

MOISTURE INSENSITIVE EPOXY RESIN MORTAR

Description

REPCON EP MI is a solvent free, three-component moisture insensitive, epoxy resin based mortar. It has been developed to meet special requirement of concrete repair particularly in damp, wet condition.

After mixing, the mortar is placed on moist concrete and it cures to form a rigid and high strength material.

Uses

REPCON EP MI may only be used by experienced professionals. REPCON EP MI is used for:

- For repair of damp and wet concrete
- For rapid installation and repair.

Advantages

- High early strength
- Cures without shrinkage
- Excellent adhesion to cement substrate even under salt water.

Technical Data

Chemical base	Epoxy resin
Mixed density (Comp A+B+C)	2.1 ± 0.1 g/cm ³ (at 27°C)
Compressive strength: ASTM C579	
3 hrs	≥20 Mpa
6 hrs	≥25 Mpa
1 day	≥35 Mpa
7 days	≥60 Mpa
Tensile strength: ISO 527-2	10.2 N/mm ² (after 7 days at +30° C)
Tensile adhesion strength(14 days)	≥ 4 MPa for dry concrete ≥ 4 Mpa for Moist concrete
Flowability(Sag flow)	Not more than 20 mm for vertical application
Pot life	20 minutes (100 g mass at +27° C)

Application Information

Mixing ratio:

Part A : Part B : Part C = 2 : 1 : 18 (by weight)

Consumption:

2.1kg/m² per mm of thickness

Layer Thickness

30 mm max.

Application information

Substrate Quality

Verify the substrate strength (concrete, masonry, natural stone).

The substrate surface (all types) must be clean and free from contaminants such as dirt, oil, grease, existing surface treatments and coatings etc.

Steel substrates must be de-rusted similar to Sa 2.5. The substrate must be sound and all loose particles must be removed.

Surface preparation

Concrete / masonry / mortar / stone

Substrates must be sound, clean and free from laitance, grease, oils, old surface treatments or coatings and all loose or friable particles must be removed to achieve a laitance and contaminant free, open textured surface.

Steel

Must be cleaned and prepared thoroughly to an acceptable quality i.e. by blast cleaning and vacuum. Avoid dew point conditions

Mixing:

Part A : Part B : Part C = 2 : 1 : 18 (by weight)

Mix parts A+B together for at least 3 minutes with a mixing spindle attached to a slow speed electric drill (max. 600 rpm) until the material becomes smooth in consistency and a uniform colour. Then add part C and continue until mixture is homogeneous. Avoid aeration while mixing. The, pour the whole mix into a clean container and stir again for 1 more minute at low speed to keep air entrapment at a minimum. Mix only that quantity which can be used within its potlife.

Application Method and tools

When using a thin layer adhesive, apply the mixed adhesive to the prepared surface with a spatula, trowel, notched trowel, (or with hands protected by gloves). When applying as a repair mortar use some formwork. When using for bonding metal profiles onto vertical surfaces , support and press uniformly using props for at least 12 hours, depending on the thickness applied (not more than 5 mm) and the room temperature. Once hardened check the adhesion by tapping with a hammer.

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Packaging

Part A+B+C Pre-batched unit 10.5 kg

Comp A: 1 kg.

Comp B: 0.5 kg.

Comp C: 9 kg.

Cleaning

All tools and equipment should be cleaned immediately after use with Xylene Sol. Spillages should be absorbed with sand or sawdust and disposed in accordance with local regulations.

Storage and Shelf Life

12 months from date of production. Store properly in original unopened, sealed and undamaged packaging, in dry conditions at temperatures between +5°C and +40°C. Protect from direct sunshine.

Note

All Technical Data Sheets of FIRSTCHOICE SPECIALITY CHEMICALS are updated on regular basis; it is the user's responsibility, to obtain the most recent issue. Field services where provided, does not constitute supervisory responsibility, for additional information contact our local representative.

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