

Expanmortar*EPFC

High strength thixotropic, epoxy resin mortar, for bedding, anchoring and adhesive

Uses

Expanmortar * EPFC is designed for application to repair minor imperfections in concrete surfaces. It is suitable for application from 1 to 10 mm, and can be used in the following situations:

- Filling pinholes prior to overcoating with Expancote* or Expanfloor* products.
- General reprofiling over large areas, upto 10mm thick
- Sealing of surface cracks in preparation for crack injection, fixing of dowel bars and anchors.
- General purpose bedding mortar and adhesive

Advantages

- Cost effective - reduces usage of subsequent coatings
- High performance - excellent chemical resistance, strong adhesion to concrete substrate
- User friendly - easy to apply and finish, manufactured to meet local conditions

Description

Expanmortar * EPFC is a two component thixotropic, solvent free, compound based on epoxy resins, graded fillers and thixotropic agents. It is supplied in two grades and applied directly to concrete substrates, without primer, and cures to a surface ready for over coating. The base component is light grey coloured and the hardener black to ease identification of uniform mixing.

Design criteria

Expanmortar*EPFC is available in two grades Expanmortar EPFC & Expanmortar EPFC (B), and is designed for filling pinholes, & surface irregularities in concrete prior to the application of subsequent coatings etc., can also be use as finish surface. Expanmortar EPFC can be use in between 0 - 3 mm thick application and Expanmortar EPFC(B) can be use for 3 - 10 mm thick application.

Technical support

Expanchem Fospak offers a comprehensive technical support service to specifiers, end users and contractors. It is also able to offer on-site technical assistance, an AutoCAD facility and dedicated specification assistance in locations all over the world.

Properties

Solids by weight	: 100%	@ 25°C
Compressive strength	: 70 N/mm ²	@ 7 days
Pot life	: 1 hour 40 mins @ 25°C 1 hour @ 35°C	
Drying time	: 10 hours @ 25°C 4 hours @ 35°C	
Overcoating time	: After 24 hour curing period	
Colour	: Grey	
Chemical resistance	: Resistant to oils, fats, petrol, salt and sugar solution, bleach, dilute mineral acids, alkalis and various solvents	

Instructions for use

Preparation

Concrete surfaces should be clean, dry and free from laitance. Sandblasting or mechanical wire brushing may be necessary.

Mixing

Care should be taken to ensure that Expanmortar*EPFC is thoroughly mixed to produce a fully homogeneous paste.

The hardener' and 'base' components should be stirred thoroughly in order to disperse any settlement before mixing them together. The entire contents of the 'hardener' should be emptied into the 'base' container and the components mixed together using a Expanchem mixing paddle attached to a slow-speed (400/500rpm) heavy duty drill, until a uniform grey colour and consistency is obtained. Mixing of 1kg packs can be done by hand but care must be taken to ensure homogenous mixing. Under no circumstances should part packs be used, or part mixing be attempted.

Application

Due to the easy workability of the product, a variety of instruments such as trowel, scraper, filling knife and squeegee can be used. After mixing, material can be taken directly from the can, or subdivided onto spot boards for individual applicators.

Expanmortar*EPFC can be over coated with all epoxy coatings after a minimum curing period of 24 hours. Prior to overcoating, the surface of the fully cured Expanmortar*EPFC should first be abraded to assist adhesion, and then cleaned to a dust-free finish.

Cleaning

Expanmortar*EPFC should be removed from tools, equipment and mixers with Expanchem Solvent 102*† immediately after use. Hardened material can only be removed mechanically.

Estimating

Supply

Expanmortar*EPFC : 1.0 and 4.0 Kg packs

Expanchem Solvent 102 : 5 and 25 litre cans

Coverage and yield:

Coverage of Expanmortar*EPFC is wholly dependant upon surface conditions, site trials are therefore recommended to ascertain actual usage on uneven substrates. As a guideline when applied at 200 microns dft coverage is approximately 5m²/kg.

Storage

Shelf life

12 months if kept in unopened tins and stored in a dry place away from direct sunlight.

Storage conditions

Store in dry conditions in the original, unopened containers. If stored at high temperatures the shelf life may be reduced to 4 to 6 months.

Limitations

- Do not mix part packs under any circumstances.
- Expanmortar*EPFC should not be exposed to moving water during application.
- Exposure to heavy rainfall prior to final set may result in surface scour.
- If any doubt arises concerning temperature or substrate condition, consult the local Expanchem Fospak office.

Precautions

Health and safety

Expanmortar*EPFC and Expanchem Solvent 102 should not come in contact with skin or eyes, or be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye/face protection.

If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provides additional skin protection. Should accidental skin contact occur, remove immediately with a resin removing cream followed by soap and water. Do not use solvent. In case of contact with eye, rinse immediately with plenty of clean water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

Fire

Expanmortar*EPFC is non-flammable.

Expanchem Solvent 102 is flammable. Keep away from sources of ignition. No smoking. In the event of fire extinguish with CO₂ or foam. Do not use a water jet.

Flash points

Expanchem Solvent 102 : 33°C

For further information, refer to the product materials safety data sheet.

Additional information

Expanchem Fospak manufactures a wide range of products specifically designed for the repair and refurbishment of damaged reinforced concrete. These include hand-placed and spray grade repair mortars, fluid micro-concretes, chemical-resistant epoxy mortars and a comprehensive package of protective coatings.

* Denotes the trademark registered.

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