



# NanoMortar FEP

Thixotropic epoxy resin base fairing mortar

## Description

NanoMortar FEP is a two component thixotropic, mortar based on epoxy resins, graded fillers and thixotropic agents. It is applied directly to concrete substrates without primer and cures to a surface ready for over coating. The base component is light grey colour and the hardener black to ease identification of uniform mixing.

## Uses

- NanoMortar FEP is designed for application to minor imperfections in concrete surfaces. It is suitable for application from a feather-edge to 3 mm, and can be used in the following situations:
- Filling pinholes prior to over coating with epoxy or polyurethane.
- General re-profiling over large areas, up to 3 mm depth.
- Sealing of surface cracks in preparation for crack injection.
- General purpose bedding mortar and adhesive.

## Advantages

- Reduces usage of subsequent coatings.
- Excellent chemical resistance, strong adhesion to concrete substrate.
- Easy to apply and finish, manufactured to meet local conditions.

## Technical Information

Appearance:	Thixotropic paste
Density	1.7kg/lit (fresh mortar)
Compressive Strength:	70 N/mm <sup>2</sup> (7 days at 20°C)
Bond Strength to Concrete:	Stronger than integral strength of concrete.
Pot Life:	4 Hours at 20°C
Drying Time:	10 Hours at 25°C
Over coating:	After 24 Hours at 25°C

## Packaging

2.5kg & 3kg unit.

## Storage

Store in a dry and cool place below 35°C. Protect from direct sunlight.

## Shelf life

2 years in original, unopened packaging.

## Instructions for use

**Surface Preparation:** All surfaces should be clean, dry, free from oil, grease and chemical contamination. Oil and grease can be removed using dissolve. Concrete surfaces should be free from laitance which should be removed by grit blasting or scarifying.

**Mixing:** Care should be taken to ensure that NanoMortar FEP 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 mixing paddle attached to a slow speed (400/500rpm) heavy duty drill, until a uniform grey colour and consistency is obtained. Mixing of 2.5kg unit 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. NanoMortar FEP can be over coated with all epoxy coatings after a minimum curing period of 24 hours. Prior to over coating, the surface of the fully cured NanoMortar FEP should first be abraded to assist adhesion, and then cleaned to a dust-free finish.

## Cleaning & Disposal

NanoMortar FEP should be removed from tools, equipment and mixers with NanoSolvent immediately after use. Hardened material can only be removed mechanically. Do not dispose off into water or soil but according to local regulations.

## Precautions/Limitations

Minimum application temperature 5°C. It is recommended that concrete substrates should not have a moisture content of more than 75% RH.

## Health & safety

NanoMortar FEP like similar products, are capable of irritating unprotected sensitive skin, we therefore recommend the use of a suitable barrier cream and the wearing of gloves and goggles.