INNO-FLOOR

FOX EPOTHANE® PRIMER

Epoxy Based, Two Component, Solvent Free, Transparent Primer

Description

FOX EPOTHANE® PRIMER is epoxy based, two component, low viscosity, solvent free, transparent primer set.

Fields of Application

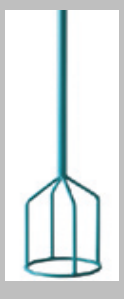
- As a primer before epoxy and polyurethane coatings,
- As a binder for epoxy based correction mortars and screeds,
- As a repair and filling mortar by mixing with a suitable amount of silica sand,
- Before **FOX EPOTHANE®** series floor coating systems, as a primer,
- Before **FOX PURATHANE®** series polyurethane floor coating systems, as a primer,
- Before **FOX PURMAX®** series polyurethane waterproofing coatings, as a primer.

Advantages

- Can be used interiors and exteriors.
- High amount of filling material can be added in it.
- High chemical and mechanical resistance.
- Easy to apply.
- Perfect surface adherence.
- Liquid impermeable.
- Anti-slip surface can be obtained.
- Solvent free.
- Low viscosity.
- High splice strength.

Technical Features

Density		1,10 ±0,05 gr/cm^3
Colour		Transparent, Yellowish
Mortar Feature with 14,3% Binder		
Compressive Strength	7 days	~95 N/mm^2
Flexural Tensile Strength	7 days	~30 N/mm^2
Splice Strength	Concrete	≥2 N/mm^2
Solids by %		%100
Dilution		No Dilution
Application Surface Temperature		+10°C /+30°C
Shore D Hardness	7 days	84
Working Time		35-40 minutes



The above values are given for +23°C and 50% relative humidity. High temperatures shorten the time, low temperatures extend the time.

Physical Features

Temperature	+10°C	+20°C	+30°C
Relative Humidity Ratio	%60	%60	%60
Pot Life	40 minutes	35 minutes	12 minutes
Over Coating Time	Min. 24 - Max. 35 hours	Min. 12 - Max. 18 hours	Min. 7 - Max. 10 hours
Pedestrian Traffic	30 hours	15 hours	8 hours
Light Traffic	3 days	2 days	1 day
Fully Cures	7 days	7 days	7 days

The above values are theoretical. May vary depending on temperature differences and humidity.

System Details and Coverage

System Details		Product	Coverage
Primer	Primer	FOX EPOTHANE® series (See primer selection chart.)	100-200 gr/m^2
	Surface Roughness <1 mm	1 unit FOX EPOTHANE® series + 0,5 unit Silica Sand 60-70 AFS (0,1-0,3 mm) by weight	200-500 gr/m^2 100-250 gr/m^2
	Surface Roughness up to 2 mm	1 unit FOX EPOTHANE® series + 1 unit Silica Sand 60-70 AFS (0,1-0,3 mm) by weight	200-500 gr/m^2 200-500 gr/m^2
Mortar Coating and Repair Mortar	5-20 mm layer thickness	1 unit FOX EPOTHANE® PRIMER + 3 unit Silica Sand 60-70 AFS (0,1-0,3 mm), 3 unit Silica Sand 40-45 AFS (0,3-0,5 mm), 3 unit Silica Sand 15-25 AFS (0,7–1,2mm), by weight	2,2 kg/m^2/mm

The above values are theoretical and do not include the need for additional materials depending on surface porosity, profile, differences in levelling and weakening.

Chemical Resistance

Leaded Benzene	+	Beer	+	Cyclohexane	+	Diesel Oil	+
Sulphuric Acid 30%	+	Nitric Acid	+	Acetic Acid	+	Caustic Soda	+
Toluene	+	Xylene	+	Styrene	+	Fruit Juice	+
Ethanol 10%	+	Ethylene Glycol	+	Glycerine	+	Milk	+
Sodium Chloride 30%	+	Sodium Hydroxide 10%	+	Olive Oil	+	Paraffin	+
Petrol	+	Hint Oil	+	Silicone Oil	+	Sugary Melt	+
Deionize Water	+	Soap	+	Javel Water	+	Toluene	+

Colour change may occur due to the effects of chemicals. This research was done at room temperature. High temperature values and / or mixtures of chemicals can affect chemical resistance.

