

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 fire resistant, crack-bridging waterproofing, vapor barrier and fill out surface imperfections. DECOBRUSH can also be applied for sealing and 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 and contamination with excellent fire-resistant properties. It can be applied as a vapor barrier to facades prior to aluminum cladding.

Uses:

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-surfacing 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 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.

Mixing:

DECOBRUSH is supplied in a pre-measured quantity of a powder (part A) and liquid (part B). In a clean mixing

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container, pour the polymer (component B) and add slowly the contents of the powder bag (component A). Use a low-speed mixer (300-400 rpm). Mix for an interval of 3-5 minutes till a homogenous lump free consistency 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 minimum two coats of the material with a total thickness of 2.0mm at spread rate of 1.65 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-a reflective acrylic topping as a reflective coating.

Standards:

- ASTM D4541-02, D412, E96, E119-16, E84
- DIN 1048
- EN 12390/8

Coverage:

For external facades theoretical coverage for one kit achieves 9.0 to 10.0 square meters at 2.0 mm DFT.

*Coverage rate is an approximate value, and subject to actual site conditions.

Packaging:

DECOBRUSH is supplied in 30 Kg. kit.

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

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

TECHNICAL PROPERTIES	
Color	Dark Grey, Brick Red, Dirty Green
Density	1.67 ± 0.03 kg/lit
Workability	60 minutes
pH of Mixture	8.5 – 9.5
Application Temp	+5°C to +40°C
Recoating Interval	4-8 hours
Bond Strength (ASTM D4541)	1.40 N/mm ²
Elongation at break (ASTM D412)	40%
Tensile Strength (ASTM D412)	>1.00 N/mm ²
Crack Bridging at Breakage (ASTM D412)	1.0 mm
Resistivity to positive pressure	Positive 1.5 bar
Water vapor permeability (ASTM E96)	<0.3 gm/m ² /24 hr
Water penetration (EN 12390)	NIL
Chloride resistance	Passed
Service Temperature	-30°C to +90°C
VOC	<1 g/l

*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

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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 an unopened original packing.

Cleaning:

Clean all tools with water before product hardens. Hardened materials can only be removed mechanically.

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 40°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:

- Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapour or spray mist.

FIRST AID:

- Eyes: In the event of accidental splashes, flush with warm water and seek medical advice.
- Skin: Wash skin thoroughly with soap and water
- Inhalation: Remove to fresh air, keep patient rested
- Ingestion: Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to DECOBRUSH Material Safety Data Sheet.

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