

Standard Wing Toggles



Description

The Standard Wing Toggle anchor is a two-part hollow wall anchor consisting of a machine bolt and a spring wing toggle. The snap-open action eases installation and spreads the working load over a greater surface area. They are designed for use in wallboard/drywall, block and other hollow base materials.



Key Features & Benefits

- ▶ Two-part assembly consisting of a machine bolt and a spring wing toggle
- ▶ Wing toggle spreads load over a wide area
- ▶ Snap-open action eases installation
- ▶ Adjustable to accommodate various wall thickness
- ▶ Easy to use and works in a variety of hollow base materials



Specifications, Listings and Approvals

Available Bolt Diameters: 1/8" – 3/8"

Material:

Wing/Bolt/Nut : AISI 1010

Finish: Zinc Plated ASTM B633, SCI, Type III

Installation Information

Instructions

1. Drill appropriate size hole.
2. Insert bolt through the fixture and thread into the wing.
3. Push toggle wing through the drilled hole and fasten tight.

NOTE: Always wear safety glasses. Normal safety precautions should be observed when drilling the holes to avoid electrical installations, other utilities and reinforcement bars.

Installation Data

| Bolt Dia. (in.) | Drill Bit Dia. (in.) | Wing Clearance (in.) | Thread Size (UNC) |
|-----------------|----------------------|----------------------|-------------------|
| 1/8 | 3/8 | 1-1/16 | 6-32 |
| 3/16 | 1/2 | 1-3/8 | 10-24 |
| 1/4 | 5/8 | 1-1/2 | 1/4-20 |
| 3/8 | 7/8 | 2-1/8 | 3/8 - 16 |

Performance Data

Allowable Loads (lbs.) – Wallboard

| Bolt Dia. (in.) | Drill Bit Dia. (in.) | 3/8" Wallboard | | 1/2" Wallboard | | 5/8" Wall board | | 3/4" Wallboard | |
|-----------------|----------------------|----------------|-------|----------------|-------|-----------------|-------|----------------|-------|
| | | Tension | Shear | Tension | Shear | Tension | Shear | Tension | Shear |
| 1/8 | 1/2 | 30 | 30 | 35 | 35 | 45 | 45 | 55 | 55 |
| 3/16 | 9/16 | 35 | 35 | 45 | 45 | 60 | 60 | 70 | 70 |
| 1/4 | 11/16 | 55 | 55 | 60 | 60 | 65 | 65 | 75 | 75 |
| 3/8 | 1 | 60 | 60 | 65 | 65 | 75 | 75 | 85 | 85 |

*Allowable load capacities are calculated using an applied safety factor of 4:1

Ultimate Loads (lbs.) – Wallboard

| Bolt Dia. (in.) | Drill Bit Dia. (in.) | 3/8" Wallboard | | 1/2" Wallboard | | 5/8" Wall board | | 3/4" Wallboard | |
|-----------------|----------------------|----------------|-------|----------------|-------|-----------------|-------|----------------|-------|
| | | Tension | Shear | Tension | Shear | Tension | Shear | Tension | Shear |
| 1/8 | 1/2 | 120 | 120 | 140 | 140 | 180 | 180 | 220 | 220 |
| 3/16 | 9/16 | 140 | 140 | 180 | 180 | 240 | 240 | 280 | 280 |
| 1/4 | 11/16 | 220 | 220 | 240 | 240 | 260 | 260 | 300 | 300 |
| 3/8 | 1 | 240 | 240 | 260 | 260 | 300 | 300 | 340 | 340 |

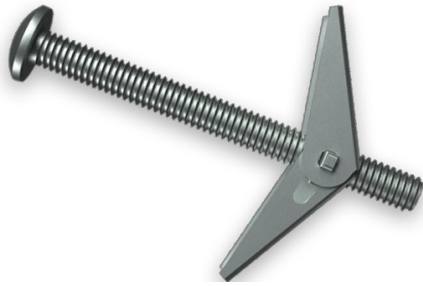
*Allowable load capacities are calculated using an applied safety factor of 4:1

Ultimate and Allowable Loads (lbs.) – Hollow Concrete Masonry

| Bolt Dia. (in.) | Drill Bit Dia. (in.) | 1,500 psi | | | |
|-----------------|----------------------|-----------|-------|----------|-------|
| | | Allowable | | Ultimate | |
| | | Tension | Shear | Tension | Shear |
| 1/8 | 1/2 | 45 | 40 | 180 | 160 |
| 3/16 | 9/16 | 55 | 60 | 220 | 240 |
| 1/4 | 11/16 | 65 | 125 | 260 | 500 |
| 3/8 | 1 | 130 | 150 | 520 | 600 |

*Allowable load capacities are calculated using an applied safety factor of 4:1

Order Information



| Standard Wing Toggles: Zinc-Plated Carbon Steel | | | | | |
|---|-----------|------------|-------------|--------------|-----------------|
| Catalog Number | Bolt Size | Drill Dia. | Thread Size | Box Quantity | Carton Quantity |
| TBM1830 | 1/8 x 3 | 1/2 | 6-32 | 50 | 500 |
| TBM1840 | 1/8 x 4 | 1/2 | 6-32 | 50 | 500 |
| TBM3630 | 3/16 x 3 | 9/16 | 10-24 | 50 | 500 |
| TBM3640 | 3/16 x 4 | 9/16 | 10-24 | 50 | 500 |
| TBM3660 | 3/16 x 6 | 9/16 | 10-24 | 50 | 400 |
| TBM1430 | 1/4 x 3 | 11/16 | 1/4-20 | 50 | 400 |
| TBM1440 | 1/4 x 4 | 11/16 | 1/4-20 | 50 | 400 |
| TBM1460 | 1/4 x 6 | 11/16 | 1/4-20 | 50 | 400 |
| TBM3830 | 3/8 x 3 | 1 | 3/8-16 | 25 | 200 |
| TBM3840 | 3/8 x 4 | 1 | 3/8-16 | 25 | 200 |
| TBM3860 | 3/8 x 6 | 1 | 3/8-16 | 25 | 200 |
| TBM3840 | 3/8 x 4 | 1 | 3/8-16 | 25 | 200 |
| TBM3860 | 3/8 x 6 | 1 | 3/8-16 | 25 | 200 |

For more information, please contact:

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