

EPOXY MORTAR for Concrete Fixing & Repair

EPAR 705

TECHNICAL DATA

1.0 DESCRIPTION

A two part, non-slump epoxy mortar formulated to give a strong bond to dry or damp concrete, steel, glass, aluminium etc. EPAR 705 is non-shrink and has excellent chemical resistance. Also available with a cold cure hardener for use from 0°C - 10°C and a 5 minute hardener which has a 5 minute pot life and 10 minute initial set time.

2.0 PHYSICAL PROPERTIES

2.1	Viscosity	Non Slump.
2.2	Mix Ratio	1 : 1 by weight or volume.
2.3	Pot Life	1 - 1.5 hours at 20°C. Std hardener.
2.4	Minimum Application Temp.	10°C. Std hardener. 0°C cold cure & 5-min. hardener.
2.5	Shelf Life	1 year in original unopened containers.
2.6	Cured Properties	(Standard hardener at 20°C)
2.6.1	Colour	Grey.
2.6.2	Specific Gravity	1.78
2.6.3	Compressive Strength	48 MPa 1 day, 65 MPa 7 days.
2.6.4	Compressive Modulus	13 GPa.
2.6.5	Tensile Strength	20 MPa.
2.6.6	Thermal Expansion	5 x 10 ⁻⁵ mm/mm/°C.

3.0 USES

The excellent mechanical properties of EPAR 705 combined with ease of use make it an extremely versatile product.

Common uses for EPAR 705 include the following:

- 3.1 Bedding and jointing of precast concrete units.
- 3.2 Repair of damaged or spalled concrete and protection of reinforcing.
- 3.3 Levelling and patching of concrete floors under heavy load or impact.
- 3.4 Grouting of starter bars and bolts particularly horizontal or overhead.
- 3.5 Fabrication of concrete pipe intersections and general drainage work.

4.0 APPLICATION

- 4.1 SURFACE PREPARATION. Thoroughly clean the jointing surfaces of all extraneous matter, especially oil and grease. Laitance should be removed from concrete surfaces mechanically or by acid etching. For best results steel surfaces should be prepared by sand blasting or grinding.

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TECHNICAL DATA Continued

- 4.2 **MIXING PROPORTIONS** – 1 : 1 by volume or weight. Mix the two parts THOROUGHLY by machine, spatula, or by hand until a uniform grey colour is obtained. Wear protective gloves and apply a barrier cream to exposed skin. Wet gloves in water to prevent sticking of EPAR. Shake off excess water. Avoid mixing water with EPAR as this may interfere with the final set and hardness.
- 4.3 In cold weather the resin and hardener may be softened by placing the containers in hot water.
- 4.4 **APPLICATION.** EPAR 705 should be worked well into the surface to be filled or bonded. Initially a thin smear should be applied to ensure the surface is properly 'wet' with epoxy. After applying this initial layer more EPAR 705 may be applied to the desired thickness. Both surfaces should be coated with EPAR 705 before being joined. A smooth surface can be obtained by wiping with a wet cloth or trowel.
- 4.5 If being placed under water, avoid involving water into the mixed EPAR. Use minimum amount of handling when placing and finishing.
- 4.6 **CLEAN UP.** Hands and equipment should be washed in soap and water before curing is advanced.

5.0 ADDITIONAL INFORMATION

Gloves must be worn when handling epoxy products. Read product labels before use.

Keep out of reach of children. Avoid contact with skin and eyes.

For 5 and 15-minute versions, avoid mixing large amounts of epoxy that cannot be used within the pot life of 5 or 15 minutes.

For optimal performance with any epoxy system it is important to:

1. Proportion the hardener and resin accurately.
2. Thoroughly mix together until of an even colour and consistency.
3. Use the correct product for the conditions, especially during cold weather.

If potable water certification is required, then refer to EPAR EM Epoxy Mortar.

6.0 PACKAGING

900 gm pack (2 x 450gm) - approx. volume 0.5 litres

1.8kg pack (2 x 900gm) - approx. volume 1 litre

3.6kg pack (2 x 1.8kg) - approx. volume 2 litres

16kg pack (2 x 8kg) - approx. volume 9 litres

Refer to Product Safety Data Sheet for handling and first aid information.

