

TOGGLER® ANCHOR SYSTEM

Technical Bulletin



SNAPTOGGLE® HEAVY-DUTY HOLLOW-WALL ANCHORS

The latest generation of the ever evolving TOGGLER hollow-wall anchor technology...

The SNAPTOGGLE anchor is a **heavy-duty** hollow wall anchor for use in walls, ceilings, or floors of materials such as gypsum board, drywall with a wood or steel stud, concrete block, tile over drywall, wood, etc.

The anchor is pre-assembled and supplied **ready for immediate use**. The ratcheting strap / locking cap assembly positions the strong one-piece zinc-plated (or stainless) steel anchoring channel on the rear of the wall, capturing it snugly and securely between the anchoring channel and the cap. The remaining portion of the straps on the outside of the wall are then easily and quickly snapped off by hand at the required length, flush with the surface of the wall (no extra tools required). Holding is dependent only on a metal bolt to metal channel connection.

Benefits compared to wing toggles:

- Holds up to **2x** the load
- Solid metal channel resists vibration & shock
- Pre-assembled and ready for immediate use
- Pre-installs without fixture or bolt
- Installs in a significantly smaller hole
- Automatically adjusts to thickness of wall, ceiling, or floor
- Does NOT spin—bolt installs with a screw gun
- Uses a shorter bolt—no need to carry a wing
- New plating is 7 times more corrosion-resistant and RoHS compliant
- Does NOT fall behind wall when bolt is removed; fixture can be removed and reinstalled as often as desired.

TENSILE [kg]									
Anchor	Metric thread	Drill dia. (mm)	12.5mm Drywall	15mm Drywall	**12.5mm w/ 25ga stud	**15mm w/ 25ga stud	Concrete block	12.5mm steel plate	Stainless in 12.5mm steel ³
BM5	M5	13	108	161	186	209	363	416 ¹	541 ¹
BM6	M6	13	120	161	192	210	489	582 ²	787 ¹
BM8	M8	19	122	217	199	216	635	762	960
BM10	M10	19	124	261	211	221	791	767	1144 ¹

SHEAR [kg]				
Anchor	Metric thread	Drill dia. (mm)	12.5mm Drywall	15mm Drywall
BM5	M5	13	112	135
BM6	M6	13	109	146
BM8	M8	19	132	184

* Failure measured as onset of gouging of drywall material

** Failure measured as breakage of drywall portion

*** Failure of block

¹ Stainless steel bolts used

² Hardened bolts used

³ Stainless steel channel tested with stainless bolts in 12.5mm steel plate

All tests carried out indicate the ultimate working load (UWL) using equivalent UNC thread anchors & bolts. Holding values converted from lb to kg. Industry safety standards recommend ¼ of UWL.

- Industry standards recommend 1/4 of ultimate test load.
- Holding strength for a SNAPTOGGLE heavy-duty hollow-wall anchor varies directly with the strength and condition of the substrate and the bolt size—and inversely with variations in hole diameter and the distance of the load from the wall.
- All figures in Kilograms (kg). 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.

SNAPTOGGLE® HEAVY-DUTY HOLLOW-WALL ANCHORS

Specifications

Description — SNAPTOGGLE Heavy-Duty Hollow-Wall Anchors (Toggle Bolts)

Material — RoHS compliant zinc-plated 1010 cold rolled steel (or 300 series stainless steel) metal channel, high-impact polystyrene straps and handle, translucent polypropylene co-polymer cap

Screw specification — Metric thread machine screw (bolt) to match thread in metal channel

Minimum screw length — thickness of wall or ceiling + thickness of item being fastened + 12.5mm

Minimum clearance behind wall — 48mm

Minimum drywall thickness — 9.5mm

Maximum drywall thickness — 92mm for BM5 & BM6 anchors

63mm for BM8 & BM10 anchors

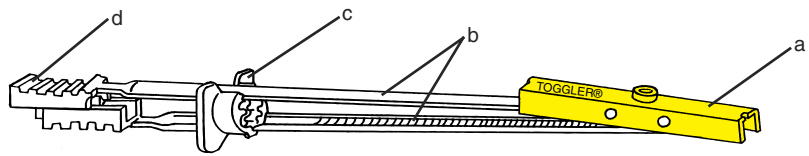
241mm for BM5L & BM6L anchors

Also available:

- UNC-threaded channels [3/16-24, 1/4-20, 5/16-18, 3/8-16, 1/2-13]
- Stainless steel channels

The plastic straps and cap washer are positioning and retention elements only. They do not otherwise function as anchoring elements. Holding is dependent only on a metal bolt to metal channel connection.

- a = anchoring channel / zinc-plated cold rolled steel or 300 series stainless steel
 b = straps / high-impact polystyrene / locking ratchet
 c = cap / translucent polypropylene copolymer
 d = ergonomic handle / same as straps



Code	Metric Bolt thread	Drill Diameter	Grip Range
BM5	M5	13mm	9.5 - 92mm
BM6	M6	13mm	9.5 - 92mm
BM8	M8	19mm	9.5 - 63mm
BM10	M10	19mm	9.5 - 63mm
BM5L*	M5	13mm	60 - 241mm
BM6L*	M6	13mm	60 - 241mm

*The same product codes with an "L" at the end indicate Long straps for roofing and very thick walls or ceilings.

