

MASONBOLT ANCHOR



10.12 PRODUCT DESCRIPTION

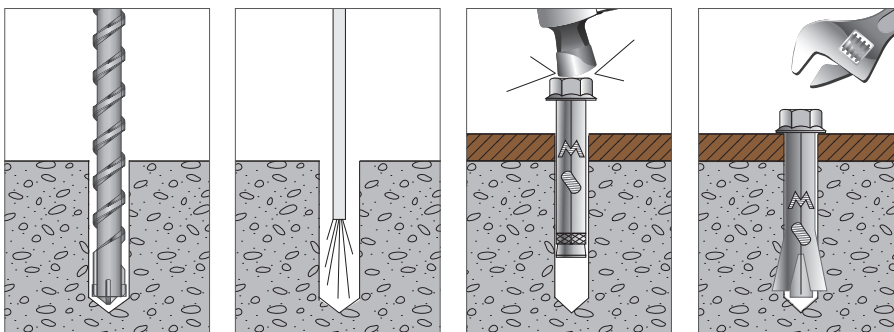
The Macsim Masonbolt is a high quality sleeve anchor designed to give optimal performance in concrete, masonry and other solid base materials.

The design gives medium-high tensile and shear performance, with simple through-fix installation and instantaneous load capability.

The anchor is ideal for attaching steel components to concrete such as wall ties, support brackets, fence supports etc.

10.13 INSTALLATION METHOD

1. Drill Correct Diameter and depth of hole as specified.
2. Clean hole by brushing and blowing out dust carefully.
3. Push Anchor through fixture and hammer down until flush with surface.
4. Using a calibrated Torque Wrench apply correct torque setting as specified. The anchor should not be over tightened or it may be permanently damaged, leading to premature failure. The highly variable amount of expansion means that it may require several turns to fully tighten in softer materials than concrete.



10.11 PRODUCT DATA

Head Type:

- Hex Bolt
- Flush Hex Bolt
- Countersunk
- Eye Bolt
- Eye Hook

Material Coating:

- Yellow Zinc Plated (Pictured)
5.8 Grade Steel
- Galvanised
5.8 Grade Steel
- 316 Stainless Steel

10.14 APPLICATIONS

- Used for Medium Duty Loads
- Attaching Steel to Concrete, such as wall ties, support brackets, & fence supports.

10.15 ADVANTAGES

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

CODE	Anchor Size	Stud/ Bolt Thread Size (mm)	Drill Diameter (mm)	Minimum Hole Depth (mm)	Fixture Clearance Hole Diam. (mm)	Thickness Fastened Range (mm)	Minimum Structural Thickness (mm)	Rec. Tight Torque (Nm)
ALL CODES*	6.5	M5	6.5	40	8	3-45	70	5
ALL CODES*	8	M6	8	45	10	5-50	80	10
ALL CODES*	10	M8	10	50	12	5-85	85	30
ALL CODES*	12	M10	12	70	14	10-79	100	50
ALL CODES*	16	M12	16	75	18	10-92	110	80
ALL CODES*	20	M16	20	80	22	15-90	130	160

* Refers to the following codes

- Yellow Zinc Plated - 5.8 Grade Steel: All head types in the Yellow Zinc Range (See buyers guide for code information)
- Galvanised - 5.8 Grade Steel: All head types in the Galvanised range (See buyers guide for code information)
- 316 Stainless Steel: All head types in the 316 Stainless Steel range. (See buyers guide for code information)

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10.16 MATERIAL SPECIFICATIONS

10.161 YELLOW ZINC PLATED & GALVANISED - 5.8 GRADE STEEL

CODE	Anchor Size (mm)	Hole Diameter (mm)	Bolt		Sleeve	
			Yield Strength (N/mm ²)	Ultimate Strength (N/mm ²)	Yield Strength (N/mm ²)	Ultimate Strength (N/mm ²)
ALL CODES*	6.5	6.5	640	800	640	800
ALL CODES*	8	8	640	800	640	800
ALL CODES*	10	10	550	700	640	800
ALL CODES*	12	12	440	550	640	800
ALL CODES*	16	16	400	500	640	800
ALL CODES*	20	20	320	410	640	800

NOTE: Masonbolt Anchors are Yellow Zinc Plated 8µm yellow Passivated zinc plate; 25µm minimum Galvanised Coating (Bolt and Sleeve; 40µm on Hex Nut)

* Refers to the following codes

- Yellow Zinc Plated - 5.8 Grade Steel: All head types in the Yellow Zinc Range (See buyers guide for code information)
- Galvanised - 5.8 Grade Steel: All head types in the Galvanised range (See buyers guide for code information)

10.162 316 STAINLESS STEEL

CODE	Anchor Size (mm)	Hole Diameter (mm)	Bolt		Sleeve	
			Yield Strength (N/mm ²)	Ultimate Strength (N/mm ²)	Yield Strength (N/mm ²)	Ultimate Strength (N/mm ²)
ALL CODES*	6.5	6.5	480	600	480	600
ALL CODES*	8	8	480	600	480	600
ALL CODES*	10	10	480	600	480	600
ALL CODES*	12	12	480	600	480	600
ALL CODES*	16	16	n/a	n/a		
ALL CODES*	20	20	n/a	n/a		

NOTE: Masonbolt Anchors are Grade 316 Stainless Steel (AISI A4/70).

* Refers to the following codes

- 316 Stainless Steel: All head types in the 316 Stainless Steel range. (See buyers guide for code information)

10.17 SIMPLE LOAD CHARACTERISTICS

Anchor Size (mm)	Hole Diameter (mm)	Min. Embed. Depth (mm)	Ultimate Tensile * (kN)	Ult. Tensile Strength (mm)	Working Load		Anchor Spacing (mm)	Edge Distance (mm)
					Tensile (kN)	Shear (kN)		
6.5	6.5	30	8.00	10.00	1.50	1.70	100	50
8	8	35	9.50	16.00	2.10	2.10	120	55
10	10	40	18.00	25.00	3.70	4.10	135	65
12	12	50	21.00	32.00	5.60	6.30	165	80
16	16	55	30.00	42.00	6.80	8.30	180	90
20	20	60	35.00	62.00	7.50	12.50	200	100

NOTE: Loads are applicable to 30MPa Concrete and on the correct torque setting. Factors such as Close Edge or neighbouring anchor spacing may need to be applied. See following sections.

Data in the following sections is for Yellow Zinc Plated Only.