

EPCON G5 High Strength Epoxy Adhesive



EPCON G5 High Strength Epoxy

A high performance chemical epoxy adhesive. Fast cure with extended working time for use in tropical climate. Works well in dry, damp, wet and flooded holes.

Product Advantages

Formulated for hot or warm weather

- High strength epoxy
- Fire rated: tested up to 4 hours FRP
- Shorter curing time with extended working time
- Works in damp holes and underwater applications
- Low shrinkage, suitable for cored and oversized holes
- Virtually odorless, can be used indoors
- Easy handling and installations
- Re-sealable tip

Substrates

- Concrete
- Solid block
- Solid brick

Specification

EPCON G5 is a heavy duty, pure epoxy injection chemical anchor.

Setting characteristics at 27°C:

- Working time: 12 minutes
- Full cure time: 2 hours

Applications



- Reinforcing and starter bars
- Underwater fixings
- Diaphragm wall fixings
- Guard rail fixings
- Parapet wall fixings
- Tunnel fixings
- Floor slabs

Approvals / Listings

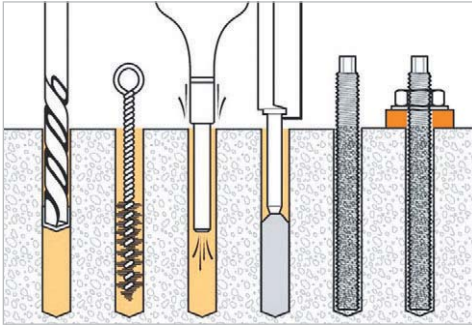
- ASTM C881-99, Type IV, Grade 3, Class A, B and C
- ICC Evaluation Service, Inc.
- Miami Dade County - #06-0425.02
- DOT Approval
- Florida Building Code Approved
- Warrington Fire Resistance Tests with Rebars BS 476 Part 20 - 1987
- Patent No. 6,874,661 and 0,266,972 Pending
- HDB Prefabrication Technology Centre tested
- SETSCO Tests

Setting Time

Base Material Temperature (F°/C°)	Working Time	Full Cure Time
90° / 32°	8.5 minutes	2 hours
80° / 27°	12 minutes	2 hours
70° / 20°	15 minutes	2 hours
60° / 16°	18 minutes	3 hours
50° / 10°	21 minutes	6 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 G5 to cure for specified period before loading.

Product Range - EPCON G5 High Strength Epoxy Adhesive



Part No.	Description	Order Qty
Pack Sizes and Accessories		
8A-G5VV	EPCON G5 (650ml) + 1 E55 Nozzle	6
8A-E55V	E55 Nozzle	24
8A-E102	E102 Dispensing Tool	1
8A-E202	E202 Pneumatic Dispensing Tool	1

EPCON G5 - 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 G5 - 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	15.4
T10	13	100	180	90	17.3	24.1
T12	15	120	220	110	25.0	34.7
T13	16	130	220	110	29.3	40.7
T16	20	160	250	170	44.4	61.7
T20	25	200	350	170	69.4	96.4
T25	30	250	420	210	108.4	150.6
T28	35	280	540	270	136.0	188.9
T32	40	320	600	300	177.6	246.7
T40	50	400	800	400	277.5	385.4

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

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