wing             | AISI 1010                           |
| Plating          | ASTM B633, SC1, Type III, (Fe/Zn 5) |
| Anchor Body      | Engineered Plastic                  |

### INSTALLATION SPECIFICATIONS

| Dimension   | Anchor Diameter, <i>d</i> |        |        |        |
|---|---------------------------|--------|--------|--------|
|   | 3/16"                     | 1/4"   | 3/8"   | 1/2"   |
| ANSI Drill Bit Size, <i>d<sub>bit</sub></i> (in.)         | *1/2                      | *1/2   | **3/4  | **3/4  |
| Cap Size (in.)  | 5/8                       | 5/8    | 1      | 1      |
| Grip Range (in.)  | 2 1/2                     | 2 1/2  | 2 1/2  | 2 1/2  |
| Thread Size (UNC)   | 3/16-24                   | 1/4-20 | 3/8-16 | 1/2-13 |
| Max. Tightening Torque, <i>T<sub>max</sub></i> , (ft-lbs) | 5                         | 5      | 5      | 5      |
| Minimum Clearance (in.)                                   | 1 7/8                     | 1 7/8  | 1 7/8  | 1 7/8  |

\* 9/16" diameter bit may be required for very dense materials.  
 \*\* 13/16" diameter bit may be required for very dense materials.

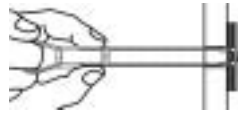
### Installation Guidelines



Drill the proper size hole into the cavity of the hollow base material.



Position the wing parallel to the plastic legs and slide the anchor through the drilled hole into the hollow cavity.



Pull the wing firmly against the inside wall of the hollow material using the ring, then slide the plastic cap forward until the flange is seated flush against the work surface.



Place your thumb between the plastic straps and snap the straps off.



Position the fixture. Insert the bolt through the fixture and tighten. The minimum bolt length should be at least 1/2" longer than the combined wall and fixture.

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Strap-Toggle

### ANCHOR MATERIALS

Engineered Plastic  
Carbon Steel (Wing)

### ANCHOR SIZE RANGE (TYP.)

3/16" to 1/2" diameter

### SUITABLE BASE MATERIALS

Wallboard  
Hollow Concrete Masonry

**PERFORMANCE DATA**

**Ultimate Load Capacities for Strap-Toggle in Wallboard<sup>1</sup>**

| Anchor Diameter<br><i>d</i><br>in.<br>(mm) | 3/8" Wallboard          |                       | 1/2" Wallboard          |                       | 5/8" Wallboard          |                       | 3/4" Wallboard          |                       |
|--|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|
|  | 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) | Tension<br>lbs.<br>(kN) | Shear<br>lbs.<br>(kN) |
| 3/16<br>(4.8)                              | 120<br>(0.5)            | 240<br>(1.1)          | 130<br>(0.6)            | 285<br>(1.3)          | 195<br>(0.9)            | 380<br>(1.7)          | 205<br>(0.9)            | 440<br>(2.0)          |
| 1/4<br>(6.4)                               | 130<br>(0.6)            | 270<br>(1.2)          | 145<br>(0.7)            | 295<br>(1.3)          | 210<br>(0.9)            | 420<br>(1.9)          | 215<br>(1.0)            | 470<br>(2.1)          |
| 3/8<br>(9.5)                               | 135<br>(0.6)            | 275<br>(1.2)          | 150<br>(0.7)            | 300<br>(1.4)          | 220<br>(1.0)            | 420<br>(1.9)          | 230<br>(1.0)            | 475<br>(2.1)          |
| 1/2<br>(12.7)                              | 140<br>(0.6)            | 290<br>(1.3)          | 150<br>(0.7)            | 355<br>(1.6)          | 220<br>(1.0)            | 430<br>(1.9)          | 230<br>(1.0)            | 485<br>(2.2)          |

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 Strap-Toggle in Wallboard<sup>1</sup>**

| Anchor Diameter<br><i>d</i><br>in.<br>(mm) | 3/8" Wallboard          |                       | 1/2" Wallboard          |                       | 5/8" Wallboard          |                       | 3/4" Wallboard          |                       |
|--|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|
|  | 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) | Tension<br>lbs.<br>(kN) | Shear<br>lbs.<br>(kN) |
| 3/16<br>(4.8)                              | 30<br>(0.1)             | 60<br>(0.3)           | 35<br>(0.2)             | 70<br>(0.3)           | 50<br>(0.2)             | 95<br>(0.4)           | 50<br>(0.2)             | 110<br>(0.5)          |
| 1/4<br>(6.4)                               | 35<br>(0.2)             | 70<br>(0.3)           | 35<br>(0.2)             | 75<br>(0.3)           | 55<br>(0.2)             | 105<br>(0.5)          | 55<br>(0.2)             | 120<br>(0.5)          |
| 3/8<br>(9.5)                               | 35<br>(0.2)             | 70<br>(0.3)           | 40<br>(0.2)             | 75<br>(0.3)           | 55<br>(0.2)             | 105<br>(0.5)          | 60<br>(0.3)             | 120<br>(0.5)          |
| 1/2<br>(12.7)                              | 35<br>(0.2)             | 75<br>(0.3)           | 40<br>(0.2)             | 90<br>(0.4)           | 55<br>(0.2)             | 110<br>(0.5)          | 60<br>(0.3)             | 120<br>(0.5)          |

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

**Ultimate and Allowable Load Capacities for Strap-Toggle in Hollow Concrete Masonry<sup>1,2</sup>**

| Anchor Diameter<br><i>d</i><br>in.<br>(mm) | Drill Bit Diameter<br><i>d<sub>bit</sub></i><br>in.<br>(mm) | <i>f'<sub>m</sub></i> ≥ 1,500 psi (10.4 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) |
| 3/16<br>(4.8)                              | 1/2<br>(12.7)   | 1,080<br>(4.9)                               | 740<br>(3.3)          | 215<br>(1.0)            | 150<br>(0.7)          |
| 1/4<br>(6.4)                               | 1/2<br>(12.7)   | 1,355<br>(6.1)                               | 1,420<br>(6.4)        | 270<br>(1.2)            | 285<br>(1.3)          |
| 3/8<br>(9.5)                               | 3/4<br>(19.1)   | 1,435<br>(6.5)                               | 2,330<br>(10.5)       | 285<br>(1.3)            | 465<br>(2.1)          |
| 1/2<br>(12.7)                              | 3/4<br>(19.1)   | 1,720<br>(7.7)                               | 2,980<br>(13.4)       | 345<br>(1.6)            | 595<br>(2.7)          |

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**

**Strap-Toggle** (Not packaged with screws)

| Cat. No. | Anchor Size | Drill Diameter | Wall Thickness | Std. Box | Std. Carton | Wt./100 |
|----------|-------------|----------------|----------------|----------|-------------|---------|
| 4052     | 3/16" x 4"  | 1/2"           | 3/8" - 2 1/2"  | 50       | 300         | 3 1/2   |
| 4054     | 1/4" x 4"   | 1/2"           | 3/8" - 2 1/2"  | 50       | 300         | 3 1/2   |
| 4056     | 3/8" x 4"   | 3/4"           | 3/8" - 2 1/2"  | 25       | 150         | 5       |
| 4058     | 1/2" x 4"   | 3/4"           | 3/8" - 2 1/2"  | 25       | 150         | 5       |



WALL ANCHORS