

ShaliFix[®] EM

3K Solvent Free High Strength Epoxy Mortar



STP Limited

Description

ShaliFix[®] EM is a 100% solid, solvent free, high performance, non-slumping, three-component, consisting of an epoxy resin, hardener and selected graded filler, providing a tough and resilient, surface when compared to concrete.

ShaliFix[®] EM can be used as multipurpose repair and adhesive mortar including bedding mortar, adhesive and non-sag concrete repair mortar.

ShaliFix[®] EM mortar may be applied at thickness of minimum 10 mm. It conforms to ASTM C 395 - 01 (2012).

Characteristics

Compressive Strength, MPa		Working Time, Minimum, 30°C	30 - 40
• 1 day	40 - 50	Flexural Strength, MPa	25 - 27
• 7 days	70 - 80	Tensile Strength, MPa	14 - 16
Mix Density, gm / cc	2 ± 0.05	Coverage @ 10 mm, kg / m ²	20 ± 0.5

Chemical Resistance

ShaliFix[®] EM is resistant to a variety of chemicals as given below:

Acetic Acid	10%	Nitric Acid	25%
Ammonium Hydroxide	25%	Sulphuric Acid	10%
Caustic Soda	50%	Sulphuric Acid	50%
Citric Acid	10%	Lactic Acid	10%
Phosphoric Acid	50%	Hydrochloric Acid	10%
Saturated Sugar	50%	Fuel / Oil resistance	*

*Generally resistant to fuel / lubricant / other oil. However, it is recommended to apply a coat of ShaliUrethane TC to ensure avoidance of even small quantity of penetration of fuel / lubricant / other oil.

Application

- Apron / Taxi area in airports
- Car parks and workshops
- Warehouses
- Dairies / Food & Beverages production facilities
- Chemical / Fertilizers Plants
- Metal treating plants

Advantages

- Solvent free. No odour during application.
- Provides non-absorbent, non-dusting, durable, chemical resistant surface.
- Dries in eight hours to allow foot traffic.
- High tensile and high compressive strength.
- Slip resistant - different textures available to suit different conditions.

Application Methodology

➤ Surface Preparation

• New Concrete Floor

- Ensure that concrete should be at least 28 days old and moisture content is < 5%.
- Ensure that surface is sound and free from dust, laitance and other contaminants
- Remove any oil, grease etc. by acid etching or by burning.
- Allow the surface to dry.

- **Old Concrete Floor**
 - Ensure a sound cleaned substrate and remove all laitance deposits by light mechanical scabbing, grinding or grit blasting.
 - Remove any oil, grease etc. by acid etching or by burning.
 - Repair any damage or surface irregularity with ShaliFloor Epoxies.
- **Material Preparation**
 - Mix entire Comp B (Hardener) into entire Comp A (Resin), both of which are pre-weighed, thoroughly by using a drill mixer fitted with suitable paddle till a homogenous mix is obtained.
 - Add entire pre-weighed Comp C (Filler) in the above mixture and mix for additional 2 minutes or until all aggregate pieces are completely covered by the epoxy.
- **Application of Material**
 - Priming is not normally required provided the substrate is sound, untreated and good quality non-porous concrete.
 - If any doubts exist on the quality of the concrete or if it is porous, prime the surface with **ShaliPrime 2E** which is two components. Care must be taken to mix the entire pre-weighed component as directed.
 - Allow the primer to achieve tack free condition.
 - Apply the prepared mixed **ShaliFix® EM** immediately as below
 - Apply first coat of 5 mm **ShaliFix® EM** using a trowel or squeeze to achieve a continuous coating.
 - Apply second coat after initial cure of 12 hrs. @ 27°C.
 - Ensure to achieve continuous film.
 - In case of anti-slip application, use metallic broom to give a textured finish immediately after laying on the top coat.
 - Ensure expansion joints in the existing substrate is retained and continued through **ShaliFix® EM** topping. The joint can be filled with **ShaliSeal EMS**.

Cleaning & Maintenance

Clean all tools immediately after use with Xylene. Do not allow the material to harden.

Health & Safety

- Avoid contact with skin / eyes and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapour.
- Wear suitable protective clothing, gloves and eye protection.
- In case of skin contact, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of eye contact, wash with plenty of clean water and seek medical advice.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

Packing

Available in 20 kg combo pack consisting of Component A (Resin) 2.90 kg, Component B (Hardener) 0.50 kg and Component C (Filler) 16.60.

Storage

Store in a cool dry place, under shed, away from heat.

Shelf Life

12 months in original unopened sealed conditions.



STP Limited
Enhancing Structures' Life

Product Range

- Waterproofing and Insulation ■ Road Surfacing
- Sealants and Additives ■ Pipeline Coating
- Protective / Anti-Corrosive Coating ■ Epoxy Flooring
- Grouts / Admixtures ■ RestoFix- Repair / Rehabilitation
- Other Construction Chemicals



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