

ECMACOAT FLEX PU 60-2K

Two-component, highly elastic, Polyurethane waterproofing membrane (Exposure Grade with Top Coat)

Description

ECMACOAT FLEX PU 60-2K is a two-component, cold-applied, fast-curing, solvent-free, pure Polyurethane membrane designed for variety of high-performance waterproofing and protective coating applications where high degree of chemical and mechanical resistance is required. Component A is a pre-polymer polymerized by polyether and isocyanate, component B is coloured liquid made up of reinforcing agent, plasticizer and curing agent. It is designed for external and internal application on concrete, cement boards, metal roofs, etc. subject to UV exposure with Top Coat Resin ECMAGUARD TC.

Advantages

- Easy, fast and sure system for exposure grade waterproofing with Topcoat.
- Can be applied by spray, brush, roller or a squeeze.
- Very flexible to withstand movements, excellent crack-bridging ability
- Resistant to chemical and bacterial growth, plant root penetration, etc.
- High tensile strength and hardness to withstand human/ pedestrian traffic
- Low VOC – environment friendly
- Seamless, self-leveling and rollable
- Quicker application with the Spraying machine and it cures faster than single-component PU membranes.

Uses

Waterproof and protective coating for concrete, steel, and substrates in a variety of applications like

- Terraces, Green Roofs, Podium decks
- Swimming Pools, Water Tanks
- Car Parking Areas, External Building Walls/ Facades, Retaining walls, etc.

Technical Specifications (2 mm thick membrane cured for 14 days)

Chemical Base	Polyurethane
Mixing Ratio (Part A: Part B) v/v	1:2
Viscosity (mixed), cps @ 25°C	8000
Specific Gravity (mixed) @ 25°C	1.33 ± 0.05
Pot Life @ 25°C	25-30 minutes
Color of cured membrane	Reddish (Terracotta)
Solids by volume	≥85%
Tack-free Time (@27°C, 65% R.H.)	<5 hours
Hard Drying Time (full cure)	24 hours (7 days)
Application Temperature Range	+5°C to +40°C
Service Temperature Range	-20°C to +80°C
Elongation at break 7 days, ASTM D412 %	550 ± 100 %
Tensile Strength, 7 days, N/mm ² ASTM D412	7 ± 1 N/mm ²
Tear Strength 7 days, N/mm ² ASTM D412	≥20 N/mm ²
Hardness (Shore A) ASTM D2240-97	75 ± 2
Crack bridging capability	≥3 mm
UV Resistance with Topcoat	Excellent
Coverage (theoretical)	1.3 kg/ mm/ sqm
Packaging 30 Kg (Part A – 10 Kg & Part B – 20 Kg)	

Application Instructions

Surface Preparation

Concrete should be cured for at least 28 days before applying ECMACOAT FLEX PU 60-2K. It is important to remove/clean loose particles, dirt, grease from the surface by chipping, grinding and washing with suitable equipment such as high-pressure air, water-jet, grinder or wire brush. Make corner fillets and treat all cracks and construction joints in substrate with Polymer mortar. All moving cracks and joints shall be sealed with flexible sealants like ECMASEAL PU 1K or ECMASEAL MS. Apply PU primer ECPRIME PU @ 0.15-0.20 Kg/ Sqm for better adhesion. Ensure substrate is dry and surface moisture content is <4% prior to primer application.

Applying ECMACOAT FLEX PU 60-2K

- Add part B to part A and mix it well with slow speed mechanical mixer and do not add anything in to Mixed Composition.
- Apply ECMACOAT FLEX PU 60 2K evenly by spray, stiff brush or roller within the pot life of the mixed material.
- Apply a first coat of ECMACOAT FLEX PU 60 on primed surface as seamless film and let it dry for 8 hours. After the first coat has fully dried and set, apply a second coat of ECMACOAT FLEX PU 60 in cross direction and let it cure for 3-4 days (Re-coat time: min. 8 hours & max. 2 days at @25°C, 65% R.H.).
- Recommended film thickness should be minimum 1.5 mm for exposed terrace waterproofing and 2.0 mm for human trafficable floors.
- Higher thickness up to 2-2.5 mm should be used for demanding conditions.
- If used under UV exposure conditions, cured membrane shall be protected with UV Stable Topcoat using ECMAGUARD TC @ 0.2 Kg/ Sqm.

Precautions

- Use PPE such as gloves, masks, goggles, etc. Avoid contact with skin & eyes, and prolonged breathing of solvent vapors.
- Unused material should not be left open.
- Do not apply if rain is expected within 24hours.
- Clean all tools with solvent before polymerization starts.

Shelf Life, Storage & Handling

Shelf life is 9 months, when stored in Cool (5°C -27°C temperature range), Dry and well covered space away from moisture & fire. Please avoid stacking of containers and handle carefully during transport.

Safety Precautions

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

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