

TRUTEK TCM MS PRO INJECTION RESIN

Polyester With Styrene

Usage:

- Installation of threaded studs
- Approved for non-cracked concrete
- Can be used in dry wet holes
- Class A1 reaction to fire
- Suitable for use in brickwork
- Can be used with perforated sleeves in hollow substrate

Advantages:

- Available in 300ml and 420ml cartridge
- Suitable for concrete from c20/25 to c50/60
- Range of embedment depths



Resin setting times

Substrate temperature	°C	> -5	> +5	> +15	> +25	> +35
Gel time	min.	40	20	9	5	3
Cure time in dry concrete	hour.	180	90	60	30	20

The temperature of the resin container must be $\geq 20^{\circ}\text{C}$

in wet concrete the curing must be doubled

Concrete Ranges:	C20/25 to C0/60 according to EN 206:2013+A1:2016
Certification:	European Technical Assessment ETA 22/0353

Installation Data

Threaded Stud Diameter			M8	M10	M12	M16	M20	M24
Nominal drill hole diameter	d_o	[mm]	10	12	14	18	22	28
Diameter of clearance hole in fixture	d_f	[mm]	9	12	14	18	22	28
Diameter of steel brush	d_b	[mm]	12	14	15	20	24	30
Minimum Effective Anchorage Depth	$h_{ef,min}$	[mm]	60	60	70	80	90	100
Maximum Effective Anchorage Depth	$h_{ef,max}$	[mm]	160	200	240	320	400	480
Standard Effective Anchorage Depth	$h_{ef,std}$	[mm]	80	90	110	125	170	210
Minimum Concrete Thickness	h_{min}	[mm]	$h_{ef} + 30\text{mm} \geq 100\text{mm}$			$h_{ef} + 2d_o$		
Spacing - Tension (Std Embedment) Dry & Wet holes	s_{std}	[mm]	160	200	240	320	400	450
Edge Distance - Tension (Std Embedment) Dry & Wet holes	$c_{N,std}$	[mm]	80	100	120	160	200	225
Edge Distance - Shear (Std Embedment) (Dry & Wet holes)	$c_{V,std}$	[mm]	80	90	110	125	180	220
Minimum Spacing	s_{min}	[mm]	40	50	60	80	100	120
Minimum Edge Distance	c_{min}	[mm]	40	50	60	80	100	120
Maximum torque	T_{inst}	[Nm]	10	20	40	80	120	160

Edge Distances are based on minimum concrete thickness

Load Data

Standard Embedment Depth

(Non-Cracked concrete, Hammer Drilling and Compressed Air Drilling)

(Dry and Wet Holes)

Threaded Stud Diameter	M8	M10	M12	M16	M20	M24
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Characteristics Resistance

Tensile (5.8, 8.8 and A4-70 studs)		N _{Rk}	[kN]	15.1	28.3	41.4	60.3	85.5	56.5
Shear	5.8	V _{Rk}	[kN]	9.0	15.0	21.0	39.0	61.0	88.0
	8.8		[kN]	15.0	23.0	34.0	63.0	98.0	141.0
	A4-70		[kN]	13.0	20.0	30.0	55.0	86.0	124.0

Design Resistance

Tensile (5.8, 8.8 and A4-70 studs)		N _{Rd}	[kN]	8.4	15.7	23.0	33.5	47.5	66.0
Shear	5.8	V _{Rd}	[kN]	7.2	12.0	16.8	31.2	48.8	70.4
	8.8		[kN]	12	18.4	27.2	50.4	78.4	112.8
	A4-70		[kN]	10.4	16.0	24.0	44.0	68.8	99.2

Recommended Resistance

Tensile (5.8, 8.8 and A4-70 studs)		N _{rec}	[kN]	6.0	11.2	16.4	23.9	33.9	47.1
Shear	5.8	V _{rec}	[kN]	5.1	8.6	12.0	22.3	34.9	50.3
	8.8		[kN]	8.6	13.1	19.4	36.0	56.0	80.6
	A4-70		[kN]	7.4	11.4	17.1	31.4	49.1	70.9

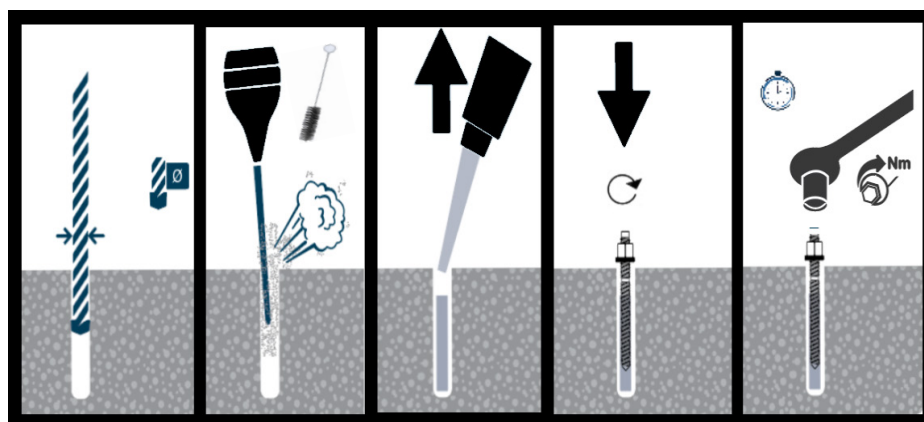
Recommended Resistance Includes Partial Safety Factor $\gamma = 1.4$ in the absence of national regulations and type of loading

Data is for Static and Quasi Static Loads for a single anchor

Increasing Factor

Increasing factor for non-cracked concrete (all types of drilling)

Threaded Stud Diameter		M8	M10	M12	M16	M20	M24
Ψ _C C30/37	[-]	1.04					
Ψ _C C40/50	[-]	1.10					
Ψ _C C50/60	[-]	1.12					



Accessories:

