

ECMAGUARD THERMOCOAT

Solar Reflective, Heat Insulation, Elastomeric Coating

Description

ECMAGUARD THERMOCOAT is pure acrylic, elastomeric high build, Eco-friendly, Energy Efficient. Solar Heat Reflective coating for roof and exterior walls that significantly reduce absorbed heat in the building envelope. This coating lessens the urban heat islands effect, which allows cooler buildings. A cooler building means reduced cost of air-conditioning and lower Carbon dioxide emission. ECMAGUARD THERMOCOAT is designed with high performance acrylics and high-quality titanium di-oxide which reflects most of Solar Radiation and contains specialty Nano Ceramic hollow spheres which reduces heat transmission. When it is applied on exterior side walls and roofs, it reduces energy costs. The cured ECMAGUARD THERMOCOAT also acts as elastomeric, waterproof membrane.

Areas of Application

- Old and new flat or sloped Roofs
- Metal/ Concrete Roofs
- Exterior walls of Residential, Commercial or Industrial Buildings

Advantages

- Water Based, Non-Toxic, Non-flammable and User friendly
- No VOC Content
- High Solar Reflectance (SRI ≥ 110), help reducing Air-Conditioning costs
- Protects from Carbonation, acid rains and alkali solutions
- Excellent UV Resistance and Weather Resistance
- Excellent resistance to dirt pick-up
- Single Component with Easy Application
- Can be applied by Brush, Roller or Spray on horizontal & vertical surfaces
- Excellent Bonding with concrete, masonry surfaces, metal, wood, etc.
- Can be tinted to different shades using suitable pigments

Technical Specification

Appearance	White, Grey
Specific Gravity at 27°C	1.3±0.1
Solid Contents	>60%
Surface Drying Time at 27°C	10-12 Hours
Solar Reflectance Index (SRI)	≥ 110
Hardness Shore A, ASTM D	>40
Elongation at Break at 14 Days ASTM D412	>150
Tensile Strength at 14 Days ASTM D412	>1.0 N/mm ²
Pull off Adhesion at 14 days, ASTM D 541, MPa	>1.0 N/mm ²
QUV Resistance, ASTM G154, 1000 hours	No crack, No colour change
Fungi Resistance, ASTM G21	Passes test
Recommended film thickness (DFT)	200-300 microns
Coverage	4-6 Sqm/ Kg/ Coat



Application Instructions

Surface Preparation: Surfaces should be cleaned properly, it should be free from all deposits, dust, loose particles, fungus, contaminations, etc. and make surface free from oil, grease, etc. Concrete surfaces shall be fully cured and free from mold release agents and curing compound. This can be done by scarifying, grinding, high pressure water jet 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. All moving cracks/ joints of two dissimilar substrates shall be sealed with flexible sealants like ECMASEAL PU 1K or ECMASEAL M.S.

Application of ECMAPRIME ACRY: For excellent bonding results on concrete surfaces use ECMAPRIME ACRY penetrative primer cum sealer coat before application of ECMAGUARD THERMOCOAT. It easily penetrates deeper into the substrate 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 @ 4-6 Sqm/Kg/coat 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 two coats.

Application of ECMAGUARD THERMOCOAT: After the application primer coat allow it to touch dry for 2-4 hours. Stir well ECMAGUARD THERMOCOAT 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 usage conditions (200-300 microns Dry Film thickness) but for higher performance, three or more coats are required to achieve desired results.

In case, waterproofing cum heat insulation is required on exposed surfaces, first apply 2 coats of ECMAGUARD PROOFCOAT on well prepared, primed surface followed by 2 coats of ECMAGUARD THERMOCOAT.

Precautions

- ECMAGUARD THERMOCOAT should be used without any dilution.
- Unused material should not be left open.
- Do not apply if rain is expected within 24 hours.
- Clean all the equipment with water or cleaning Agent.
- Do not apply coating thickness more than 150 microns in one coat. For higher coating thicknesses, apply multiple coats.
- Sharp materials/ objects should not be dragged over the ECMAGUARD THERMOCOAT membrane, as this can damage/puncture the same.
- For better & long-lasting performance, ensure water is not stagnated on the surface and surface is frequently cleaned with water and soft cloth to remove dust and dirt deposits. Treated surfaces should be re-coated every 5 years.

Packaging

20 Kg Bucket

Shelf Life

12 months from the date of manufacturing when stored in unopened, original sealed container.

Storage & Handling

- Material should be stored in cool and dry shade at a temperature from +5°C to 40°C
- Protect it from direct sunlight.
- Avoid stacking of containers and handle carefully during transport.

Safety Precautions

Wear all PPE's at the time of application and handling of product like Safety boot, Safety Goggles, Hand Gloves, Mask, etc. and avoid contact with Skin and Eyes. In case eyes or mouth are affected, wash with plenty of clean water and seek medical treatment immediately.

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