ChemSet™ 101 PLUS

CHEMICAL INJECTION ANCHORING

GENERAL INFORMATION

Performance Related	Material Specification	Installation Related

Product

ChemSet™ Injection 101 PLUS is a medium duty, peroxide initiated injection anchor.

Benefits, Advantages and Features

Fast installation:

- Load in 50 min. (at 20°C).

Versatile:

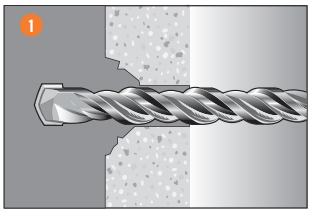
- Suitable for anchoring into pre-manufactured masonry units.

Australian Made

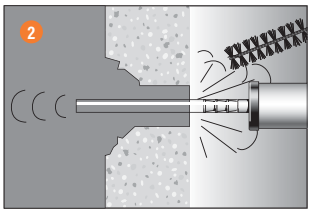
Principal Applications into Brick and Block

- **Installing wall mounted signs, handrails, and gates**

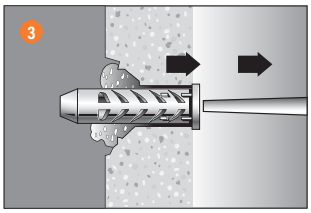
Installation



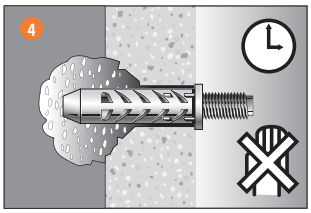
1. Drill recommended diameter and depth hole.



2. **Important:** Clean dust and debris from hole with stiff wire or nylon brush and blower in the following sequence: blow x 4, brush x 3, blow x 4, brush x 3, blow x 4.



3. Insert mixing nozzle into sleeve or sieve. Dispense adhesive to waste until colour is uniform light grey (2-3 trigger pulls) Fill to 3/4 the sleeve/sieve depth slowly, ensuring no air pockets form. Insert **Ramset™** ChemSet™ Anchor Stud to bottom of hole while turning.



4. ChemSet™ Injection 101 Plus to cure as per setting times.
Attach fixture.

Recommended Installation Temperatures

	Minimum	Maximum
Substrate	5°C	40°C
Adhesive	5°C	40°C

Service Temperature Limits

-40°C to 80°C

Setting Times

Temperature of base material	Cartridge Temperature	Gel Time	Curing time in dry and wet concrete
5°C	5°C	18 min	145 min
10°C	10°C	10 min	85 min
20°C	20°C	6 min	50 min
25°C	25°C	5 min	40 min
+30°C	+30°C	5 min	35 min
Note: Cartridge temperature minimum +5°C			

ChemSet™ 101 PLUS

CHEMICAL INJECTION ANCHORING

Installation and Working Load Limit performance details: ChemSet™ Injection 101 PLUS and ChemSet™ Anchor Studs

Anchor size, d_b (mm)	Substrate	Sleeve/Sieve Type	Installation details				Working Load Limit (kN)	
			Drilled hole diameter, d_h (mm)	Fixture hole diameter, d_f (mm)	Anchor effective depth, h (mm)	Tightening torque, T_r (Nm)	Solid Brick	
							Shear, V_a	Tension, N_a
M8	Solid Clay Brick	–	10	10	80	10	4.4	1.4
M10			12	12	85	20	4.8	1.5
M12			14	15	85	40	5.2	1.6
M16			18	19	85	95	5.2	1.7

Note: Use specified hole size for solid brick. Use of larger hole and/or sleeve/sieve will result in lower capacities.

Anchor size, d_b (mm)	Substrate	Installation details					Working Load Limit (kN)					
		Drilled hole diameter, d_h (mm)		Fixture hole diameter, d_f (mm)	Anchor effective depth, h (mm)	Tightening torque, T_r (Nm)	3 Hole Brick		10 Hole Brick		Concrete Block	
		Nylon Sleeve	S/S Sieve				Shear, V_a	Tension, N_a	Shear, V_a	Tension, N_a	Shear, V_a	Tension, N_a
M8	3 Hole Brick, 10 Hole Brick or Concrete Block	12	12	10	64	10	3.8	2.5	3.0	1.0	1.8	1.8
M10		14	16	12		20	4.6	2.5	4.6	1.0	2.0	1.8
M12		16	16	15		40	5.0	2.5	5.0	1.0	2.0	1.8
M16		–	22	19		95	5.0	2.5	5.0	1.0	2.0	1.8

For lower strength studs, refer to table for reduced steel capacity on page 322.

DESCRIPTION AND PART NUMBERS

Description	Cartridge Size	Part No.
ChemSet™ 101 PLUS Cartridge	380 ml	C101C
ChemSet™ 101 PLUS Jumbo Cartridge	750 ml	C101J
ChemSet™ 101 PLUS Kit	2 x 380 ml	ISKP
Mixer Nozzle for 101 PLUS	–	ISNP

Effective depth, h (mm)

Preferred h = h_n otherwise,

$$h = L_e - t$$

t = total thickness of material(s) being fastened.

To suit ChemSet™ Anchor Stud	Nylon Sleeve	Stainless Steel Sieve
M8	ISS08	-
M10	ISS10	-
M12	ISS12	ISM12
M16	-	ISM16

ENGINEERING PROPERTIES

Refer to "Engineering Properties" for ChemSet™ Anchor Studs.