

INNO-FLOOR **FOX PURATHANE® BASECOAT HARD**

Polyurethane Based, Two Component, Solvent Free, Self Levelling Coating

Description

FOX PURATHANE® BASECOAT HARD is polyurethane based, two component, solvent free, self-levelling, semi-flexible, designed for industrial floors, coloured floor coating material.

Fields of Application

- Areas exposed to heavy/medium/light traffic load,
- Depots,
- Production areas,
- Aircraft hangars,
- Car parks,
- Garages,
- Airports,
- Shopping malls,
- Supermarkets
- Magazines and showrooms,
- Congress and exhibition saloons,
- Hotels,
- Hospitals and nursery homes,
- Clinics,
- Schools and kindergartens,
- Libraries,
- Offices,
- Chemical and pharmaceutical industries,
- Laboratories,
- Hygiene desired areas,
- It is used in areas where the floor is expected to be a certain degree of flexibility.

Advantages

- It provides perfect adherence.
- Perfect chemical resistance.
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- Semi flexible, resistant to abrasion.
- Has crack bridging feature, (1 - 3 mm).
- Can be applied on asphalt.
- High splice strength.
- Glossy finish coating is obtained.
- Easy to maintain and clean.
- Creates hygienic environments.
- Easy to sterilize.
- It has a surface structure that does not allow microbe formation.
- It can be painted with **PURATHANE® TOPCOAT** series products.
- Fluid.
- Liquid impermeable.
- Does not contain volatile organic substance(VOC-solvent).
- Seamless finishing (other than existing structural joints) is possible.



Technical Features

Density		1,35 gr/cm ³
Colour		Ral Colours
Compressive Strength		46 N/mm ²
Flexural Tensile Strength		10 N/mm ²
Splice Strength with Breaking the Concrete		>1,5 N/mm ²
Solids by %		100%
Dilution		No Dilution
Elongation at Break		20%
Shore A Hardness	7 days	>100
Shore D Hardness	7 days	~85
Working Time		60 minutes
Recommended Thickness		1,5 mm - 2,5 mm



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

Physical Features

Temperature	+10°C	+20°C	+30°C
Working Time	70 minutes	60 minutes	40 minutes
Over Coating Time	Min. 24 - Max. 48 hours	Min. 16 - Max. 48 hours	Min. 12 - Max. 48 hours
First Touch Cure	24 hours	16 hours	16 hours
Pedestrian Traffic	16 hours	13 hours	10 hours
Light Traffic	3 days	2 days	1 day
Fully Cures	10 days	7 days	7 days

The above values are theoretical. It 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
Coating System	Self-Levelling System Coating 1mm thickness	FOX PURATHANE® BASECOAT HARD + %15 Silica sand 60-70 AFS (0,1-0,3 mm) by weight	1,35 kg/m ² /mm 200 gr/ m ²
	Topcoat	2 layers PURATHANE® TOPCOAT / ASPARTHANE® TOPCOAT series (For Product Selection, see the product manual.)	100-200 gr/m ²

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

Chemical Resistance

Toluene % 47,5	+	Toluene % 30	+	Acetic Ester % 50	+
Isooctane % 30,4	+	Benzene % 30	+	Methyl Isobutyl Ketone % 50	+
N-Heptane % 17,1	+	Xylene % 30	+	Butyl Alcohol	+
Methanol %3	+	Methyl Naphthalene	+	Methanol	+

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 should be strong and have sufficient compressive strength (minimum 25 N/mm²), tensile strength should be minimum 1.5 N/mm², humidity should be maximum 4%, and ground temperature should be minimum +8°C. In addition, it should be noted that the dew point of the ground is 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 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 (0,1-0,3 mm) quartz sand with **FOX EPOTHANE® PRIMER** series primer.

Application Conditions

- Substrate moisture content should be below 4%.
- Test method: CM - measurement or drying in an 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 floor temperature should be above +3°C.

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 + 15°C and + 25°C. A component **FOX PURATHANE® BASECOAT HARD** contains pigment and filler. Stir A component product thoroughly with an electric mixer and a suitable mixing tip until you get a homogeneous colour and make sure that there is no product on the bottom and sides of the container. After adding the B component product into the A component product, mix continuously for 3-4 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

Primer

Surfaces to be made with **FOX PURATHANE® BASECOAT HARD** must be previously primed with **FOX EPOTHANE®** series primer. Attention should be paid to the floor temperature (min +8°C). **FOX PURATHANE® BASECOAT HARD** should be applied on the primer within the application period.

Coating

FOX PURATHANE® BASECOAT HARD is poured on the surface and the comb is applied properly with a trowel. When the coating reaches the proper consistency, the air should be removed by applying a spiked roller. If the spiked roller application is late, spiked roller marks may remain on the surface. There is no need to apply a hedgehog roller if the floor surface is homogeneous and without gap.

Cleaning of the Tools

After the application, the tools and equipment used should be cleaned with solvent or polyurethane thinner. **FOX PURATHANE® BASECOAT HARD** can only be removed from the surface by mechanical methods after hardening.

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

20 kg Set

A Component; 16,60 kg tin bucket

B Component; 3,40 kg tin bucket

Shelf Life

When stored properly at room temperature, away from direct sunlight, between +5°C and +30°C, its shelf life is 6 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 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.

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