

SCREWBOLT ANCHOR



12.11 PRODUCT DATA

Head Types:

- Hex
- Hex Flanged
- Countersunk
- Eye Bolt
- Swag Hook
- Tie Down

Material Coating:

- Yellow Zinc Plated
- Galvanised (Pictured)

12.12 PRODUCT DESCRIPTION

The Macsim Screwbolt is designed for medium to heavy duty applications in solid concrete of 25MPa or greater, offering a variety of head types and finishes. The Screwbolt exerts no expansion pressure and can be used close to edges without damaging the base material.

12.13 INSTALLATION METHOD

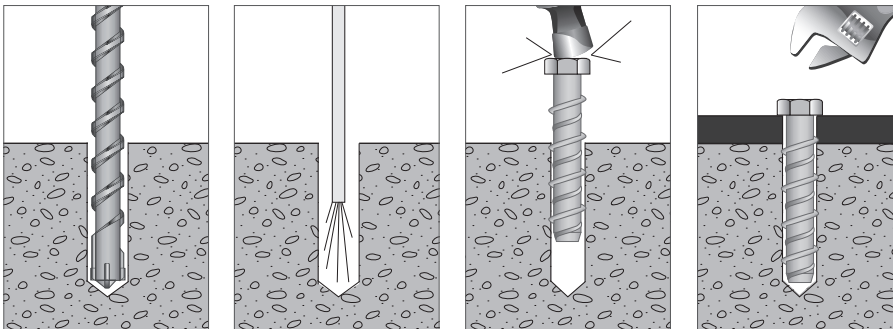
1. Drill Correct Diameter and depth of hole as specified. A clearance hole of at least >1mm diameter is required through component. The hole depth must be at least 2 x the bolt/ drill diameter, deeper than the bolt embedment.
2. Clean hole by brushing and blowing out dust carefully.
3. Place the Screwbolt through the fixture, and tighten. Using a calibrated Torque Wrench apply correct torque setting as specified. It is important to keep pressure applied during tightening to ensure grip. If the bolt becomes jammed, back off one turn and re-tighten.

12.14 APPLICATIONS

- Used for Medium to Heavy Duty Loads
- Solid Concrete

12.15 ADVANTAGES

- Medium-High Tension Capacity
- Medium-High Shear Load Capacity
- Simple Installation
- Instant Load Capacity



CODE	Bolt Diameter (mm)	Drill Diameter (mm)	Minimum Embed. Depth (mm)	Minimum Hole Depth (mm)	Minimum Structural Thickness (mm)	Minimum* Anchor Spacing (mm)	Minimum* Edge Distance (mm)
SB06(SIZE)	6	6	30	45	75	30	20
SB08(SIZE)	8	8	40	60	90	40	20
SB10(SIZE)	10	10	50	70	100	60	30
SB12(SIZE)	12	12	60	85	115	60	30
SB16(SIZE)	16	16	80	115	120	100	40

* Absolute distances, reduction factors apply.

12.16 MATERIAL SPECIFICATIONS

Manufactured from high grade carbon steel, 8.8 grade.

Torque settings are based on installation in 30MPa minimum. Concrete; Installation in materials other than Concrete are available on request if the material strength is known.

All load data in this document is based on tests in 30MPa concrete but other data may be available on request.

12.161 YELLOW ZINC PLATED & GALVANISED

Diameter (mm)	Yield Strength (N/mm ²)	Ultimate Strength (N/mm ²)	Torque Setting Nm
6	640	800	32
8	640	800	55
10	640	800	55
12	640	800	80
16	640	800	100

12.17 SIMPLE LOAD CHARACTERISTICS

Anchor Size	Hole Diameter (mm)	Min. Embed. Depth (mm)	Ult. Tensile Strength (kN)	Ult. Shear Strength (mm)	Working Load		Anchor Spacing* (mm)	Edge Distance* (mm)
					Tensile (kN)	Shear (kN)		
6	6	30	8.00	10.00	2.00	2.50	100	60
8	8	40	12.00	24.00	3.00	6.00	120	80
10	10	50	18.00	40.00	4.50	10.00	170	100
12	12	60	26.00	54.00	6.50	13.50	200	120
16	16	120	47.83	70.00	11.95	17.5	250	160

Concrete Strength 30MPa

* Reduction Factors apply for distances less than these.