

CAT. No. CONREP-07-2009

ISOPOX EC MORTAR

High Strength Epoxy Mortar

ISOPOX EC MORTAR is a three-component system consisting of an epoxy resin, quartz silica filler and amine- type hardener. It is a 100% solids system and solvent free. This system is characterized with high compressive, impact and resilient properties and ideal for floor repairs, resurfacing or wherever permanent repairs to cracked/spalled concrete are needed.

APPLICATIONS

ISOPOX EC MORTAR is used for floor resurfacing, spalled or cracked concrete repair in acid tanks and sea wall, sewage lining, chemical plants, machinery service areas, warehouse, service station and other areas where a high degree of abrasion/chemical resistance and high strength is required.

ADVANTAGES

- High compressive and tensile strength.
- Waterproof.
- Highly resistant to aggressive chemicals.
- Give non-absorbent, non-dusting surface.
- Corrosion and abrasive resistant.
- Supplied in pre-weighed quantities.

TYPICAL PROPERTIES

1. Compressive Strength (ASTM C109)	65 N/ sq.mm @ 7 days
2. Tensile strength (ASTM C307)	11 N/Sq.mm @ 7 days
3. Flexural Strength (ASTM C580)	21 N/ Sq.mm @ 7 days
4. Wet Density	2 kilogram/ Liter
5. Pot Life	30 minutes @ 35 ^o celsius
6. Initial Hardness	Within 24 hours
7. Full Cure	7 Days
8. Chemical Resistance	
Hydrochloric Acid, 15%	excellent
Nitric Acid, 10%	very good
Acetic Acid, 5%	very good
Sulphuric acid, 10%	excellent
Phosphoric Acid, 20%	excellent
Latic Acid, 10%	very good
Sodium Hydroxide, 50%	excellent
Petrol	excellent

SURFACE PREPARATION

Surface must be structurally sound, clean, dry and free from dust, oil, grease, curing compounds and other loose debris. Surface should be fairly rough. Recommended methods for preparing concrete are by sand-blasting, water jet, acid etching, grinding, wire brushing or by pneumatic tools. Spalled or cracked concrete should be removed and where steel reinforcements are exposed, concrete should be taken out baring all reinforcements on the unsound areas. The steel reinforcements should be cleaned using suitable methods like abrasive blasting or power wire brushing. All cracks over 1.6mm should be routed out to a 10mm depth and 10mm width prior to application of the epoxy mortar.

PRIMING

Prior to application of **ISOPOX EC MORTAR**, prime the prepared surface using ISOPOX IH 3010 LV or MV. Apply primer using roller or brush. In general, primer should be tacky when the epoxy mortar is applied. Apply primer at the rate of 3-4 square meters per kilogram.

MIXING

The part B hardener is added to Part A Resin. Mix the two liquid components first using a slotted paddle or a jiffy mixer attached to a 13mm electric drill. Slow circular motions are carried out to assure complete mixing. Next transfer the mixed liquid to a suitable, big mixing bucket container. Add the Part C tiller slowly while mixing until all aggregate particles are coated. Large quantities may be mixed in a pan type paddle mixer. Do not attempt to mix by hand or by any other means. Place immediately.

PLACING

For horizontal application, fill routed cracks first, and place remainder of mortar with steel trowel pressing the mortar firmly to achieve positive adhesion to the primer. If a thick mortar surfacing is required on floors, ISOPOX EC MORTAR should be built up in layers of 15-30 mm leaving the surface of the first layer rough to provide good mechanical key. The interface of each layer should be primed with ISOPOX IH 3010 LV or MV. Final finish can be accomplished by trowel or with a four bladed power trowel in case of large areas.

In vertical applications, the mortar should be built up in layers of 10mm. **ISOPOX EC MORTAR** is not recommended for overhead repairs. For overhead repair use **ISOPOX OH**.

PACKING COVERAGE

ISOPOX EC MORTAR is packed in 16- kilogram kit (Parts A, B, C) and will yield eight (8) liters of mortar.

CLEANING

Fresh mortar can be cleaned- off from tools using **ISOKLEEN**.

STORAGE

1year shelf life in original packing stored under warehouse condition.

HEALTH / SAFETY

Always use protective clothing, eye goggles, and rubber hand gloves when handling this product. Avoid contact with the skin or eyes. If spilled on the skin, wash immediately with soap and plenty of water, accidental splashes on the eyes should be immediately cleaned with water and medical attention sought. Refer to MSDS for more information.

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Technical information, data are to be considered as typical values and not sales specification. Actual measured values may vary due to factors beyond our control. Indications concerning function and application of the products are empirical. Although the information is believed to be accurate, there is no warranty by ISOLA. None of the recommendations becomes part of the warranted quality of the products. Due to the fact that the conditions of individual use are beyond ISOLA's direct and continuous control, ISOLA disclaims all responsibility in connection with the use of its products and does not warrant against any loss direct or consequential

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