

ECMAGUARD 555

Elastomeric, Anti-Carbonation & Protective Coating

Description

ECMAGUARD 555 is a single component, Acrylic Polymer based, UV stable, weather resistant, Anti-Carbonation and Protective Coating. It is highly elastomeric coating having excellent bonding & waterproofing properties and can be used for new and old concrete and steel reinforced structures. It is designed to resist algae & fungus and to protect structures from harmful effects of water and other pollutants. It is a breathable coating with good water vapor permeability but highly resistant to the ingress of chloride ions and diffusion of carbon dioxide & harmful gases.

Areas of Application

- Over Bridges, flyovers, elevated Road/ Metro structures
- Tunnels, Underpasses, Car Parking's, etc.
- Buildings & structures in coastal and high Pollution & Rainfall zones
- Dams, Towers, etc.

Advantages

- Eco-friendly - no VOC Content, Water based, Non-toxic
- Excellent resistance to ingress of carbon dioxide, chlorides, sulphates, etc.
- Durable - Excellent UV resistance and Weather Resistance
- Single Component with Easy Application
- Can be applied by Brush, Roller or Spray on horizontal & vertical surfaces
- Excellent Bonding with concrete and masonry surfaces
- Available range of Colors as per RAL shades

Technical Specification

Appearance	Milky white and other RAL shades
Form	Semi Thick Paste
Specific Gravity at 27°C	1.50±0.1
Solid Content %	62±2
Surface Drying Time at 27°C	10 Hours
Hardness Shore A, ASTM D	>40
Elongation at Break at 14 Days ASTM D412	>300
Tensile Strength at 14 Days ASTM D412	>1.5 N/mm ²
Equivalent Air Layer Thickener (R)	250 m
Pull Off Adhesion bond strength	~1.5 N/mm ²
Carbon Dioxide Diffusion Resistance	2312000 microns
Carbon Dioxide Diffusion Coefficient	7.0 x 10 ⁻⁰⁸ cm ² /sec
Chloride Ion Penetration	Nil
QUV Resistance, ASTM G 154, 1000 hours	No crack, No color change
Fungi Resistance, ASTM G21	Passes Test
Coverage	4-6 m ² /kg/ coat as per Surface finish
Water Absorption (24hours), ASTM D6038	Passes Test
Complete Curing Time at 27°C, 60% RH	12 Days
Water Vapor Transmission	>5 gm/m ² /Day

Application Instructions

Surface Preparation: New concrete, mortars and plastered surfaces should be cured for at least 28 days before application. Surfaces should be sound and free from all deposits, dust, laitance, loose particles, fungus, contaminations, etc. and make surface free from oil, grease, etc. Concrete surfaces shall free from mold release agents and curing compound. This can be done by scarifying, grinding, water blasting, sand blasting, or using any other approved Method. Repair surfaces for any blow holes, cracks, honeycombs, depressions & damages using ECMAS Polymer mortar or with Hi Finish putty and leave it for at least 1 day before priming.

Application of ECMAPRIME ACRY: For excellent bonding results on concrete surfaces use ECMAPRIME ACRY penetrative primer cum sealer coat before application of ECMAGUARD 555. It easily penetrates deeper into the concrete surface and repel inside water, if any to keep outer surfaces dry. This enhances durability of top coat. Stir it well before application then apply one coat with consumption @ 5-6 Sqm/ Kg using soft brush or roller over the damp surface. In case of high porous surfaces, apply two coats for excellent result and time gap should be 3- 4 hours between the two coats.

Application of ECMAGUARD 555: After the application primer coat allow it to touch dry for 3-4 hours. Stir well ECMAGUARD 555 to a homogeneous smooth consistency and apply it horizontally with soft brush, roller or spray on sound and prepared surfaces. Allow it to dry for approx. 4-8 hours and when the applied coat becomes sufficiently, apply second coat vertically. Minimum Two coats are recommended for general anti-carbonation (150 -200 microns Dry Film thickness) but for severe conditions, three or more coats are required to achieve high film thickness of 250-300 microns.

Precautions

- Unused material should not be left open.
- Do not apply if rain is expected within 24 hours.
- Do not dilute material with water or any other solvent.
- Clean tools with water while still wet. Once the material has cured, it can be removed only mechanically.
- Do not apply coating thickness more than 250 microns in one coat for higher coating thickness apply multiple coats.

Packaging

ECMAPRIME ACRY :20 Kg Bucket

ECMAGUARD 555 :20 Kg Bucket

Shelf Life

12 Months in original unopened sealed condition.



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Storage & Handling

Material should be stored in Cool and Dry shade. Also protect it from direct sunlight. Please avoid stacking of containers and handle carefully during transport.

Safety Precautions

Wear all PPE's at the of Application like Safety boot, Safety Goggle, Hand Gloves, Mask and avoided with contact of Skin and Eyes. Any direct skin contamination with the hardeners should be washed off immediately with soap and water.

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