

SCHEDA TECNICA

VERNITAL FIRESTOP
Extratherm Concrete WS

COD. 85310903

Intumescent one-component water-based coating , certified for fire protection of masonry walls, cement-brick slabs, beams and columns in reinforced concrete

Description

One-component water-based intumescent paint consisting of acrylic polymers and reactive substances; that the temperature above 200°C(392°F) are transformed into a foamy layer able of limit heat trasmission and to delay the collapse of concrete structures.

Use and principal characteristic

Suitable for the protection of exposed brick walls, concrete, boiler rooms, fire walls, slab floors and beams in reinforced concrete, where an increase in the fire resistance is required. The use of this product is subject to a prior evaluation to determine the necessary quantity to obtain the required fire resistance; this is a function of the following parameters:

Type of item to be protected, fire resistance class, concrete cover thickness, load and the type of fire exposure kind. The intumescent paint replaces the dimensional increase between the existing section and the section needed to obtain the required fire resistance according to UNI EN 9502; the amount of paint to be applied has been experimentally verified according to the:

- UNI EN 13381-3:2015 beams and columns in reinforced concrete
- UNI EN 1365-2:2014 concrete floors
- UNI EN 1364-1:2015 brick walls

Performance of the coating:

Adhesion

Good on support preparation with the specification

Flexibility

Fair

Abrasion resistance

Poor

Impact resistance

Fair

Weathering

The product has poor resistance to moisture and weathering.

Topcoat required

In case of rain the painting undergoes rapid degradation with flaking and detachment, which require the re-application of the product.
For exterior surfaces the paint system must be protect with an additional coat of water based paint as Hydroacryl s. 755600000 or Vernisan s. 85840000

Basic data at 20°

Colour and gloss

White n. 85310903 – flat < 40 gloss

Mass density

1,30 gr/ml

Solids content by volume

60% +/-2

Solids content by weight	68% +/-2								
Viscosity	Thixotropic								
Dry to touch	4-5 ore								
Read for handling	12-18 ore								
Dry to recoat or topcoat	min. 6 hours at 20°C Max. unlimited- surface should be cleaned from dust and contamination								
Shelf life	12 months if protected against weathering and at max. temperature of 40°C (104°F)								
Packaging	Paint s. 85310903 25 kg – 5kg								
Flash point (DIN 53213)	Not flammable								
Application method	Airless spray for large surfaces; brush or roller								
Surface preparation	All surfaces to be coated must be clean, dry and free of rust, oils, dust, dirt, old paint, and other contaminants								
Application conditions	he product must be mixed very well before application, to obtain a perfect homogenization of the components								
Environmental Condition	Air temperature: +5°C ÷ 40°C Relative humidity: 0 ÷ 70%								
Airless spray	<table border="1"> <tr> <td>Recommended thinner</td> <td>Water; 0-5% in case of necessity</td> </tr> <tr> <td>Nozzle orifice</td> <td>0,028 – 0,031 inch or larger</td> </tr> <tr> <td>Nozzle pressure</td> <td>approx. 150 - 200 (at.-2100 - 2840 p.s.i.)</td> </tr> <tr> <td>Compression ratio</td> <td>Standard airless spray equipment havinga 45:1 or higher pump ratio (without filter)</td> </tr> </table> <p><i>The product must be applied by means of airless equipment with compression ratio 60:1</i> <i>Do not insert the filter in the compensation tank.</i></p>	Recommended thinner	Water; 0-5% in case of necessity	Nozzle orifice	0,028 – 0,031 inch or larger	Nozzle pressure	approx. 150 - 200 (at.-2100 - 2840 p.s.i.)	Compression ratio	Standard airless spray equipment havinga 45:1 or higher pump ratio (without filter)
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Brush/Roller	Use clean, short bristled brush or medium nap roller. For strip coating, small areas and spot repair only Recommended thinner: water								
Cleaning solvent	Water								