

DECOBRUSH

Polymer Modified Protective Fire Resistant Coating for Concrete Surfaces and Facades

Description:

DECOBRUSH is a two component flexible acrylic polymer modified cementitious coating supplied in ready to mix kit. It is composed of special types of cements, silica sand, reactive fillers (Part A: powder), and acrylic polymer blended with chemical additives (Part B: liquid). It is formulated for application to concrete and brickwork to provide a crack-bridging waterproofing, vapor barrier fire resistant and fill out surface imperfections. DECOBRUSH can also be applied for sealing, as filling blowholes, cracks, and imperfections and for providing concrete surfaces with a uniform appearance.

DECOBRUSH has high bonding features to concrete surfaces and provide an ideal solution for protection against weathering, moisture, fire and contamination with excellent fire resistant features. It can be applied as a vapor barrier to facades prior to cladding and aluminum cladding.

Applications:

DECOBRUSH is designed as a fire protective and vapor barrier coating to exposed reinforced concrete structures from attack by acid gases, chloride ions, oxygen and water. Other applications include:

- Re-facing concrete & masonry surfaces
- Flexible coating to bridge shrinkage cracks
- Coating of facades prior to cladding and aluminum fronts
- To coat the backside of marble and granite against water and pigments penetration. Suitable for waterproofing floor slabs before laying tiles.
- Protective Coating and fire resistant on steel elements.

Advantages:

- Resistant against harsh environment.

- Polymer modified, therefore, reduces permeability and dusting while increasing bond, flexure, and tensile strength.
- Excellent adhesion to all cementitious surfaces.
- Bonds directly to porous and non-porous surfaces without the need of primer.
- Excellent for damp-proofing basements below ground.
- Breathable-Allows transmission of water vapor from interior of building.
- Can fill the honeycombs, dot surfaces and concrete with pinholes.
- Durable, excellent resistance to UV.
- Excellent protection on against carbon dioxide, chloride ions and water.
- Façade Vapor barrier layer
- Provides flexible crack bridging when cured.
- Fire resistant, non-flammable with class A flame spread classification.
- Green Environment Friendly.

Instructions for Use:

Surface Preparation:

All surfaces should be sound, clean, dry and free from loose material, efflorescence, laitance, curing compounds; dirt, oil and grease. Ensure that concrete surfaces are cured for at least 14 days. In case of hard laitance, contamination or non-degradable curing compound, apply mechanical surface preparation such as, captive blasting or sand blasting, if the substrate is restricted to access, utilize preparation by handy mechanical tools and wire brush discs.

Damaged concrete should be repaired with a suitable cementitious repair mortar. Pinholes should be widened, cleaned and filled. Any static or dynamic cracks revealed at concrete surface after blasting should be treated. Prior to application the surface should be soaked with clean water. Excess standing water must be allowed to evaporate.

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Mixing:

DECOBRUSH is supplied in a pre-measured quantity of a powder (part A) and liquid (part B). In a clean mixing container pour the polymer (component B) into the container and then add slowly the contents of the powder bag (component A). Use a low speed mixer (300-400 rpm) for an interval of 3-5 minutes till a Homogenous lump free consistent mix is reached. Leave the mix for 4 minutes to allow air entrapped to be released. The mixture should be placed immediately after mixing.

Application:

DECOBRUSH can be applied with a brush or a spraying machine, wet the surface of application thoroughly with clean water till a saturated surface dry 'SSD' condition is reached, this allows best adhesion and proper curing of the slurry.

For vapor barrier application, apply two coats of the material with a total thickness of 2.0mm at spread rate of 1.0 Kg/m².

DECOBRUSH is a stand-alone performing product and requires no finishes. It can also be over coated with a finish coat of HYDROCRYL CRC reflective acrylic topping as a reflective coating.

Standards:

DECOBRUSH conforms to:

- ASTM D4541-02, ASTM D412
- ASTM E 96
- DIN 1048
- EN 12390/8
- ASTM E 119-16
- ASTM E 84

Coverage:

For external facades theoretical coverage for one kit achieves 13.75 to 14.0 square meters.

Fire Classification:

According to International Building Code 2015, Section 803.1.1 Interior wall and ceiling finish materials classified in accordance with ASTM E84 or UL 723

TECHNICAL PROPERTIES

Color	:	Dark Grey, Brick Red, Dirty Green
Density	:	1.60 ± 0.05 g/cm ³
Workability	:	60 minutes
pH of Mixture	:	≥ 12 at 20°C
Bond Strength	:	1.40 N / mm ²
Elongation at break	:	20%
Tensile Strength	:	More than 1.00 N / mm ²
Heat Temperature	:	-30°C to +90°C
Resistivity to pressure	:	Positive 1.5 bar
Recoating Interval	:	4-8 hours
Water vapor permeability	:	<0.3 gm/m ² /24 hr
Service Temp.	:	+5°C to +40°C
Chloride resistance	:	Passed
Water penetration	:	NIL
Crack Bridging at Breakage	:	0.5 mm

Test	Standard ASTM E84	DECOBRUSH
Flame Spread Index (FSI)	Class A 0-25	15
Smoke Developed Index (SDI)	Class A 0-450	5

Packaging:

DECOBRUSH is supplied in 30 Kg. two component kits.

Cleaning:

Clean all tools with water before product hardens.

Storage:

Store in original packing in dry conditions away from direct sunlight and high humidity levels.

Shelf Life:

DECOBRUSH can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

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Remarks:

- DECOBRUSH should not be applied if the surface temperature is greater than 45°C.
- DECOBRUSH should not be applied in rainy or windy conditions.
- For external application during summer season or temperature higher than 45°C, working area should be covered to prevent the direct sun effects. Keep equipment in a shaded area.
- If subsequent coatings or paintings are required, it is recommended to conduct compatibility trial test between two coatings.

Health and Safety:

- Use goggles and gloves during application. Use only in well ventilated areas.
- Avoid contact with eyes or skin.

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This technical data sheet is not considered as local building codes. It shall be used as general reference for the product, based on our current knowledge and experience. However the company do not accept any liability arising from the use of its products as it has no direct control on how and where the product is applied.