Primer Selection Chart

SURFACE CONDITION	RECOMMENDED PRIMER
Concrete in Accordance with The Standard	FOX EPOTHANE® PRIMER, FOX EPOTHANE® PRIMER HB, FOX PURMAX® PRIMER 1K RAPID
Moist Substrate	FOX EPOTHANE® PRIMER WB
Moist Substrate (With Moisture Barrier)	FOX EPOTHANE® PRIMER HB, FOX EPOTHANE® PRIMER HBF
High Porous Substrates	FOX EPOTHANE® PRIMER, FOX EPOTHANE® PRIMER SL
High Porous Moist Substrates	FOX EPOTHANE® PRIMER HB, FOX EPOTHANE® PRIMER HBF
Steel, Galvanized Steel and Aluminium Surfaces	FOX EPOTHANE® PRIMER HB, FOX EPOTHANE® PRIMER WA, FOX PURMAX® PRIMER 1K RAPID
Wooden Boards and Some Special Surfaces	FOX EPOTHANE® PRIMER, FOX PURMAX® PRIMER 1K RAPID
Asphalt and Bitumen Membrane Surfaces	FOX EPOTHANE® PRIMER SL, FOX EPOTHANE® PRIMER HBF, FOX PURMAX® PRIMER 1K RAPID, FOX PURMAX® PRIMER 1K
Re-Application on Application (Old-New)	FOX EPOTHANE® PRIMER, FOX EPOTHANE® PRIMER WA, FOX PURMAX® PRIMER 1K RAPID
Non-Porous Concrete and Non-Absorbent Surfaces	FOX EPOTHANE® PRIMER SL, FOX EPOTHANE® PRIMER HBF, FOX PURMAX® PRIMER 1K RAPID, FOX PURMAX® PRIMER 1K
Ceramic, Marble, Granite and Gloss Surfaces	FOX EPOTHANE® PRIMER WA

Surface Quality

Concrete substrates to be applied must have a strong and sufficient compressive strength (at least 25 N/mm^2), tensile strength at least 1.5 N/mm^2, humidity should be maximum 4%, ground temperature minimum +10°C. In addition, it should be noted that the dew point of the floor must be above +3°C. The substrate must be clean, dry and free from all kinds of dirt, oil, grease, coating and surface curing materials etc.

Application Procedure

Substrate Preparation

Concrete substrates to be applied should be prepared in a way to remove an open porous surface by removing cement grout using abrasive equipment (Shot Blasting, milling, diamond polishing, etc.). Weak concrete pieces should be removed from the surface, small gaps, holes should be made completely open. The resulting dust should be cleaned with the help of an industrial vacuum cleaner. The ground should be prepared by mixing the 60-70 AFS (0,1-0,3 mm) quartz sand with **FOX EPOTHANE® PRIMER** series primer for substrate repairs, filling the voids and smoothing the surface.

Application Conditions

- Surface moisture content should be below 4%.
- Test method: CM - measurement or drying method in the oven.
- There should be no rising humidity according to ASTM. (Polyethylene cover test).
- Relative air humidity should be 80% maximum.
- Pay attention to dew and condensation!
- Dew and water vapour condensation on the floor that has not been applied or newly coated will damage the coating. To prevent this, the ground temperature must be above +3°C above the dew point.

Watch Points in Application

Surface Temperature ; Minimum +10°C - Maximum +30°C
Ambient Temperature ; Minimum +10°C - Maximum +30°C
Material Temperature ; Minimum +10°C - Maximum +30°C

Mixing

Before starting the mixture, make sure that the product temperatures are between +10°C and +30°C. Mix A component **FOX EPOTHANE® PRIMER** with suitable mixer for 1 minute without dragging air. Then pour component B onto component A. Stir continuously for 2 minutes until you have a homogeneous mixture. If necessary, add 60-70 Afs (0,1- 0,3 mm) silica sand or other fillers after mixing A and B components. Stir for 2 more minutes until you get a homogeneous mixture. Avoid over mixing to minimize air entrainment.
Mixing tools: (300-400 rpm) electric mixer and epoxy / polyurethane resin mixing tip

Application

As Primer

Apply **FOX EPOTHANE® PRIMER** with a roller, trowel or a notched trowel. Make sure that the application is made on the whole surface without any gaps. Depending on the surface condition, apply two layers of primer if necessary. If an epoxy or polyurethane coating will be applied on it, while the material is still wet, Silica sand 40-45 Afs (0.3-0.5 mm) can be sprinkled on it.

