# BETOPOX® CEMENT

# Self-levelling epoxy-cement based mortar for repairing and levelling floors up to 5 mm.

**BETOPOX® CEMENT** is a self-levelling, cement-based, water-based epoxy resin, three-component mortar with a very fine texture, designed specially for implementing high performance base layers for pavements, in thicknesses ranging from 1.5 to 5 mm. It complies with the requirements of standard EN 13813.

#### FIELDS OF APPLICATION

- High performance levelling layer before applying epoxy, polyurethane, wooden pavements, etc.
- Regulating and repairing substrates with humidity before applying their finish with epoxy resins or polyurethane.
- Regulating, repairing and protecting concrete surfaces exposed to aggressive chemical and physical environments.
- Self-levelling final coating on substrates in areas with light permanent humidity or little ventilation.

#### **PROPERTIES**

- High initial and final mechanical strengths.
- It acts as a temporary vapour barrier on damp substrates, preventing the formation of blisters in definitive resin coatings.
- · Good chemical strength.
- Self-levelling, it provides an excellent, very fine and smooth finish.
- · Very good abrasion strength.
- It can be coated with resins after 24 hours (20 °C and 50 % R.H.)
- · Solvent-free.
- Suitable as a base layer for indoors and outdoors.

# **HOW TO USE**

#### Preparing the substrate:

The substrate must be firm, clean, free of any loose, brittle elements, as well as other substances like grease, oil or other pollutants. To do this, any remains of such substances will have to be removed. Remove the dust by vacuuming.

The substrate must be dry or slightly wet but never waterlogged or with any water content.

The concrete substrates must be prepared using mechanical means (shot blasting or preferably diamond polishing) so as to remove the surface slurry and obtain an open pore surface as smooth and even as possible.

#### Primer:

On porous and concrete substrates, apply the **BETOPOX® PRIMER W** primer using a gun, brush or short-haired roller, and try to help the product penetrate into the substrate with an approximate amount of 250-350 g/m $^2$ . If applying to ceramic tile or enamel substrates, use **BETOPOX® CERAM** as a primer.

# Mixing:

First mix the two epoxy components (A and B), pouring component A over component B. Stir with the help of a low revolution electrical stirrer until the product is mixed completely. Try not to add air to the mixture.

Pour the mixture into another clean, appropriately-sized container and gradually add the cement component (C), while mixing with the electric stirrer until a smooth, even product is obtained.

# **Application:**

Apply **BETOPOX® CEMENT** when the primer begins to feel tacky.

Pour and spread **BETOPOX® CEMENT** uniformly with the help of a notched trowel or a rubber rake calibrated to the desired thickness. Immediately pass a bristle roller over it to help remove any trapped air and improve the evenness of the coating.

Wait at least 24 hours to coat with an epoxy finish and before applying make sure that the surface humidity of **BETOPOX® CEMENT** is lower than 4 %.

# Tool cleaning:

The tools are to be cleaned with water immediately after use. Once hardened, it can only be removed mechanically.

#### **COVERAGE**

The approximate coverage is 2 kg/m<sup>2</sup> and mm thick. However, the final amount used will depend on the condition of the substrate, its porosity, levelling and the site conditions.

#### **PACKAGING**

Pre-metered 30 kg units.

Colour: Grey.

#### **STORAGE**

12 months, in its original closed packaging, in a cool, covered place, protected from humidity, sunlight and freezing temperatures.

#### INDICATIONS TO TAKE INTO CONSIDERATION

- After application avoid direct contact with water for the next 24 hours.
- Indoors make sure there is appropriate ventilation to help remove any possible excess damp.
- To cover the coating with any product that is not permeable to water vapour, the surface humidity of that coating is to be less than 4 %.
- Do not exceed the indicated thicknesses by layer.
- The temperature of the substrate must be between +5 °C and +30 °C.
- The maximum relative humidity must be 80 %.
- The substrate concrete's tensile strength must be at least 1.5 N/mm<sup>2</sup> and its compression strength at least 20 N/mm<sup>2</sup>.
- Do not add water to the mixture or any other substance that may alter the properties of the material.
- The use of partial mixtures is not advisable.
- If used as a humidity time barrier, the minimum thickness will be 3 mm.

## **TECHNICAL DATA**

Material base	Cement and water-based epoxy resins mortar
Maximum granulometry	0.2 mm
Mixture density	2.0 g/cm <sup>3</sup>
Pot life (20 °C)	60 min
Repaintability (20 °C)	24 hours
Adherence on concrete	> 2.2 N/mm² (breakage in concrete)
7 days compression strength	≥ 25 N/mm²
Shore D	≥ 75
Application temperature	5 °C - 30 °C
Total hardening	7 days

## **CE MARKING**



# EN 13813

Cementitious mortar for screeds and floor finishing CT-C40-F10-A9		
Reaction to fire	Class A2 <sub>FL</sub> s1	
Emission of corrosive substances	CT (Cement)	
Compression strength	C40 (≥ 40 N/mm²)	
Flexural strength	F10 (≥ 10 N/ mm²)	
Wear resistance	A9 (≤ 9 cm³/50 cm² )	
Emission of hazardous substances	See SDS	

# **HEALTH AND SAFETY**

All the information about conditions of usage, use, storage, transport and removing chemical waste is available on the product Safety Data Sheet.

The product and its packaging must be disposed of according to current legislation and it is the responsibility of the product end user.

# LEGAL NOTICE

The data contained in this document is based on our experience and technical knowledge, gained during laboratory assays, and our bibliography. We will not be responsible for any product applications not indicated in this file. The dosage and consumption data are only guidelines, based on our experience, and may alter due to atmospheric or on-site conditions. For correct dosage and usage amounts, it is necessary to conduct a trial or assay "in situ", for which the client is responsible. If you have any doubts or require additional information, please contact our technical department. December 2016.



# PROPAMSA S.A.U.

C/Ciments Molins s/n, Pol. Ind. Les Fallulles 08620 Sant Vicenç dels Horts, (Barcelona) Tel. (+34) 93 680 60 40 - Fax (+34) 93 680 60 49

