

EPCON A7 Acrylic Resin Adhesive



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A7 is a cost effective solution to anchoring jobs close to edges where there is a need to avoid bursting stress on the surrounding substrate and is suitable for normal loads in benign environments.

Product Advantages

- High performance acrylic resin
- Fast dispensing and curing times
- Ideal for damp conditions
- Easy to use (no heating) even at cold temperatures
- Easy handling and installation
- One solution for both hollow and solid base materials
- Attained NSF Approval for portable drinking water

Substrates

- Concrete
- Hollow block wall
- Solid block
- Hollow brick
- Solid brick
- Hollow floor beams

Specification

EPCON A7 is a fast dispensing, fast curing acrylic injection chemical anchor.

Setting characteristics at 27°C:

- Working time: 5.5 minutes
- Full cure time: 30 minutes

Applications



- Guard rail fixings
- Overhead fixings
- Scaffolding attachment
- Floor slabs
- Signs
- Stadium seating
- Mechanical and electrical services

Approvals / Listings

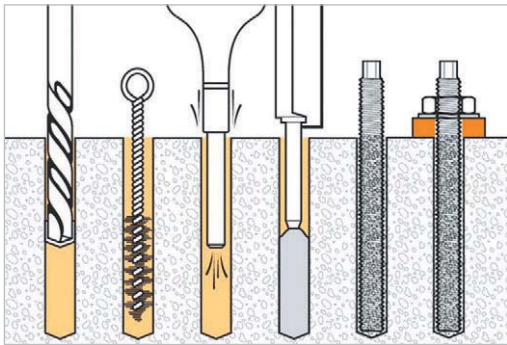
- ASTM C881, Type IV, Grade 3, Class A, B, C (exceptions - A7 gels faster than ASTM requirements and does not contain any epoxy)
- ICC Evaluation Service, Inc.
- Miami Dade County - #06-0425.02
- City of Los Angeles - RR#25379
- DOT Approval
- Florida Building Code
- NSF Standard 61 Certified for Drinking Water Components
- HDB Prefabrication Technology Centre tested

Setting Time

| Base Material Temperature (F°/C°) | Working Time | Full Cure Time |
|-----------------------------------|--------------|----------------|
| 100° / 38° | 5 minutes | 25 minutes |
| 80° / 27° | 5.5 minutes | 30 minutes |
| 60° / 16° | 7 minutes | 35 minutes |
| 40° / 4° | 15 minutes | 75 minutes |
| 20° / -7° | 35 minutes | 6 hours |
| 0° / -18° | 4 hours | 24 hours |

CHEMICAL ANCHORS

Installation



1. Drill correct diameter hole to recommended depth.
2. Clean hole thoroughly with brush and air pump twice.
3. Assemble nozzle onto cartridge. Dispense and discard enough chemical until uniform mix is achieved. Inject from the bottom of the hole gradually, filling in until 50% full.
4. Insert the rod/stud by hand to full depth, using slow rotating movement.
5. Allow EPCON A7 to cure for specified period before loading.

Product Range - EPCON A7 Acrylic Resin Adhesive



| Part No. | Description | Order Qty |
|-----------------------------------|---------------------------------|-----------|
| Pack Sizes and Accessories | | |
| 8A-A728 | EPCON A7 (825ml) + 2 E55 Nozzle | 4 |
| 8A-E55V | E55 Nozzle | 24 |
| 8A-A102 | A102 Dispensing Tool | 1 |
| 8A-A200 | A200 Pneumatic Dispensing Tool | 1 |
| 8A-PFSL-1585 | Plastic Mesh 15x85 (M8-M10) | 10 |
| 8A-PFSL-2085 | Plastic Mesh 20x85 (M12) | 10 |

EPCON A7 - Indicative Design Loads in Concrete - ChemSet™ Anchor Studs

| Thread Ø | Hole Ø (mm) | Embedment Depth (mm) | Torque (Nm) | Anchor Spacing (mm) | Edge Distance (mm) | Shear Load (kN)* | Tension Load (kN)* |
|----------|-------------|----------------------|-------------|---------------------|--------------------|------------------|--------------------|
| M8 | 10 | 80 | 10 | 160 | 80 | 9.5 | 13.2 |
| M10 | 12 | 90 | 20 | 180 | 90 | 15.0 | 20.9 |
| M12 | 14 | 110 | 30 | 220 | 110 | 21.9 | 30.3 |
| M16 | 18 | 125 | 60 | 250 | 125 | 39.2 | 54.4 |
| M20 | 25 | 170 | 120 | 340 | 170 | 61.2 | 84.9 |
| M24 | 28 | 210 | 200 | 420 | 210 | 88.1 | 122.4 |
| M30 | 35 | 280 | 400 | 560 | 280 | 130.5 | 181.2 |

Indicative design load (kN) with ChemSet™ Grade 5.8 Studs in 30N/mm² concrete

* Refer to Ramset Design Guide for more information or explanation of technical data

EPCON A7 - Indicative Design Loads in Concrete - Rebar (FE460)

| Bar Ø | Hole Ø (mm) | Embedment Depth (mm) | Anchor Spacing (mm) | Edge Distance (mm) | Shear Load (kN)* | Tension Load (kN)* |
|-------|-------------|----------------------|---------------------|--------------------|------------------|--------------------|
| T8 | 12 | 80 | 160 | 80 | 11.1 | 10.9 |
| T10 | 13 | 100 | 180 | 90 | 17.3 | 15.4 |
| T12 | 15 | 120 | 220 | 110 | 25.0 | 22.5 |
| T13 | 16 | 130 | 220 | 110 | 29.3 | 24.4 |
| T16 | 20 | 160 | 250 | 125 | 44.4 | 34.1 |
| M20 | 25 | 200 | 340 | 170 | 69.4 | 58.0 |
| M25 | 30 | 250 | 420 | 210 | 108.4 | 89.6 |

Indicative design load (kN) with FE460 Rebar in 30N/mm² concrete

* Refer to Ramset Design Guide for more information or explanation of technical data