



# XCHEM™ PRO




P201

POLYESTER

## P201 XCHEM™ PRO POLYESTER 300 ml

### Description

A two-component chemical anchoring injection system possessing high bond strength and developed principally to anchor threaded studs into concrete, masonry and hollow substrate. Used widely for medium loads in both vertical and horizontal applications.

Applications	Highlights	
<ul style="list-style-type: none"> <li>Non-cracked concrete</li> <li>Natural stone*</li> <li>Solid and hollow masonry</li> </ul>		
	NON-CRACKED	MASONRY
		
	COLOUR TECH	

Features	
<ul style="list-style-type: none"> <li>Suitable for medium loads in non-critical applications</li> <li>Fast working times for early loading in time-sensitive applications</li> <li>Styrene-free for indoors and in enclosed spaces</li> </ul>	<ul style="list-style-type: none"> <li>Extremely versatile in solid/hollow masonry and concrete</li> <li>Use in wet or flooded holes</li> <li>Colour change technology</li> <li>Nine helical mixing deflectors inside nozzle†</li> </ul>

<b>Material</b>	 POLYESTER
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<b>Finish</b>	 POLYESTER 300 ML CARTRIDGE
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\* Natural stone not included in ETA. Tensile load capabilities may vary in natural stone. Preliminary tests prior to application are recommended.



AS 5216



FAST CURING



†Use with Nozzle MCXND3



### Medium Duty

COST-EFFECTIVE AND VERSATILE ANCHORING IN A WIDE RANGE OF BASE MATERIALS.

	CE	OPT 7	24/0509
		MASONRY	24/0508

		
VOC / A+ GRADE	LEED TESTED	POTABLE WATER

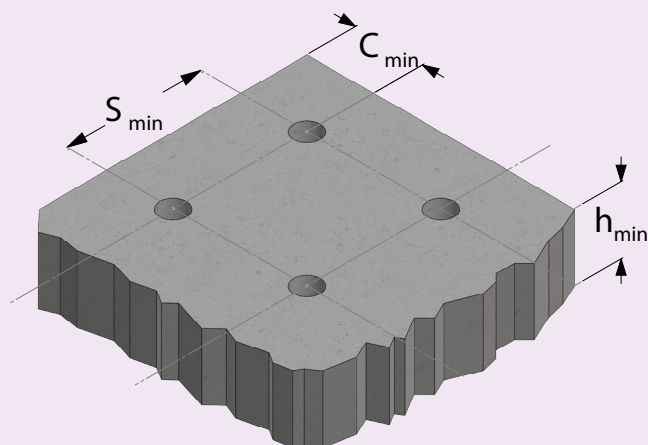
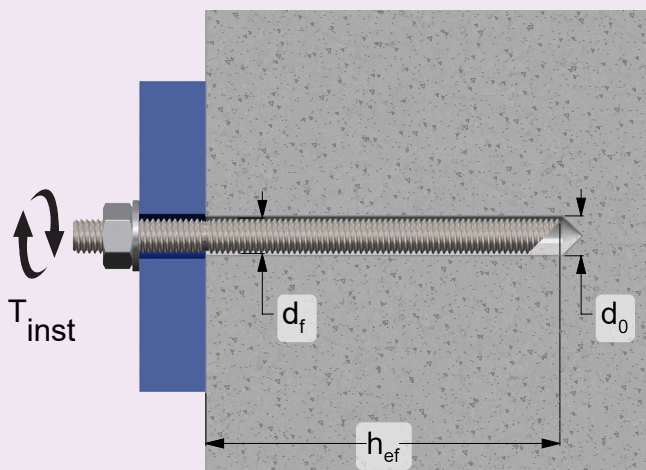
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## Installation Parameters

		M8	M10	M12	M16
Effective Anchor Depth	$h_{ef}$ (mm)	60–160	60–200	70–240	80–320
Hole Diameter	$d_o$ (mm)	10	12	14	18
Fixture Hole	$d_f$ (mm)	9	12	14	18
Max. Torque	$T_{inst}$ (Nm)	8	10	15	25

## Member Thickness, Edge Distance and Spacing

		M8	M10	M12	M16
Min. Concrete Thickness	$h_{min}$ (mm)	$h_{ef} + 30\text{mm} \geq 100\text{mm}$		$h_{ef} + 2 d_o$	
Min. Edge Distance	$C_{min}$ (mm)	$0.5 h_{ef}$			
Min. Spacing	$S_{min}$ (mm)	$0.5 h_{ef}$			

## Chemical Volume Calculator\*

		M8	M10	M12	M16
Volume of Chemical per cm of Hole Depth	mL / cm	0.5	0.8	1.0	1.7
Standard Hole Depth	mm	80	90	110	125
Volume Required for Standard Hole	mL	4	7	11	21
Total Holes per 300mL Tube		68	42	25	13

\*Volume calculation based on 2/3 standard hole depth filled and 5% product waste due to initial and residual mixing.

