

# **Description**

Our third generation of the ORIGINAL TOGGLER plastic toggle anchors provide vibration-proof anchoring of light to medium loads in hollow walls & ceilings ... but also hold securely when they encounter an unexpected solid, such as a wooden stud, or when performing as wedge anchors in materials with thicknesses above their normal wall grip range. Improvements in the original design have increased holding strength and abuse resistance. Holding arms have been thickened and strengthened without increasing insertion hole size, and major stress points have been significantly reinforced without increasing anchor size. Use TOGGLER SNAPTOGGLE® toggle bolts for highest hollow-wall holding strength.



- ▶ **Strongest** of all plastic toggle anchors—reinforces the wall or ceiling & leads the load away from the hole
- ▶ Vibration & shock proof—won't damage walls or ceiling
- ▶ Can use a screw gun—anti-rotation fins prevent spinning
- Accepts greatest range of screw sizes in each anchor
- ▶ All install in only a small 5/16" hole
- Pre-install without the screw
- ▶ Key-activated **positive locking** system
- Screw can be removed and reinserted in same anchor without loss of holding power
- ▶ **Corrosion-proof** when used with stainless steel screws
- **▶** Nonmagnetic, nonconductive
- All TOGGLER anchors are constructed completely out of inert, non-toxic materials

# **Applications**

- ▶ Drywall
- ▶ Gypsum board
- ▶ Plasterboard
- ▶ Greenboard
- ▶ Fiberglass
- Hollow core doors

- ▶ Thin paneling
- ▶ Sheet metal.
- Acoustic ceilings
- ▶ Masonite® panels
- ▶ Tile over drywall
- ▶ Tile over greenboard







# Specifications, Listings and Approvals

**Materials:** Specially formulated grade of non-corrodible polypropylene

**Screw Specification:** Sheet metal screw or other screw with a sufficiently long thread

#### **Screw Size Range, Diameter:**

All sizes (except TA) = #6 through #14 TA = #8 through #12

#### **Temperature Range:**

-20°F to 212°F

#### **Minimum Clearance Behind Wall:**

All Sizes (except TA) = 3/4"

TA = 1/2"

## **Grip Range:**

TA: 1/8"-1/4" TB: 3/8"-1/2" TC: 5/8"-3/4" TD1: 1" T35: 1-3/8" T39: 1-1/2"

**Drill Bit Diameter:** 5/16" for all sizes **Note:** In very hard materials, like ceramic tile, use 3/8" drill bit.

#### Fed specs:

- Type IV anchor in Federal Specification FF-B-588D (superceded)
- No MSDS needed



# The Unique Way the TOGGLER Plastic Toggle Anchor Works

The setting key toggles the anchor fully open, locking it in place & forming an over-center, load-bearing truss. Added load acts to increase the holding, as the truss moves the load away from the hole: up against the screw and back down against the surface of the wall. Over-center holding and strong, yet flexible, plastic composition provides high resistance to vibration and stress from dynamic loading—the most common causes of anchor failure. Spreading of the load on the wall surface rather than wedging against the gypsum in the interior of the drywall effectively minimizes drywall failure and puts the load on the wall surfaces to maximize load bearing.

Positive tactile feedback of the setting key, in popping the anchor arms over center, is an absolute indication of proper hollow wall setting of the anchor. Do not place excessive pressure on the key and never use a hammer on it, since failure to set indicates either a solid wall or a wall too thick for the anchor to set in its hollow mode. The anchor will operate under such conditions, however, as a wedge and as a compression solid-wall anchor with significant holding strength.





A screw gun is ideal for screw insertion. Anti-rotation fins prevent the anchor from spinning in the wall. The anchors will not collapse or strip out if the head of the screw is simply screwed flush with the object being fastened. Fastening is complete with the seating of the screw head snugly flush with the object being fastened. Do not continue tightening the screw past this point.

- The flexibility of the plastic composition of the anchor acts as a cushion against wall gouging or breakage.
- For all of the TOGGLER plastic toggle anchors, use a 5/16" drill bit. In very hard materials, like ceramic tile, use a 3/8" drill bit.
- Where a drill is not available, a #3 blade (1/4") screwdriver, when rotated, will make a 5/16" installation hole in drywall.
- For critical shear load applications, make the folding arms of the anchor open in the direction of the shear load, usually vertical to the floor.
- Use the red (TK) key to set the TA, TB & TC anchors in hollow walls within their grip range.
- Use the black (TKB) key to set the TD, T35 & T39 anchors in hollow walls in their grip range.

The outward folding required by some competitive anchors (NOT by TOGGLER plastic toggle anchors):

- ▶ requires an extra-long screw, which is more expensive and requires more clearance behind the wall and more time to install
- ▶ has almost no holding power, if the screw enters the anchor at an angle and consequently does not engage the apex of the anchor
- "strips out" the only region capable of securely holding the screw, because, in order to draw down the anchor leg, one needs to keep turning the screw after it has become flush with a fixture.



## **Installation Information - Hollow Material**

#### Instructions

- 1. Drill a 5/16" diameter hole. Fold anchor in middle. **Note:** Use a 3/8" drill in very hard materials.
- 2. Insert anchor in hole and tap flush. Only 3/4" clearance needed behind wall. Only 1/2" clearance for the TA anchor.
- Insert key to pop anchor open behind hollow wall or ceiling (not necessary for thick or solid walls). Do not hammer key. Remove key.
- 4. Place item over anchor. Insert screw and tighten until flush with item—then stop. **Do not** overtighten.

**Note:** Only the threaded portion of the screw (TL) should be in the anchor itself; any unthreaded shank portion of the screw (S) may be in the fixture or item being anchored, but **not** in the anchor.













