

# NCC COMPLIANT AS5216 CONFORMING

## CHEMICAL INJECTION BREMIFIX PURE EPOXY

Range M8 - M24

Zinc Plated Studs  
Dry, internal applications

### FEATURES & BENEFITS

- Ideal for safety critical applications.
- Intended working life of 100 years.
- ETA rating - Up to Seismic C2: refer to Range tables.
- VOC A+ rating.
- WRAS Approved for potable drinking water.
- LEED Compliance.
- Suitable for wet & flooded holes.
- Hammer drilled or diamond cored holes.
- Long working time.

### APPLICATIONS/TRADES

- Structural steel connections to concrete.
- Road, tunnel & bridge heavy construction.
- Seismic / cracked concrete applications.
- Critical Infrastructure structural connections.

### COMPLIANCE



AS5216



Pending Update



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#### RANGE

Chemical Injection - Product Code & description	Anchor thread size	ETA Cert'n level	# fixings per cartridge (per below Range tables)
<b>ACIPCSE5852</b> Pure Epoxy 600, Seismic C2 Chemical Injection - 585ml cartridge	M8 (10 x 80mm hole)	Seismic C1	145
	M10 (12 x 90mm hole)	Seismic C1	95
	M12 (14 x 110mm hole)	Seismic C2	60
	M16 (18 x 125mm hole)	Seismic C2	40
	M20 (22 x 170mm hole)	Seismic C2	20
	M24 (28 x 210mm hole)	Seismic C2	9

Chemical Anchor Stud - Product Code	Pack Qty	Thread size	Anchor length (mm)	Drill hole Ø (mm)	Drill hole depth (mm)	Minimum concrete thickness (mm)	Maximum fixture thickness (mm)	Fixture clearance hole Ø (mm)
			$l_t$	$d_o$	$h_1$	$h_{min}$	$t_{fix, max}$	$d_f$

#### Chemical Anchor Studs (Property Class 5.8)

ACSMZ081102	10	M8	110	10	80	110	15	10
ACSMZ101302	10	M10	130	12	90	120	20	12
ACSMZ121602	10	M12	160	14	110	140	25	14
ACSMZ161902	10	M16	190	18	125	160	35	18
ACSMZ202602	5	M20	260	22	170	220	50	22
ACSMZ243002	5	M24	300	28	210	260	55	26

#### Flat Cut Chemical Anchor Studs (Property Class 8.8)

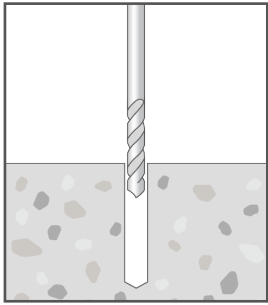
SFCMZ121602	10	M12	160	14	110	140	25	14
SFCMZ161902	10	M16	190	18	125	160	35	18
SFCMZ202602	5	M20	260	22	170	220	50	22

# CHEMICAL INJECTION

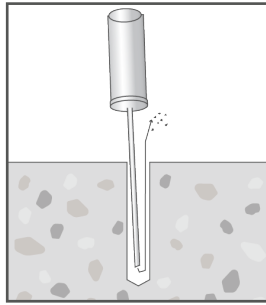
## BREMFIX PURE EPOXY

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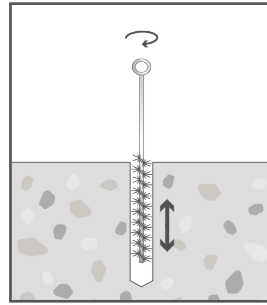
#### INSTALLATION



Drill hole into substrate to the specified diameter and depth using a rotary hammer drill and correctly sized carbide bit.

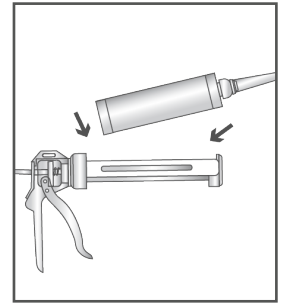


Blow out from the base of the drill hole at least 2 times until removed air is free of noticeable debris. For drill holes up to 18mm diameter - a manual blower pump may be used to clean the hole. For larger diameter holes - compressed air cleaning must be used and may also be used for smaller holes.

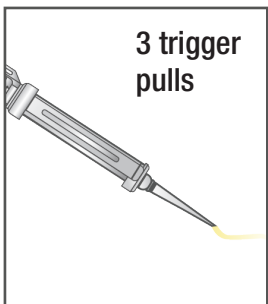


Brush 2 times with a wire brush (its diameter should be greater than the drill hole diameter) - inserting the brush to the base of the hole and withdrawing it with a twisting motion. If no resistance is felt during this step, the brush is worn - replace it.