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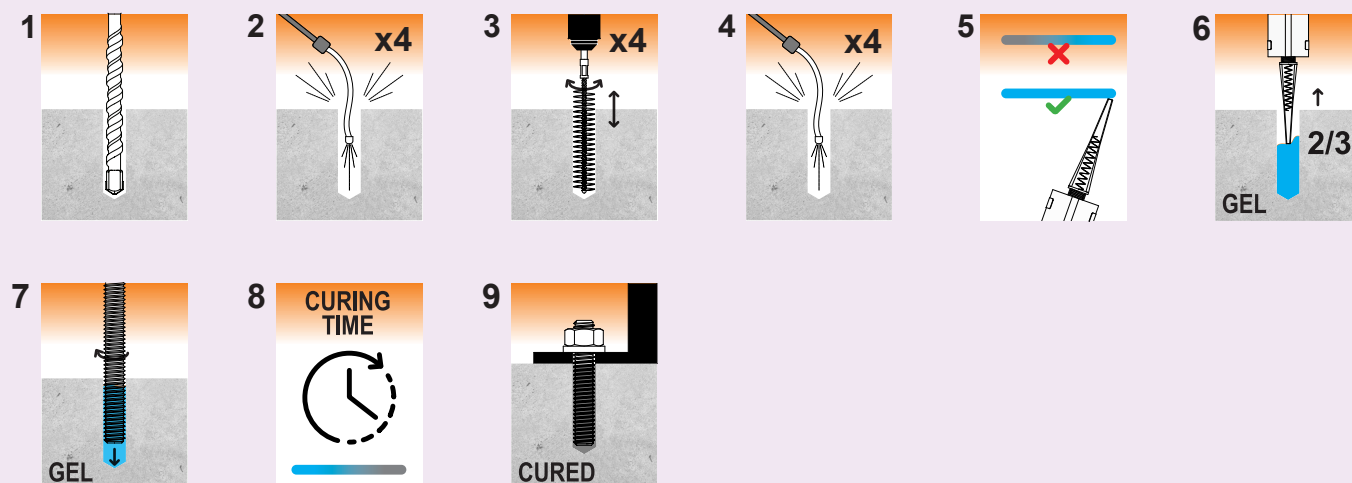


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## Installation



Refer to technical assessment (ETA) document for full installation.

Use with **MCXND3**



## Working and curing times (minutes)

Base Material Temp.	-5°C–0°C	0°C–9°C	10°C–19°C	20°C–29°C	30°C–40°C
Gel Working Time	40	20	9	5	3
Curing Time Dry Concrete	180	90	60	30	20
Curing Time Wet Concrete	360	180	120	60	40

Note: resin temperature must be at least 20°C.

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- **Design Resistance:** ultimate design loads in kN for single anchor in C20/25. Temperature 24°C average–40°C maximum (short-term temperature). No influence of edge distances or anchor spacing considered.
- **Shear Loads:** steel strength without lever arm.
- **Working Loads:** in kg for single anchor in C20/25. Temperature 24°C average–40°C maximum (short-term temperature). No influence of edge distances or anchor spacing considered. Calculated as Design Resistance/1.4 for both tension and shear.

## Design Resistance Dry/Wet Hammer-Drilled Holes

  Steel Decisive

Non-cracked Concrete			M8	M10	M12	M16
Embedment Depth (mm)			80	90	110	125
5.8	Tension	$N_{Rd}$ [kN]	3.4	5.2	6.9	8.4
	Shear	$V_{Rd}$ [kN]	7.2	12.0	16.8	31.2
8.8	Tension	$N_{Rd}$ [kN]	3.4	5.2	6.9	8.4
	Shear	$V_{Rd}$ [kN]	12.0	18.4	27.2	50.4
A4-70	Tension	$N_{Rd}$ [kN]	3.4	5.2	6.9	8.4
	Shear	$V_{Rd}$ [kN]	8.3	12.8	19.2	35.3