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Scan for hollow material installation video

# **Installation Data**

#### **Size Selection Chart**

	Fully Toggled Wedge		Expansion Anchor	Screw Size Range	Drill Bit Diameter*	
Wall Anchor	S < T >	S T	S	Sheet Metal Screw D  Wood Screw S TL  L	$\frac{1}{\sqrt{2}}$	
TA®	T = 1/8"-1/4"	T > 1/4"	X = 1"	D = #8-#12 TL = 1" TL = 1" + S	Ø = 5/16"	
TB°	T = 3/8"-1/2"	T > 1/2"	X = 1-1/4"	D = #6-#14 TL = 1-1/4" L = 1-1/4" + S	Ø = 5/16"	
TC®	T = 5/8"-3/4"	T > 3/4"	X = 1-1/2"	D = #6-#14 TL = 1-1/2" L = 1-1/2" + S	Ø = 5/16"	
TD <sup>TM</sup>	T = 1"	T > 1"	X = 2"	D = #6-#14 TL = 2" L = 2" + S	Ø = 5/16"	
Т35™	T = 1-3/8"	T > 1-3/8"	X = 2-1/4"	D = #6-#14 TL = 2-1/4" L = 2-1/4" + S	Ø = 5/16"	
Т39™	T = 1-1/2"	T > 1-1/2"	X = 2-1/2"	D = #6-#14 TL = 2-1/2" L = 2-1/2" + S	Ø = 5/16"	



#### **Installation Information - Solid Material**







Scan for solid material installation video



2. Fold anchor in the middle and insert anchor in hole and tap flush



3. In hollow walls, insert key to pop open anchor behind wall or ceiling. No key necessary for thick or solid walls. Do not hammer key



4. Place item over anchor. Insert screw and tighten until flush with item, then stop



Each anchor holds securely, even if it hits an unexpected solid, like a stud

# **Performance Data**

### **Ultimate Tensile Pull-Out Values (lbs.)**

Anchor	Grip Range	Drill Diameter⁵	Tested Screw Size	Plywood	3/8" Drywall	1/2" Drywall	5/8" Drywall
TA®	1/8" - 1/4"	5/16"	#8	124 <sup>1</sup>	-	-	-
TB®	3/8"- 1/2"	5/16"	#8	175 <sup>2</sup>	97	143	102 <sup>3</sup>
TC®	5/8" - 3/4"	5/16"	#8	-	-	-	159

#### **Ultimate Shear Pull-Out Values (lbs.)**

Anchor	Grip Range	Drill Diameter <sup>5</sup>	Tested Screw Size	Plywood	3/8" Drywall	1/2" Drywall	5/8" Drywall
TA	1/8" - 1/4"	5/16"	#8	265 <sup>1</sup>	-	126 <sup>4</sup>	-
TB	3/8" - 1/2"	5/16"	#8	-	126	167	2143
TC	5/8" - 3/4"	5/16"	#8	-	-	-	237

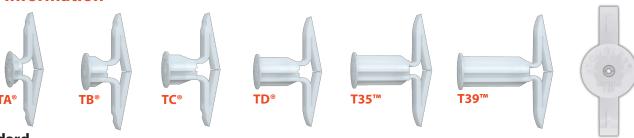
- <sup>1</sup> 1/4" Plywood was used
- <sup>2</sup> 1/2" Plywood was used
- <sup>3</sup> #10 screw tested; anchor used as wedge anchor (not toggled fully open), since substrate is thicker than grip range
- <sup>4</sup> Anchor used as a wedge anchor (not toggled fully open), since substrate is thicker than grip rang.
- <sup>5</sup> In very hard materials, like ceramic tile, use 3/8" drill bit.

#### Notes:

- Industry safety standards recommend using only 1/4 of ultimate tensile and shear values as the maximum load per anchor.
- Holding strength for a TOGGLER plastic toggle anchor varies directly with the strength and condition of the substrate, the screw size, and the extent of the screw engagement—and inversely with variations in hole diameter and the distance of the load from the wall.
- All figures in pounds. Pull-out values based on independent laboratory tests done according to U.S. Government standards. They should be used as guides only and cannot be guaranteed. The age, condition, and capacity of the substrate must be considered.



## **Order Information**



#### **Standard**

Catalog Number	Style	Drill Bit Size (in.)*	Screw Size Range	Grip Range (in.)	Included Screw Size**	Box / Bag (pcs.)	Master Carton (pcs.)
11009	TA	5/16	#8 - #12	1/8 - 1/4	no screws	100	1000
50275	TA	5/16	#8 - #12	1/8 - 1/4	#8 x 1-1/4	5	50
11010	TB	5/16	#6 - #14	3/8 - 1/2	no screws	100	1000
50300	TB	5/16	#6 - #14	3/8 - 1/2	#8 x 1-1/2	5	50
50525	TB	5/16	#6 - #14	3/8 - 1/2	#8 x 1-1/2	20	200
11011	TC	5/16	#6 - #14	5/8 - 3/4	no screws	100	1000
50325	TC	5/16	#6 - #14	5/8 - 3/4	#8 x 1-3/4	5	50
50550	TC	5/16	#6 - #14	5/8 - 3/4	#8 x 1-3/4	20	200
11021	TD	5/16	#6 - #14	1	no screws	50	500
11029	T35	5/16	#6 - #14	1-3/8	no screws	50	500
11030	T39	5/16	#6 - #14	1-1/2	no screws	25	250

<sup>\*</sup> In very hard materials, like ceramic tile, drill a 3/8" hole.

Bulk Quantaties Available for all Plastic Toggle Anchors

# For more information, please contact:





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<sup>\*\*</sup> SMS: Sheet Metal Screw