ChemSet™ 101 PLUS
CHEMICAL INJECTION ANCHORING

GENERAL INFORMATION

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

Installation temperature limits:
• Substrate: 0°C to 40°C.
• Adhesive: 5°C to 40°C.

Load should not be applied to anchor until the chemical has sufficiently cured as specified in the following diagrams.

Service temperature limits:
-40°C to 80°C.

Setting Times

<table>
<thead>
<tr>
<th>Temperature of base material</th>
<th>Cartridge Temperature</th>
<th>Gel Time</th>
<th>Curing time in dry and wet concrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>5°C</td>
<td>5°C</td>
<td>18 min</td>
<td>145 min</td>
</tr>
<tr>
<td>10°C</td>
<td>10°C</td>
<td>10 min</td>
<td>85 min</td>
</tr>
<tr>
<td>20°C</td>
<td>20°C</td>
<td>6 min</td>
<td>50 min</td>
</tr>
<tr>
<td>25°C</td>
<td>25°C</td>
<td>5 min</td>
<td>40 min</td>
</tr>
<tr>
<td>+30°C</td>
<td>+30°C</td>
<td>5 min</td>
<td>35 min</td>
</tr>
</tbody>
</table>

Note: Cartridge temperature minimum +5°C
### 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) | Solid Brick<br>Shear, $V_s$ | Tension, $N_s$
---|---|---|---|---|---
M8 | Solid Clay Brick | – | 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<br>Shear, $V_s$ | Tension, $N_s$
M10 | 10 | 10 | 80 | 10 | 4.4 | 1.4 | 4.8 | 1.5 | 5.2 | 1.6 | 5.2 | 1.7
M12 | 14 | 15 | 85 | 40 | 4.8 | 1.5 | 5.2 | 1.6 | 5.2 | 1.7
M16 | 18 | 19 | 85 | 95 | 5.2 | 1.6 | 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.

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### 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.

### ENGINEERING PROPERTIES

Refer to “Engineering Properties” for ChemSet™ Anchor Studs on page 115.