## Design Resistance Flooded Holes

Non-cracked Concrete			M8	M10	M12	M16
Embedment Depth (mm)			80	90	110	125
5.8	Tension	$N_{Rd}$ [kN]	2.9	3.2	4.7	6.3
	Shear	$V_{Rd}$ [kN]	7.2	12.0	16.8	31.2
8.8	Tension	$N_{Rd}$ [kN]	2.9	3.2	4.7	6.3
	Shear	$V_{Rd}$ [kN]	12.0	18.4	27.2	50.4
A4-70	Tension	$N_{Rd}$ [kN]	2.9	3.2	4.7	6.3
	Shear	$V_{Rd}$ [kN]	8.3	12.8	19.2	35.3

## Working Load Dry/Wet Hammer-Drilled Holes

Non-cracked Concrete			M8	M10	M12	M16
Embedment Depth (mm)			80	90	110	125
5.8	Tension	$N_{Rw}$ [kg]	250	370	500	600
	Shear	$V_{Rw}$ [kg]	520	870	1220	2270
8.8	Tension	$N_{Rw}$ [kg]	250	370	500	600
	Shear	$V_{Rw}$ [kg]	870	1330	1980	3660
A4-70	Tension	$N_{Rw}$ [kg]	250	370	500	600
	Shear	$V_{Rw}$ [kg]	600	930	1400	2560

## Working Load Flooded Holes

Non-cracked Concrete			M8	M10	M12	M16
Embedment Depth (mm)			80	90	110	125
5.8	Tension	$N_{Rw}$ [kg]	200	230	340	450
	Shear	$V_{Rw}$ [kg]	520	870	1220	2270
8.8	Tension	$N_{Rw}$ [kg]	200	230	340	450
	Shear	$V_{Rw}$ [kg]	870	1330	1980	3660
A4-70	Tension	$N_{Rw}$ [kg]	200	230	340	450
	Shear	$V_{Rw}$ [kg]	600	930	1400	2560

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## Typical Performance for Solid Masonry

Compressive Strength of Material  $\geq 18$  MPa  
 Density  $\rho_m \geq 1600$  kg/m<sup>3</sup>  
 Temp. Range -40°C to 40°C



Size	Installation Parameters						Characteristic Resistance		Service Loads			
	Drill Hole $\varnothing$ $d_0$	Min. Edge $C_{min}$	Min. Spacing $S_{min}$	Drill Depth $h_1$	Embedment Depth $h_{ef}$	Installation Torque $T_{inst}$	Tension $N_{rk}$	Shear $V_{rk}$	Tension $F_N$	Shear $F_V$		
	(mm)	(mm)	(mm)	(mm)	(mm)	(Nm)	(kN)	(kN)	(kg)	(kg)		
M6	8	120	240	85	80	2	4	6	116	175		
M8	10											
M10	12	127.5	255	90	85						7	204
M12	14											

Note: safety factor of 3.5 applies for service loads.

## Typical Performance for Hollow Masonry

Compressive Strength of Material  $\geq 6$  MPa  
 Density  $\rho_m \geq 900$  kg/m<sup>3</sup>  
 Temp. Range -40°C to 40°C



Size	Installation Parameters							Characteristic Resistance		Service Loads	
	Drill Hole $\varnothing$ $d_0$	Sleeve Size	Min. Edge $C_{min}$	Min. Spacing $S_{min}$	Drill Depth $h_1$	Embedment Depth $h_{ef}$	Installation Torque $T_{inst}$	Tension $N_{rk}$	Shear $V_{rk}$	Tension $F_N$	Shear $F_V$
	(mm)		(mm)	(mm)	(mm)	(mm)	(Nm)	(kN)	(kN)	(kg)	(kg)
M6	12	12 x 80	100	120	85	80	1.5	2	2	58	58
M8					90	85					
M10	16	16 x 85			90	85					
M12											

Note: safety factor of 3.5 applies for service loads.

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## Packaging

300 mL tube.

## Storage

18 months (from 5–25°C) or at lower temperatures for shorter periods of time (e.g. during transport). Higher temperatures shorten storage life. Store the cans in an upright position. Avoid direct sunlight.

## Health, safe handling and disposal information

Additional information on safety, safe handling instructions, personal protective equipment and disposal information is in a safety data sheet. Safety data sheets are available at [hobson.com.au](http://hobson.com.au)



## Warning



(B)

**NOTE:** instructions contained in this document are based on Hobson's research and experience.

However, due to specific conditions and working methods, preliminary tests prior to any application of XCHEM™ products are recommended.

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