

NCC COMPLIANT AS5216 CONFORMING

CHEMICAL INJECTION **BREMIFIX** PURE EPOXY

Range M8 - M30

Hot Dip Galvanised Studs
Damp, external 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



**HOT DIPPED
GALVANISED**



AS5216



* Refer to Range table for line specific approval levels

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RANGE

Chemical Injection - Product Code & description	Anchor thread size	ETA Cert'n level	# fixings per cartridge (per below Range tables)
ACIPCSE5852 Pure Epoxy 600, Seismic C2 Chemical Injection - 585ml cartridge Use dispensing tool TMACISE5852	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
	M30 (35 x 280mm hole)	Seismic C1	4

Chemical Anchor Stud - Product Code	Pack Qty	Thread size	Anchor length (mm)	Drill hole Ø (mm)	Drill hole depth (mm)	Minimum concrete thickness (mm)	Max. 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)

ACSMG081102	10	M8	110	10	80	110	15	9
ACSMG101302	10	M10	130	12	90	120	20	12
ACSMG121602	10	M12	160	14	110	140	25	14
ACSMG161902	10	M16	190	18	125	155	35	18
ACSMG202602	5	M20	260	22	170	215	50	22
ACSMG243002	5	M24	300	28	210	270	55	26

Flat Cut Chemical Anchor Studs (Property Class 5.8)

SFCMG101302	10	M10	130	12	90	120	20	12
SFCMG121602	10	M12	160	14	110	140	25	14
SFCMG161902	10	M16	190	18	125	155	35	18
SFCMG202602	5	M20	260	22	170	215	50	22
SFCMG243002	5	M24	300	28	210	270	55	26

Flat Cut Chemical Anchor Studs (Property Class 8.8)

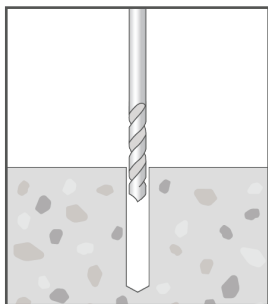
SF8MG121602	10	M12	160	14	110	140	25	14
SF8MG161902	10	M16	190	18	125	155	35	18
SF8MG202602	5	M20	260	22	170	215	50	22
SF8MG243002	5	M24	300	28	210	270	55	26
SF8MG303802	2	M30	380	35	280	350	65	33

CHEMICAL INJECTION

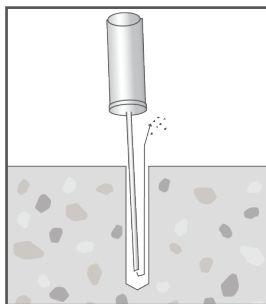
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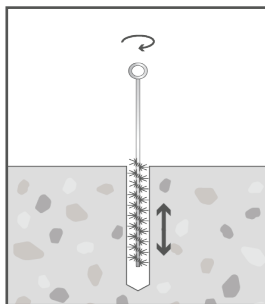
INSTALLATION



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



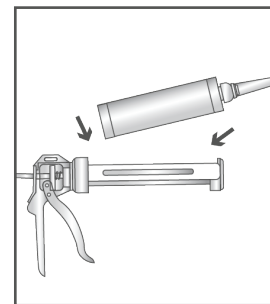
Blow out from the base of the drill hole at least 2 times until removed air is free of noticeable debris. For drill holes up to 18mm diameter - a manual blower pump may be used to clean the hole. For larger diameter holes - compressed air cleaning must be used and may also be used for smaller holes.



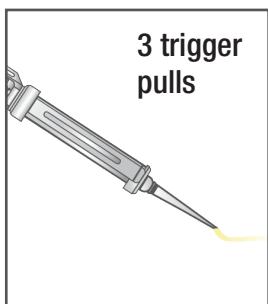
Brush 2 times with a wire brush (its diameter should be greater than the drill hole diameter) - inserting the brush to the base of the hole and withdrawing it with a twisting motion. If no resistance is felt during this step, the brush is worn - replace it.

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

Repeat prior 2 steps for a total of: blow, brush, blow, brush, blow. Protect the hole from contamination until ready to complete the installation. For full details & alternative hole drilling/cleaning methods - please refer to the product ETA document.

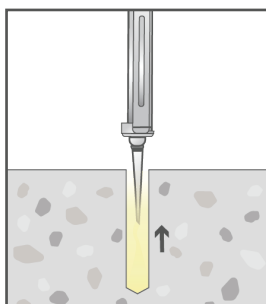


Insert the cartridge into the dispenser and screw the correct mixing nozzle onto the cartridge.

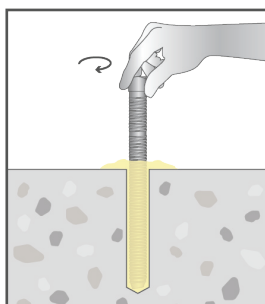


**3 trigger
pulls**

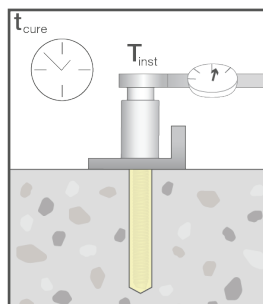
Prior to dispensing into the anchor hole, squeeze out 3 trigger pulls of material and discard. The adhesive should now have a consistent, uniform color indicating correct mixing is occurring.



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)

ACSMG081102	110	15	80	110	13	10	12.0	7.2
ACSMG101302	130	20	90	120	17	20	19.3	11.8
ACSMG121602	160	25	110	140	19	40	28.0	16.8
ACSMG161902	190	35	125	155	24	60	52.0	31.2
ACSMG202602	260	50	170	215	30	120	81.3	48.8
ACSMG243002	300	55	210	270	36	160	117.3	70.4

Chemical Anchor Flat Cut Studs (Property Class 5.8)

SFCMG101302	130	20	90	120	17	20	19.3	11.8
SFCMG121602	160	25	110	140	19	40	28.0	16.8
SFCMG161902	190	35	125	155	24	60	52.0	31.2
SFCMG202602	260	50	170	215	30	120	81.3	48.8
SFCMG243002	300	55	210	270	36	160	117.3	70.4

Chemical Anchor Flat Cut Studs (Property Class 8.8)

SF8MG121602	160	25	110	140	19	40	43.6	27.0
SF8MG161902	190	35	125	155	24	60	56.1	50.0
SF8MG202602	260	50	170	215	30	120	89.0	77.0
SF8MG243002	300	55	210	270	36	160	122.2	112.0
SF8MG303802	380	65	280	350	46	300	188.8	175.0

Note: Installation in accordance with this information.
Concrete cylinder compressive strength of 32MPa.
Single anchor capacity – no nearby concrete edge with minimum recommended concrete thickness.
In service temperature range I considered, hammer drilled holes.
 $\psi_{sus} = 1$, refer to AS 5216:2021 clause 6.2.5.2 for details.
To address specific design cases, please refer to the product ETA document and contact Bremick for details.

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.

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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			

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