

INNO-FLOOR FOX ASPARTHANE® CLEARCOAT

Polyaspartic Based, Two Component, Solvent-free, Fast Curing, Transparent Coating

Description

FOX ASPARTHANE® CLEARCOAT is a polyaspartic based, two component, high chemical resistance, fast curing, low viscosity, solvent free, gloss, transparent floor covering.

Fields of Application

- In areas exposed to medium / light traffic load,
- In areas where chemicals resistance is required,
- Production areas,
- Aircraft hangars,
- Garages,
- Airports,
- Hotel and shopping malls,
- Supermarkets, magazines and showrooms,
- Hospitals and nursery homes,
- Clinics,
- Schools and kindergartens,
- Chemical and pharmaceutical industries,
- Laboratories,
- Where hygiene is desired,
- Upon request, decorative works can be performed with **FOX ACRYLIC FLAKE** and coloured quartz.

Advantages

- It has high chemical and mechanical resistance (4 times than epoxy).
- Fast curing (can be opened to pedestrian traffic after about 2 hours).
- Aliphatic.
- Easy to maintain and clean.
- Provides hygienic environments.
- Liquid impermeable.
- Gloss topcoat can be obtained.
- High adhesion strength.
- Does not contain volatile organics (VOC-solvent).

Technical Features

Density		1,09 gr/cm ³
Colour		Transparent
Pendulum Hardness König DIN 53317	28 days	170 sec.
Taber Abrasion ASTM 4060 CS10 1000 cycles, 1kg		22 mg
Adhesion Strength By Breaking Concrete		>3,15 N/mm ²
Solids by %		% 100
Dilution		No dilution
Application Surface Temperature		+10°C / +25°C
Shore D Hardness	7 days	75
Working Time		20 dk.
Over coating Time		45 dk.
Pedestrian Traffic		2 hours
Fully cures		7 days
Recommended Thickness		0,2 mm - 1 mm

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



System Details and Coverage

System Details		Product Name	Coverage
Primer	Primer	1 or 2 layer FOX ASPARTHANE® PRIMER	150-250 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	Self-Levelling System coating	2 layers FOX ASPARTHANE® CLEARCOAT	~1,15 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 leveling and weakenin.

Chemical Resistance

Acetic Acid %100	+ -	Ammonium Hydroxide %100	+	Phosphate Ester Based Hydraulic Oil	+
Lactic Acid % 45	+	Potassium Hydroxide %10	+	Sodium Bicarbonate	+
Citric Acid	+ -	Potassium Hydroxide %20	+	Trisodyum Phosphate	+
Phosphoric Acid	+	Sodium Hydroxide %50	+	Butadiene Solution	+
Stearic Acid	+	Sodium Hydroxide %10	+	Methanol	+
Sulphuric Acid %10	+	Isopropyl Alcohol	+	Transmission Oil	+
Sulphuric Acid %50	+ -	Hydrogen Peroxide	+	Servo Steering Oil	+
Muriatic Acid %10	+	Pickle Juice	+	Super Benzene	+
Deionize Water	+	Mustard	+	Antifreeze	+
Chlorine Water %10	+	Red Wine	+	Brake Oil	+
Vinegar Water %5	+	Brine Water 310 gr/lit	+	Hot Tire Resistance	+
Sugared Water %10	+	Urine	+		
Battery Water	+ -	Excrement	+		

It is recommended to use (+). Conditional use (+ -) is recommended. Color change may occur, it should be cleaned within 1 hour. Color 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.

Surface Quality

Concrete substrates to be applied must have a strong and sufficient compressive strength (at least 25 N/mm²), tensile strength at least 1.5 N/mm², humidity should be maximum 4%, ground temperature 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 a way 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 and **FOX EPOTHANE® PRIMER** series primer.

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 60% maximum.
- Pay attention to dew and condensation! If there is condensation on the coating, it should be dried with a dry mop.
- 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 Point in Application

Surface Temperature	; Minimum +10°C - Maximum +25°C
Ambient Temperature	; Minimum +10°C - Maximum +25°C
Material Temperature	; Minimum +10°C - Maximum +25°C

Mixing

Before starting the mixture, make sure that the product temperatures are between +10°C and +25°C. Mix A component **FOX ASPARTHANE® CLEARCOAT** product thoroughly with an electric mixer and a suitable mixing tip. After adding the B component product to the A component product, mix continuously for at least 3 minutes until you get a homogeneous mixture. Avoid over mixing to minimize air entrainment.

Mixing tools: (300 rpm - 400 rpm) electric mixer and epoxy / polyurethane resin mixing tip.

Application

Primer

Surfaces to be made with **FOX ASPARTHANE® CLEARCOAT** must have already been applied with **FOX ASPARTHANE® PRIMER** or **FOX ASPARTHANE® BASECOAT**. Attention should be paid to the floor temperature (min +8°C). **FOX ASPARTHANE® CLEARCOAT** should be applied on the primer within the application period.

Coating

Self-Levelling Application

FOX ASPARTHANE® CLEARCOAT is poured on the surface and applied properly with a notched 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, hedgehog roller marks may remain on the surface.

Roller Application

FOX ASPARTHANE® CLEARCOAT is poured on the surface in equal amounts and at equal intervals. It is applied homogeneously with the help of a short pile roller. Application should be done in two layers.

Cleaning of the Tools

After the application, the tools and equipment used should be cleaned with solvent. **FOX ASPARTHANE® CLEARCOAT** can only be removed from the surface by mechanical methods after hardening.

Watch Points

- The concrete surfaces to be coated with polyaspartic / epoxy / polyurethane must be at least 3 weeks old before application, vapour barrier layer must be formed in the floors that sit on the ground, and the roof, walls, doors and windows of the building must be made. Ambient and surface temperature should be minimum +10°C and maximum +25°C.
- The materials to be used must be brought to the application site 1 - 2 days in advance and must adapt to the environmental conditions.
- In applications to be carried out in cold weather, the ambient and ground temperature should be increased, and the packages should be prepared at +20°C - +25°C and ready for use in order to increase the workability 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 given minimum temperature levels. 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

7,50 kg Set

A Component; 4,52 kg tin bucket

B Component; 2,98 kg tin bucket

Shelf Life

When stored properly at room temperature, away from direct sunlight, between + 10°C and + 25°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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