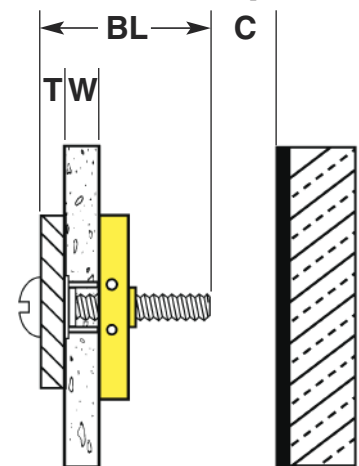
The same product codes with an "S" at the end indicate stainless steel, e.g:

BM6 = M6 thread in the zinc-plated channel

BM6S = M6 thread in a stainless steel channel

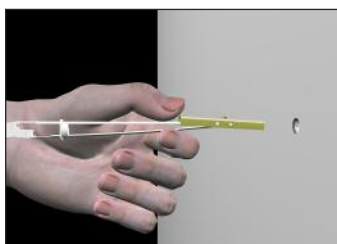
- Gently hand engage at least one thread of bolt with channel before using screw gun to avoid cross threading the bolt.
- For maximum shear holding, orient channels vertically to floor.
- Use hardened or stainless bolts for maximum weight load.
- Enlargement of specified insertion holes size will reduce anchor effectiveness.
- Remove anchor by removing bolt, inserting screwdriver and popping channel behind wall off plastic straps with a sharp blow.
- All SNAPTOGGLE anchors meet the requirements of Type V anchors in Federal Specification FF-B-588-D (superseded).
- All bolts and threaded rods used with SNAPTOGGLE anchors must meet ANSI or HR 3000 standards to ensure safety and effectiveness.

BL = T + W + 12.5mm
 [For min. W & max. W., see chart at left]

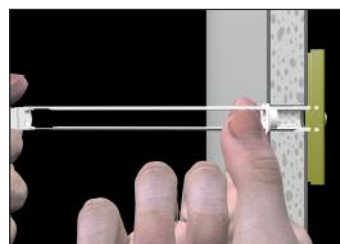


C = 48mm

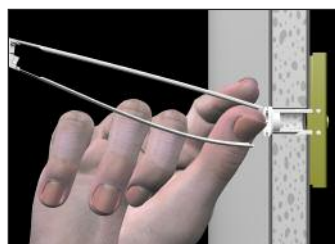
Installation Instructions



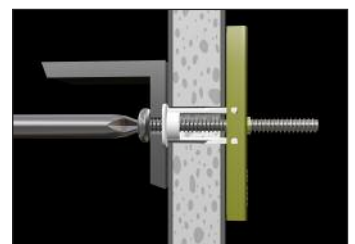
Drill appropriate size hole. Hold metal channel flat alongside plastic straps & slide channel through the hole.
 Minimum clearance behind wall: only 48mm.



Hold ends of straps together between thumb & forefinger and pull toward you until channel rests behind wall. Ratchet cap along straps with other hand until flange of cap is flush with wall.



Place thumb between straps at wall. Push thumb side to side, snapping off straps level with flange of cap.



Place item over flange. Insert bolt and tighten until snug against item, then stop.
 Use machine screw or bolt to match thread in metal channel.

SNAPTOGGLE® HEAVY-DUTY HOLLOW-WALL ANCHORS

Applications

- Flat panel TV's
- TV mounts
- Lighting fixtures
- Window treatments
- Marine applications
- Hand rails
- Grab bars
- ADA hardware
- Office furniture
- Heavy machinery
- Partitions
- Cabinets
- Shelving
- Solar panels
- Garage doors
- Sinks
- Heavy fans
- DSS antennas
- Reinstallations
- Roofs & decking

For maximum holding in

- Cinder block
- Concrete block
- Gypsum board
- Drywall
- Tile over drywall
- Plasterboard
- Composite panels
- Cement board
- Greenboard
- Plaster
- Stucco
- Fiberglass
- Plywood
- Steel plate
- Plastic
- Wood studs / beams

Benefits

- **Strong**—up to **2x the load** of an old-fashioned wing toggle
- Solid metal channel **resists vibration and shock**
 - bolt is centered in channel and positioned for precise installation
 - bolt threads never touch interior surface of hole and so can't saw through substrate
- **Save time**—at least **6 minutes** per anchor versus wing toggles
- Can use a screw gun—anchor does not spin
- **Save money**—turn a 2-person job into a 1-person job
- Use a **shorter bolt**—no need to carry a wing through the wall
- New, patented strap design with sturdier straps and smaller ratchet interval:
 - adjusts more precisely and **snaps off flush** to wall, ceiling, or floor
 - does **not break** prematurely
 - pushes aside insulation
- **Smallest installation hole** for each bolt size—
 - maintains integrity of wall, ceiling, or floor, **strengthening the anchoring**
 - ends the need to patch an oversized hole[a 6mm wing toggle requires a 19mm diameter hole: **50% larger** than the 13mm diameter hole used by the BM6 SNAPTOGGLE anchor]
- New plating is RoHS compliant and **7x more corrosion-resistant** than B633-85 Type III/SC 1 government spec high quality zinc plating [350 hours to red rust in salt spray test versus only 48 hours for government spec]
- **Pre-installs without the bolt** to make handling of fixture easier
- **Reusable** in the same hole—remove the bolt without losing the anchor
- New **ergonomic design**—fingers grip straps more naturally and more easily with **no slipping**



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