

ECMACOAT FLEX PU 40

Single component, Pure Polyurethane resin based Elastomeric Waterproofing Membrane (Non-exposure grade)

Description

ECMACOAT FLEXPU 40 is a single component, cold applied, highly elastic, pure Polyurethane resin based high performance waterproofing membrane. It is free from bitumen/ coal tar. Conforming to ASTM C-836-95 & ASTM C-898-95.

Advantages

- Easy, fast and sure system for waterproofing
- Can be applied by brush, roller, squeeze or using a suitable spray gun.
- Highly flexible to withstand movements and excellent crack bridging
- Membrane remains flexible for a very long time
- High solid content >93%
- Good resistance to chemical and bacterial growth
- High tensile and tear strength to withstand challenging situations
- Low VOC – environment friendly
- Self-leveling and rollable

Uses

- Flat or Pitched Roofs
- Terraces, Green Roofs
- Podiums, Planters
- Swimming Pools, etc.

Technical Specifications (2 mm DFT cured for 14 days)

Appearance of cured film	Black/ Grey**
Specific gravity at 27°C	1.35±0.05 Kg/L
Solid Content, (w/w) %	>93%
Elongation at break 7 days, ASTM D412 %	>650%
Tensile Strength, 7 days, N/mm ² ASTM D412	2.5-3.0 N/mm ²
Tear Strength 7 days, N/mm ² ASTM D412	17-20 N/mm ²
Adhesion to concrete	≥1.5 N/mm ²
Hardness (Shore A)	≈50
Touch dry (@27°C, 65% R.H.)	≈ 4-6 Hours
Drying Time (full cure) for 1 mm DFT	24 hours (7 days)
VOC Content	<60 g/L
Crack bridging capability	Up to 3 mm
Plant Root Resistance	Resistant
Theoretical coverage	1.3 kg / mm / m ²
Packaging	25/ 28 Kg Tin Container
Shelf Life (when stored at 25°C, 65% R.H.)	6 Months

** Standard product is supplied in Black color but it can be provided in grey color also for large volumes

Application Instructions

Surface Preparation

Concrete should be cured for at least 28 days before applying ECMACOAT FLEX PU 40. 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 ECMAPRIME PU @ 0.15-0.20 Kg/ Sqm for better adhesion. Ensure substrate is dry and surface moisture content is <5% prior to primer application.

Applying ECMACOAT FLEX PU 40

- Stir with slow speed mechanical mixer before using ECMACOAT FLEX PU 40 and do not add anything in to Mixed Composition.
- ECMACOAT FLEXPU 40 can be applied by brush, roller or by suitable spray gun.
- Apply a first coat of ECMACOAT FLEX PU 40 on primed surface and let it dry for 15-18 hours.
- After the first coat has fully dried and set, apply a second coat of ECMACOAT FLEX PU 40 and let it cure for min. 3-4 days.
- Recommended film thickness should be minimum 1.5 mm for terrace and podium waterproofing.
- Higher thickness of ≥ 2 mm can be used for demanding conditions.
- Cured membrane shall be protected with protection concrete screed ASAP or max. within 7 days.

Precautions

- Unused material should not be left open
- Do not apply if rain is expected within 24hours
- Clean all tools with solvent before polymerization starts
- Store the material in cool and dry place and away from fire

Storage & Handling

Material should be stored in Cool (temperature below 25°C), Dry and covered shade away from fire, direct sunlight and excessive moisture. Please avoid stacking of containers and handle carefully during transport.

Safety Precautions

Wear all PPE's at the time of 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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