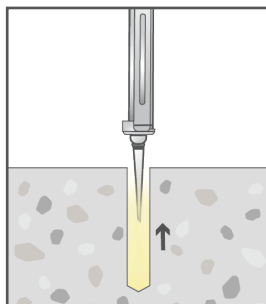
**Blow, brush,  
blow, brush,  
blow.**



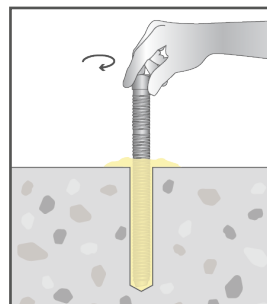
Insert the cartridge into the dispenser and screw the correct mixing nozzle onto the cartridge.



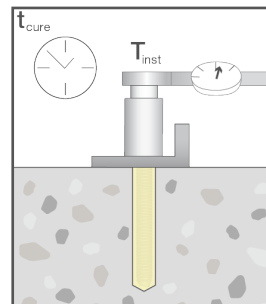
Prior to dispensing into the anchor hole, squeeze out 3 trigger pulls of material and discard. The adhesive should now have a consistent, uniform color indicating correct mixing is occurring.



With the cartridge nozzle tip at the base of the cleaned drill hole, inject adhesive until the hole is approximately 2/3 full. Slowly withdraw the nozzle from the hole whilst injecting, keeping the nozzle tip immersed in the adhesive. This will avoid creating air pockets within the adhesive.



Ensure the anchor stud is clean and free of contaminants, grease etc. Push the anchor stud into the adhesive - slowly rotating the stud until it is seated against the base of the hole. An excess of adhesive around the top of the hole indicates sufficient material was injected into the hole, otherwise remove the anchor stud and renew the hole with adhesive.



All steps prior must be completed within the working time of the adhesive. Protect the anchor from disturbance until the full curing time has been reached. Once full cure is achieved, carefully place the fixture and apply the specified installation torque.

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#### PRODUCT INSTALL & PERFORMANCE INFORMATION

Chemical Anchor Stud - Product Code	Anchor length (mm)	Maximum fixture thickness (mm)	Drill hole depth (mm)	Minimum concrete thickness (mm)	Socket size AF (mm)	Installation torque (Nm)	Design Capacities	
							Uncracked concrete - tension (kN)	Uncracked concrete - shear (kN)
	$l_t$	$t_{fix, max}$	$h_1$	$h_{min}$	SW	$T_{inst}$	$N_{Rd}$	$V_{Rd}$

#### Chemical Anchor Studs (Property Class 5.8)

ACSMZ081102	110	15	80	110	13	10	12.0	7.2
ACSMZ101302	130	20	90	120	17	20	19.3	11.2
ACSMZ121602	160	25	110	140	19	40	28.0	16.8
ACSMZ161902	190	35	125	160	24	60	52.0	31.2
ACSMZ202602	260	50	170	220	30	120	81.3	48.8
ACSMZ243002	300	55	210	260	36	160	117.3	70.4

#### Chemical Anchor Flat Cut Studs (Property Class 5.8)

SFCMZ121602	160	25	110	140	19	40	28.0	16.8
SFCMZ161902	190	35	125	160	24	60	52.0	31.2
SFCMZ202602	260	50	170	220	30	120	81.3	48.8

Note: Concrete cylinder compressive strength = 32MPa.  
 Single anchor capacity - no nearby edge, minimum recommended concrete thickness.  
 For combined load cases (tension & shear) - must also comply with  $(N^* / N_{Rd}) + (V^* / V_{Rd}) \leq 1.2$ .

**Important Disclaimer:** Product performance information contained herein is based on ETA certificate data and AS5216:2021 inputs as appropriate. Capacity information is limited to very simple load case configurations and is provided to enable a relative comparison within and across product ranges. The design of an anchoring solution for a particular application should be conducted by an appropriately qualified design professional.

#### MINIMUM CURING TIMES

Temperature in the concrete substrate	Gel / working time	Minimum curing time - dry concrete hole	Minimum curing time - wet concrete hole
+5°C	70 minutes	60 hours	120 hours
+10°C	32 minutes	40 hours	80 hours
+15°C	28 minutes	30 hours	60 hours
+20°C	25 minutes	18 hours	36 hours
+25°C	22 minutes	17 hours	34 hours
+30°C	20 minutes	16 hours	32 hours
+40°C	18 minutes	12 hours	24 hours

Cartridge temperature: +15°C to +35°C