## INNO-FLOOR

# FOX EPOTHANE® PRIMER HBF

**Epoxy Based, For Moist Surfaces, Solvent Based, Transparent Primer**

### Description

**FOX EPOTHANE® PRIMER HBF** epoxy based, two-component, solvent based, low viscosity transparent primer set that forms an anti-moisture layer.

### Fields of Application

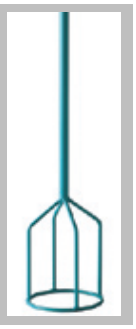
- On dry, moist, fresh concrete,
- On dry, damp, even non-blasted steel,
- Glossy and smooth surfaces,
- As primer in high porous substrates,
- As a primer for nonporous concrete and non-absorbent surfaces,
- As primer on asphalt and bitumen membrane surfaces,
- As primer before epoxy and polyurethane coatings,
- As a binder for epoxy based levelling mortars and screeds,
- It is mixed with silica sand in appropriate size and used as repair and filling mortar.
- As a primer before **FOX EPOTHANE®** series epoxy floor coatings,
- As a primer before **FOX PURATHANE®** series polyurethane floor coatings,
- As a primer before **FOX PURMAX®** series polyurethane waterproofing coatings.

### Advantages

- Used in interiors and exteriors.
- It can be applied under +10°C up to 100% relative humidity and completes curing.
- It provides good corrosion protection on steel.
- It has high chemical and mechanical resistance.
- Despite its high mechanical properties, it is flexible and does not lose its flexibility over time.
- It can be filled with a high amount of filling.
- Easy to apply.
- Surface adherence is excellent.
- It adheres perfectly to shiny, glassy and smooth surfaces.
- Liquid and moisture impermeable.
- Non-Slip surface can be obtained.
- Does not contain solvent.
- Low viscosity can be applied with ease even in low temperatures.
- It has high adhesion strength to dry, moist and fresh concrete.
- It can be applied in the open area after rain and on concrete washed by water jet.

### Technical Features

| | | |
|---|---|---|
| Density | | 1,03±0,05 gr/cm$^3$ |
| Colour | | Transparent, Yellowish |
| Mortar Properties with 14,3% Binder | | |
| Compressive Strength | | ~109 N/mm$^2$ |
| Flexural Tensile Strength | | ~40 N/mm$^2$ |
| Splice Strength | Concrete | ≥2 N/mm$^2$ |
| Solids by % | | %100 |
| Dilution | | No Dilution |
| Application Surface Temperature | | +5°C / +30°C |
| Vapour Permeability | ISO 7783-2 | 4,1 gr/ m$^2$ day |
| Working Time | | 45-50 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 | 60 minutes | 45 minutes | 30 minutes |
| Over Coat 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. It may vary depending on temperature differences and humidity.

## Surface Quality

Concrete substrates to be applied must be strong and have sufficient compressive strength (at least 25 N/mm$^2$), tensile strength must be at least 1.5 N/mm$^2$, and ground temperature must be minimum +5°C. It should also be noted that the dew point of the ground is above +3°C. The substrate should 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 such a way as to obtain an open porous surface by removing cement grout by 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. For the surface repairs, filling the voids and smoothing the surface, the ground should be prepared by mixing 60-70 AFS (0,1-0,3mm) silica sand with **FOX EPOTHANE® PRIMER HBF** primer.

### Application Conditions

- Can be applied under +10°C.
- Relative air humidity should be 100% maximum.
- Pay attention 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 floor temperature must be above +5°C minimum.

### Watch Points in Application

Surface Temperature ; Minimum +5°C - Maximum +30°C
Ambient Temperature ; Minimum +5°C - Maximum +30°C
Material Temperature ; Minimum +5°C - Maximum +30°C

### Mixing

Before starting the mixture, make sure that the product temperatures are between +5°C and +30°C. Mix A component **FOX EPOTHANE® PRIMER HBF** 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 HBF** with a roller, trowel or a notched trowel. Make sure that the application is made on the whole surface without any gaps. If **FOX EPOTHANE® PRIMER HBF** is absorbed from the surface, primer application should be repeated. If 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

Apply **FOX EPOTHANE® PRIMER** HBF with roller, trowel or zero-trowel as the first layer on a highly porous concrete floor. After the primer has dried, apply **FOX EPOTHANE® PRIMER H**BF, Silica sand 60-70 AFS (0,1-0,3 mm) mixture as a stripping trowel according to the required thickness, taking into account the surface roughness.

### Cleaning of the Tools

After the application, the tools and equipment used can be cleaned with solvent. **FOX EPOTHANE® PRIMER HBF** 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

19 kg set
A Component; 14,0 kg tin
B Component; 5,0 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. In short term storage, maximum 2 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