

SCREWBOLT



Description

The Macsim Screwbolt system is based on a completely new fixing concept for anchoring into construction materials. Using threads in metals is standard practice within the engineering industry, as is using woodscrews to cut their thread into wood in the construction industry. Macsim have developed their own self tapping anchor for use in construction materials, such as concrete, stone, brick, block and many more. Thereby, a tried and tested method of fixing for metals and wood to construction materials is applied.

The Macsim Screwbolt thread is designed to give optimum grip within the various substrates, whilst reducing insertion torque to a minimum. Using standard size hammer or percussion drills to drill the hole into which the Macsim Screwbolt is to be fixed. The Macsim Screwbolt cuts its own thread into the substrate as it is screwed in. This self tapping action enables a positive and safe anchorage to be achieved, with the substrate becoming the nut to the Macsim Screwbolt.

Because the anchor cuts its own thread, a safe anchorage is achieved without the need of high tightening forces. There is no expansion with the Macsim Screwbolt and it can be removed and refixed into the same hole, providing the thread is aligned correctly. The preload applied serves only to secure the component being fixed and should not exceed the maximum torque recommended.

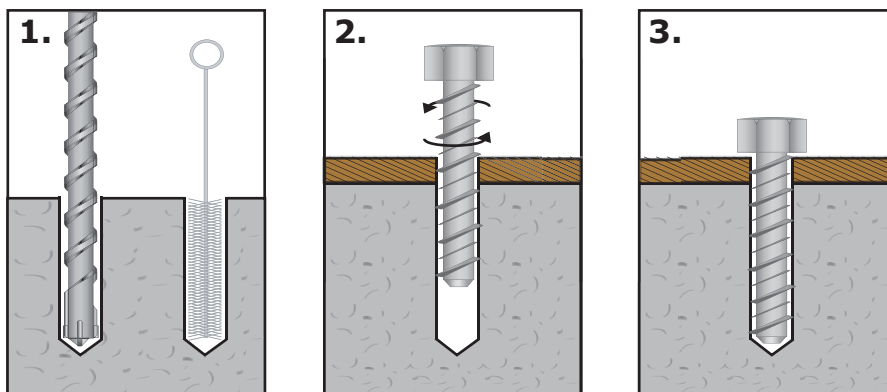
Features

- Available in yellow zinc plate or galvanised
- Variety of head styles
- Ease of application
- Made from high tensile steel
- Easily Removeable
- Can be used in brick, concrete, marble, timberstone.
- High Load Capacities
- Serrated edge under the Hex Head

Typical Applications

- Fences, Gates, Timber Beams, Ballustrading
- Brackets
- Shelving
- Pallet Racking
- Securing Machines.
- Temporary Fixing

Installation Procedure

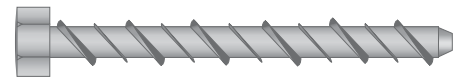


Installation Procedure

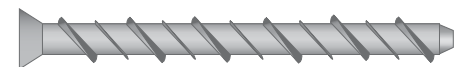
1. Drill correct size hole in substrate and then clean the hole thoroughly
2. Screw anchor in applying light pressure. If resistance is felt, loosen back 1/2 turn then recommence.
3. A clearance hole may be required in the material being fixed.

Installation Recommendations

SCREWBOLTS HEX HEAD - ZINC PLATED					
Code	Size (mm)	Drill (mm)	Length (mm)	Fastens	Box Qty
ZINC PLATED					
SBH05050	5 X 50	5	50	20	25
SBH06030	6 X 30	6	30	3	25
SBH06050	6 X 50	6	50	20	25
SBH06075	6 X 75	6	75	35	25
SBH06100	6 X 100	6	100	50	25
SBH08060	8 X 60	8	60	14	25
SBH08075	8 X 75	8	75	39	25
SBH08100	8 X 100	8	100	50	25
SBH10060	10 X 60	10	60	15	25
SBH10075	10 X 75	10	75	30	25
SBH10100	10 X 100	10	100	50	25
SBH10150	10 X 150	10	150	90	25
SBH12075	12 X 75	12	75	20	25
SBH12100	12 X 100	12	100	46	25
SBH12150	12 X 150	12	150	96	25
CLIMOGARD CLASS 3					
SBGH08060	8 X 60	8	60	14	25
SBGH08075	8 X 75	8	75	39	25
SBGH08100	8 X 100	8	100	50	25
SBGH10060	10 X 60	10	60	15	25
SBGH10075	10 X 75	10	75	30	25
SBGH10100	10 X 100	10	100	50	25
SBGH10150	10 X 150	10	150	90	25
SBGH12075	12 X 75	12	75	20	25
SBGH12100	12 X 100	12	100	6	25
SBGH12150	12 X 150	12	150	96	25



SCREWBOLTS COUNTERSUNK HEAD - ZINC PLATED					
Code	Size (mm)	Drill (mm)	Length (mm)	Fastens	Box Qty
SBC06050	6 X 50	6	50	20	25
SBC06075	6 X 75	6	75	35	25
SBC06100	6 X 100	6	100	50	25

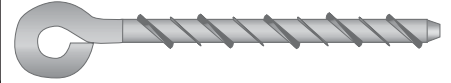


PRODUCT SPECIFICATION MANUAL

Installation Recommendations

SCREWBOLTS EYEBOLT - ZINC PLATED

Code	Size (mm)	Drill (mm)	Length (mm)	Fastens	Box Qty
SBE06050	6 X 50	6	50	-	25
SBE08055	8 X 55	8	55	-	25



SCREWBOLTS SWAG HOOK BOLT - ZINC PLATED

Code	Size (mm)	Drill (mm)	Length (mm)	Fastens	Box Qty
SBS06050	6 X 50	6	50	-	25
SBS08055	8 X 55	8	55	-	25



Material Specification

ANCHOR YZP/CLASS 3 STEEL				ANCHOR BODY A4 STAINLESS STEEL			
Diameter	Yield Strength (N/mm ²)	Ultimate Strength (N/mm ²)	Torque Setting Concrete (Nm)	Diameter	Yield Strength (N/mm ²)	Ultimate Strength (N/mm ²)	Torque Setting Concrete (Nm)
6	640	800	32	6	480	600	25
8	640	800	55	8	480	600	40
10	640	800	55	10	480	600	40
12	640	800	80	12	480	600	60

Torque settings are based on installation in 30 MPa 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 30 MPa concrete but other data may be available on request.

Simple Load Characteristics

Anchor Size	Hole Diameter (mm)	Min. Embed Depth (mm)	Ultimate Strength		Recommended			Edge Distance** (mm)
			Tensile (Kn)	Shear (Kn)	Tensile Working Load (Kn)	Shear Working Load (Kn)	Anchor Spacing** (mm)	
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

Concrete Strength 25 MPa

** Reduction Factors apply for distances less than these.