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PRODUCT DATASHEET

SELF TAPPING MASONRY SCREW

PRODUCT DETAILS

Purpose:	Fixing timber battens, trunking, track and general components to concrete and masonry substrates
Head style:	Countersunk or slotted hexagonal
Drive bit:	Phillips No. 2 or No.3 female socket, or, 5/16" hexagonal male socket (with slot)
Point:	Nail (pyramidal)
Coating:	EvoShield® 500Hr NSST resistant (Aluminium/ Zinc flake bound in resin)
Material:	SAE C1022 Carbon steel

GENERAL PHYSICAL CHARACTERISTICS

SKU	Nominal Dimensions, d_{nom} x L_{nom} (mm)	Fixture Limitations	
		Min. Thickness, t_{min} (mm)	Max. Thickness, t_{max} (mm)
Countersunk (90°) Headed			
MSCSK4.8-32-2	4.8 x 32.0	0	7
MSCSK4.8-45-2	4.8 x 45.0	0	20
MSCSK4.8-57-2	4.8 x 57.0	0	32
MSCSK4.8-70-2	4.8 x 70.0	30	45
MSCSK4.8-82-2	4.8 x 82.0	45	57
MSCSK4.8-100-2	4.8 x 100.0	55	75
MSCSK6.3-32-3	6.3 x 32.0	0	7
MSCSK6.3-45-3	6.3 x 45.0	0	20
MSCSK6.3-57-3	6.3 x 57.0	0	32
MSCSK6.3-70-3	6.3 x 70.0	30	45
MSCSK6.3-82-3	6.3 x 82.0	45	57
MSCSK6.3-100-3	6.3 x 100.0	55	75
MSCSK6.3-125-3	6.3 x 125.0	75	100
MSCSK6.3-150-3	6.3 x 150.0	100	125
Hexagonal Headed			
MSHH6.3-32-516	6.3 x 32.0	0	7
MSHH6.3-45-516	6.3 x 45.0	0	20
MSHH6.3-57-516	6.3 x 57.0	0	32
MSHH6.3-70-516	6.3 x 70.0	30	45
MSHH6.3-82-516	6.3 x 82.0	45	57
MSHH6.3-100-516	6.3 x 100.0	55	75
MSHH6.3-125-516	6.3 x 125.0	75	100
MSHH6.3-140-516	6.3 x 140.0	80	105
MSHH6.3-160-516	6.3 x 160.0	100	125
MSHH6.3-180-516	6.3 x 180.0	120	145
MSHH6.3-200-516	6.3 x 200.0	140	165
MSHH6.3-254-516	6.3 x 254.0	190	215

PRODUCT SETTING DETAILS

Substrate Type	Parameter	Screw Nominal Diameter, d_{nom} (mm)	
		4.8	6.3
All types	Nominal Embedment Depth, h1 (mm)	25	25
	Nominal Drill Hole Diameter, d0 (mm)	4.35	5.15
	Clearance Hole Diameter, df (mm)	6	8
	Installation Torque, τinst (Nm)	< 3.0	< 7.0
Non-Cracked Concrete (> 20 MPa < 80 MPa)	Minimum Member Thickness, hc (mm)	100	100
	Minimum Edge Distance, cmin (mm)	50	55
	Minimum Spacing, smin (mm)	50	55
Cracked Concrete (> 20 MPa < 80 MPa)	Minimum Member Thickness, hmin (mm)	100	100
	Minimum Edge Distance, cmin (mm)	50	40
	Minimum Spacing, smin (mm)	50	55

CHARACTERISTIC WITHDRAWAL RESISTANCE, NRk

Diameter (mm)	Embedment depth (mm)	C30/35 Concrete (35N/mm²)	Aerated Concrete Block (7N/mm²)	Class B Engineering Brick (75N/mm²)
4.8	25.0	1570	1000	1570
	35.0	4500	2930	2250
6.3	25.0	4050	1580	3730
	35.0	6140	4510	4980

CHARACTERISTIC MECHANICAL PROPERTIES

	Magnitude	
	4.8mm	6.3mm
Tensile capacity,($F_{ult,Rk}$)	11,680N	21,240N
Shear capacity,($V_{ult,Rk}$)	7,560N	13,890N
Torsional Capacity,($\tau_{ult,Rk}$)	7.2Nm	20.3Nm

NOTE: The results expressed in this document are determined from empirical testing. Specifiers, end-users and other third parties should make their own decision(s) on what safety factors to use relevant to their design(s)/ application(s). This document is provided, strictly: without prejudice, without recourse, without liability, non-assumpsit, no assured value, errors and omissions excepted, subject to change without notice and all rights reserved.