As Surface Correction Primer

Rough surfaces need to be corrected before epoxy / polyurethane floor coating. Apply **FOX EPOTHANE® PRIMER** Silica sand 60-70 AFS (0,1-0,3 mm) mixture by scraping with a zero trowel according to the required thickness, taking into account the surface roughness.

As Mortar Coating / Repair Mortar

Apply **FOX EPOTHANE® PRIMER** and silica sand 60-70 AFS (0.1-0.3 mm), 40-45 AFS (0.3-0.5 mm), 15-25 AFS (0.7–1.2mm) Apply the mixture on the **FOX EPOTHANE® PRIMER**, which is still sticky, using leveling laths. After a short waiting period, tighten the surface with a trowel or a Teflon coated finishing machine (usually 20 - 90 rpm).

Cleaning of the Tools

After the application, the tools and equipment used should be cleaned with solvent. **FOX EPOTHANE® PRIMER** can only be removed from the surface by mechanical methods after it hardens.

Watch Points

- Concrete surfaces to be coated with epoxy / polyurethane must be at least 3 weeks old before application, forming a vapour barrier layer on the floors that sit on the ground, and the roof, walls, doors and windows of the building have been made, the ambient and surface temperature must be at least +10°C and +30°C.
- The materials to be used must be brought to the application site 1-2 days prior and must adapt to the ambient conditions.
- In applications to be carried out in cold weather, the ambient and ground temperature should be increased, and the packaging should be prepared at +20°C - 25°C and ready for use in order to increase the processability of the products.
- Rain, dust, wind, animals and pests should be prevented from entering the building while the coating is fresh.
- In resin-based systems, pot life and curing times are affected by ambient temperature, ground temperature and humidity in the air. Curing slows at low temperatures, which increases pot life, over coating time and working time. Curing accelerates at high temperatures, which shortens pot life, over coating time and working time. In order for

the entire product to complete its curing, the ambient and ground temperatures should not be lowered below the minimum temperature levels given. After the application is completed, the coating should be protected from direct water contact for at least 24 hours. If water contact occurs, there will be softening and blistering on the coating, which will cause the coating to lose its properties. Therefore, the coating should be completely removed and rebuilt.

- Consumptions are given for ideal conditions where ambient and surface temperatures are considered as 20°C. Actual consumption may vary depending on the surface structure and ambient temperature. It should be remembered that consumption will increase in bad surfaces and cold weather conditions.
- Mixing must be done with an electric mixer of 300-400 rpm and the specified epoxy / polyurethane resin mixing tip. In case of not mixing with the specified mixing tip, air will be dragged into the product, which will cause air bubbles to form on the coating after application.

Package

17 kg set
A Component; 12 kg tin
B Component; 5 kg tin

Shelf Life

When stored properly at room temperature, away from direct sunlight, between +5°C and +30°C, its shelf life is 12 months from the date of manufacture.

Storage

It should be stored in its original package, in a cool and dry place protected from frost. For short term storage, maximum 3 pallets should be placed on top of each other and shipment should be made with the first in, first out system. In long-term storage, pallets should not be placed on top of each other.

Safety Precautions

It is dangerous to approach the storage and application areas with fire. Storage and application areas should be ventilated. During the application, work clothes, protective gloves, goggles, masks in accordance with the occupational health and safety rules should be used. During storage and application, it should not be contacted with the skin and eyes, should be washed immediately with plenty of water and soap, and if swallowed, seek medical attention immediately. Food and drink materials should not be brought to the application areas. It should be stored out of the reach of children.
For detailed information, please refer to the Material Safety Data Sheet.

Disclaimer

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