WATERPROOFING COATINGS

POLYURETHANE BASED





LIQUID-APPLIED ONE COMPONENT ELASTIC POLYURETHANE MEMBRANE

- Elastic behaviour
- Excellent adhesion to many porous surfaces even without the use of a primer.
- Crack-bridging ability
- Resistant to Abrasion, aging (solar radiation & humidity)
- Resistant to hydrolysis and chemicals
- Resistance to mechanical strains

GENERAL DESCRIPTION

ESHADESMOLAST is an one component elastomeric waterproofing coating for horizontal surfaces, based on hydrophobic polyurethane resins. When in contact with ground and air moisture it polymerizes and creates a flexible and coherent membrane. This final membrane has the ability to deform up to 450% (according to DIN53504), or more than 850% (according to ASTM D 412) and follow substrate expansion without rupture, does not shrink and retains its elasticity in extreme temperature variations. It is also vapor permeable, reflective, inflammable, easily cleaned and resistant to aging and UV radiation.

USES

ESHADESMOLAST is suitable for waterproofing of:

- concrete surfaces as basements, roofs, porches and balconies
- · metal plates, gypsum-boards & cement-boards
- wet areas baths
- · surfaces that undergo mechanical strains
- bridge decks waterproofing

ESHADESMOLAST is not recommended for:

- Unsound substrates
- Waterproofing swimming pool surfaces that come in direct contact with chemically treated water
- Water tanks



APPLICATION PROCEDURE

Weather conditions

Avoid rainy weather and temperatures below 5 °C

Surface Preparation

- Surfaces should be regular, free from loose particles and dust, clean from oils and foreign matter. Blow them with compressed air. Avoid cleaning with water.
- Cracks should be primary filled with polyurethane joint sealant ESHAPOLYSEAL 1K.
- For concrete surfaces use ESHADESMOLAST PRIMER PU or ESHADESMOLAST PRIMER AQUA 2K, in order to improve the mechanical properties of the substrate surface.

- Wet substrates should be avoided.
- In cases of substrates with bituminous residues, ESHADESMOLAST PRIMER PUB 2K should be used to prime the surface before applying ESHADESMOLAST.

Application

• **ESHADESMOLAST** is cold applied by roller or airless spray gun in two to three layers. Each new layer is applied in a criss cross pattern with respect to the previous one, when the latter is dry. Time interval between two layers is at least 6-24 h and not more than 36 h. However, this largely depends on environmental conditions.

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- It is recommended to apply the material with a thickness of not more than 0,5 mm / layer, to avoid trapping bubbles. If there is any difficulty in spreading the material, ESHADESMOTHINNER (up to 10% by weight) can be used to thin the material.
- Reinforcement (e.g. polyester fabric, glassfleece) may be used between two successive layers to increase the mechanical properties of the final film.
- A consumption of 1,3-2,0 kg/m² is recommended Total final consumption depends on the surface's roughness.

Curing time

12 to 24 h for 1 mm thickness, depending on environmental conditions. Final material properties and mechanical strength: in 2-5 days

Attention

ESHADESMOLAST must not be applied during frost or when the temperature is below 5 °C.

Cleaning of tools

Tools are cleaned with xylol solvent before the material has dried or by mechanical means in case it has already dried. Important to follow proper precautions written on the solvent's package / container.





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SELF-LIFE / STORAGE

PACKING

12 months from date of production if stored in a cool, dry place, in original unopened packaging. Once opened it needs to be consumed immediately.

In metallic pails of 6 kg and 25 kg.

TECHNICAL CHARACTERISTICS

| PROPERTIES | NOMINAL VALUE | TEST METHOD | UNIT |
|--|---|--|-------------------|
| Surface membrane formation time | 3-5, depending on weather conditions | | hrs |
| Viscosity | 2000-2500 | ASTM D 2196-86 | cPs |
| Color | White | Observation | |
| Density | 1.39 ± 0.05 | ASTM D 1475 | g/cm ³ |
| Elongation at break point | > 850 | ASTM D 412 | % |
| | 450 | DIN 53504 | |
| Tensile strength | 6.6 | DIN 53504 | N/mm² |
| Hardness | SHORE A: 60 | ASTM D 2240 | |
| Water vapour permeability | 20 | ISO 9932 | gr/m²/hr |
| Adhersion to concrete | > 2 | ASTM D 903 | N/mm² |
| Resistance to UV radiation and moisture exposure: 2000h accelerated weathering, cinsisting of the following cycles | Retains its mechanical properties and Elastic performance | ASTM G53: QUV-se ACCELERATED WEATHERING CYCLIC CORROSION TESTER | |
| 4h UV exposure, at 60°C | | | |
| 4h moisture exposure, at 50°C | | | |
| Resistance to temperature variation | -40 to + 80 | | °C |
| Application Temperature | +5 to +40 | | °C |

T = Tolerances in the nominal values are in accordance with respective standards. Producer reserves the right to modify the properties of his products.

The information contained in this leaflet is, to the best of our knowledge, true and reliable and is supported by the present state of our knowledge. According to the care taken and the method of application, upon which we have no influence, the values are subject to divergence. Therefore for best results, prior to use, an application test should be made by the user under his own processing conditions.

Alfa-Alfa Energy S.A.

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ISO 14001 ISO 9001