

INNO-THERM FOX THERM-ALL COAT FT 220 Straight

Acrylic Polymer Based, Elastomeric Exterior Coating with High Protecting Properties for Reinforced Concrete and Concrete Surfaces

Description

THERM-ALL COAT FT 220 Straight is an acrylic polymer based, UV resistant, elastomeric exterior wall covering material which protects concrete against frost damage, carbonation and damage of various salts.

Fields of Application

- Outdoors, in vertical applications,
- Building, factory and hotel exterior,
- As the last layer coating in heat-sealing systems,
- As a decorative protective coating on surfaces such as concrete, plaster, stone.

Advantages

- Protect against carbonation and destruction of various salts.
- Has crack bridging capability up to 0,30 mm.
- Provides extraordinary protection against harmful effects of UV rays present in sunlight.
- 0.40 mm film thickness of **FOX THERM-ALL COAT FT 220 straight** coating has equivalent carbon dioxide (CO₂) diffusion resistance of 20 cm thickness concrete, thus reduces CO₂ corrosion due to low CO₂ diffusion.
- **FOX THERM-ALL COAT FT 220 Straight** stretches up to 300% of the initial film thickness.
- Has crack bridging ability even in freezing temperatures.
- Gains excellent elasticity of 98% in 24 hours.
- Resistant to freeze-thaw effect.
- Has high durability.
- Vapor permeable, allowing the surface to dry easily when applied.
- Solvent free.
- **FOX THERM-ALL COAT FT 220 Straight** creates a smooth surface finish.

Technical Features

Structure of the Material	Improved Acrylic Polymer	
Density	1,2 - 1,3 kg/lit	
Color	Consult to the Therm-All Coat façade chart	
Solids by Ratio	%60	
Tensile Strength	7 days	1 N/mm ²
	45 months	2 N/mm ²
Recovery	7 days	% 60
	45 months	% 68
Max. Elongation	7 days	% 160
	45 months	% 145
Elongation at Break	7 days	% 360
	45 months	% 155
Application Surface Temperature	+10°C / +25°C	
Water vapor Permeability	mH ₂ O DIN53 122	480
	SdH ₂ O 200µm DFT	0,10m equals to air layer
CO ₂ Permeability	533.000	
SdCO ₂ 200µm DFT	0,107m equals to air layer	
Service Temperature	-20°C / +120°C	



The values above are given for +23°C and 50% relative humidity. While higher temperatures shorten the period, lower temperatures extend it.

Application Procedure

Preparation of the substrate

Care must be taken to ensure that the application surface is sound, dry, carrier-free, dust-free and clean. There should be no loose particles on the surface and all kinds of oil, grease, rust and paraffin residue which weaken the adherence should be removed. Uneven surfaces should be pasted with **FOX SILK MORTAR FC 125**. The new plaster (certainly not limy, made with **FOX MIXPLUS FM 201** or **FOX BINDER FM 125**) and reinforced concrete surfaces must have completed the 28-day curing period.

Mixing

FOX THERM-ALL COAT FT 220 Straight should be mixed with an electric mixer of 400 - 600 cycles before use.

Dilution

In **FOX THERM-ALL COAT FT 220** Straight 10% of water can be added. In high-dimensional work to be done on exterior façades, care must be taken to dilute the products in the same way, not to cause tone differences.

Application

Primer

Before **FOX THERM-ALL COAT FT 220** application, THERM-ALL COATPRIM FT 110 should be applied to the surface in two coats with the help of rollers as a primer.

Coating

To the **FOX THERM-ALL COATPRIM FT 110** applied surfaces after 4 to 6 hours, THERM-ALL COAT FT 220 Straight is applied with suitable roller or sprayer as the 1st coat. A brush is recommended for dying corners and edges. After the appropriate time has elapsed, the process is terminated by applying the second coat with the same method.

Drying Time

The drying time is directly related to air circulation, temperature, film thickness and number of coats applied. The figures given in the table are given according to the following conditions:

1. The information given is based on the case of repainting with the same type of dye.
2. In multi-layer applications, the drying time is affected by the number of previous layers and the total thickness.
3. The surface must be dry and free from all kinds of kernels before the next coat is applied.

Relative Humidity	50 %	50 %	50 %
Surface Temperature	10°C	23°C	40°C
Surface Drying	12 hours	6 hours	2 hours
Hard Drying	16 hours	8 hours	4 hours
Repainting	12 hours	6 hours	2 hours

Cleaning of the Tools

After application, the tools and equipment used should be cleaned with water. **FOX THERM-ALL COAT FT 220 Straight** can only be mechanically cleaned after hardening.

Consumption

The minimum thickness required to form a protective coating against carbonation; 200 - 300 micron (This coating thickness must be reached in two layers.) Consumption is directly proportional to surface smoothness. It is applied as 0,50 kg / m² on 2 layers.

Watch points

- The surface temperature to be applied must be + 10 ° C to + 30 ° C and at least 3 ° C higher than the dew point.
- Applied material must be protected from rain or frost for the first 24 hours.
- **FOX THERM-ALL COAT FT 220 Straight** can be applied on solid and old painted surfaces if needed. In such cases the adherence of the existing paint should be tested.
- **FOX THERM-ALL COAT FT 220 Straight** should be applied when the ambient and surface temperature does not fall below + 10 ° C for 24 hours.
- Care must be taken during the drying time between coats.

Package

20 kg plastic bucket

Shelf Life

Shelf life is 12 months from the date of production when stored properly at +5 oC to +30 oC at room temperature, away from direct sunlight.

Storage

The product should be stored in its original package, in a cool and dry place protected from frost. For short term storage, maximum 3 palettes should be placed on top of each other and the shipment should be made on a 'first come, first go' basis. Palettes should not be placed on top of each other during long term storage.

Health and Safety Precautions

It is dangerous to approach the application sites with fire. Fresh air should be circulated in the storage and the application sites. During the application, a protective apparel, protective gloves, goggles and masks which comply with the Occupational Health and Safety Rules should be used. Due to the irritation effect of the uncured materials, the mixture should not come into contact with skin and eyes; in case of a contact, the affected area should be washed with plenty of water and soap; in case of swallowing, a physician should be consulted immediately. No food or beverages should be brought to the application area. The product should be stored and kept out of reach of children.

For detailed information please consult the Material Safety Data Sheet.

Disclaimer

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