



TOGGLE BOLTS

| Anchor Size | Thread Size | Drill Bit Size | M | | S | | R | | D | | W | Performance Information | | | | | |
|-------------|-------------|----------------|----------------------|------|------------------------|------|-------------------|------|---------------------|------|--------|-------------------------|-------------------|-------------|-----------------|----------------|--------------|
| | | | Mushroom Head Height | | Mushroom Head Diameter | | Round Head Height | | Round Head Diameter | | | Wing Clearance | In 1/2" Wallboard | | In Hollow Block | | |
| | | | Max | Min | Max | Min | Max | Min | Max | Min | | | Tensile (lbs) | Shear (lbs) | Embedment | Tensile (lbs.) | Shear (lbs.) |
| 1/8 | 6-32 | 3/8 | .097 | .072 | .270 | .256 | .103 | .091 | .260 | .240 | 1.1/16 | 200 | 205 | 3/8 | 310 | 270 | |
| 3/16 | 10-24 | 1/2 | .133 | .099 | .373 | .357 | .137 | .123 | .359 | .334 | 1-3/8 | 245 | 280 | 1/2 | 430 | 700 | |
| 1/4 | 1/4-20 | 5/8 | .175 | .130 | .492 | .473 | .175 | .160 | .472 | .443 | 1-1/2 | 310 | 350 | 5/8 | 830 | 1390 | |
| 5/16 | 5/16-18 | 7/8 | .218 | .162 | .615 | .594 | .216 | .198 | .590 | .557 | 2-1/8 | 330 | 420 | 7/8 | 1070 | 2980 | |
| 3/8 | 3/8-16 | 7/8 | .261 | .195 | .740 | .716 | .256 | .237 | .708 | .670 | 2-1/8 | 340 | 440 | 7/8 | 1385 | 3120 | |
| 1/2 | 1/2-13 | 1-1/4 | .348 | .260 | .987 | .958 | .355 | .332 | .813 | .766 | 3 | 435 | 470 | 1-1/4 | 2550 | 3620 | |

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| Description | A fastening system consisting of (1) two matching steel "wings" each bent at two 90° angles, (2) an internally threaded nut with protrusions spaced 180° apart which serves as a pivot attaching the two wings, (3) a wire spring providing the necessary tension to open and close the wings, and (4) a machine screw which mates with the nut. |
| Applications/ Advantages | Toggle bolts are light-duty anchors for use in hollow block or gypsum wallboard. They spread the load over a larger area and are more temperature resistant than other hollow wall anchors. They are single-use anchors. |
| Material | Wing Body: AISI 1008-1010 or equivalent cold rolled steel Trunnion Nut: 1/4 thr 3/8"; AISI 1010 steel: 1/2": Zamac alloy Screw: carbon steel |
| Tensile and Shear Strengths | Ultimate load capacities for toggle bolts in various materials are listed in the above table. The suggested safe working load is 1/4 the loads listed here. |
| Plating | Toggle bolts are commonly supplied with a clear zinc finish. |