

Domissima

BUILT
BY
EXPERTS

Domoreflex PU 122



Polyurethane based waterproofing coating

DOMOREFLECT PU 122 is a water-based, elastomer waterproofing, based on special aliphatic polyurethane resins. Due to the quick polymerization after its application, it has the ability to form a moisture and stagnant water resistant membrane, which retains its elasticity even at high temperature conditions, absorbing the structural movements of the substrate and covering cracks up to 1.5 mm. Its innovative composition prevents dust and dirt to adhere on the applied surface maintaining thus its whiteness over time.

Field of application

DOMOREFLECT PU 122 is suitable for application on:

- Flat or inclined roofs
- Guardrails
- Gutters, metal sheets, plasterboards, etc.

Advantages

- Easy application (one component).
- Polymerizes rapidly providing a flexible hydrophobic membrane.
- Excellent adhesion.
- Retains its mechanical properties even in extreme temperature fluctuations (-30°C to +90°C).
- Water vapor permeable, allows the transpiration of the substrate.
- High reflectivity.
- Ideal for walkable roofs.
- Bridges cracks with or without the use of polyester reinforcing bands.
- User-friendly.

Method of use

Substrate condition:

Clean the substrate from any loose pieces, as well as peeled off paints and oils. The substrate must be free of moisture and standing water.

Prime with acrylic water-based DOMOREFLECT PRIMER or with DOMOREFLECT PU 122 diluted 10% w/w with water depending on the nature of the substrate. In case of particularly loose substrates, prime the surface with DOMORESIN SP diluted with water at a ratio of 1 to 3.

Application:

2-3 layers: DOMOREFLECT PU 122 undiluted.

Apply with a roll, brush or airless.

Each layer is applied crosswise after the previous has been fully dried (after 8-12 hours depending on the ambient temperature).

In places with cracks apply polyester cloth tape as reinforcement. In this case, apply the primer and when fully dry spread one layer of DOMOREFLECT PU 122. Then apply the reinforcement tape along the cracks while the material is still wet and then another two successive layers of DOMOREFLECT PU 122.

On surfaces with many and dense cracks, it is recommended to fully reinforce the surface using polyester cloth in a width of 1 m.

Additional information:

- In case an even higher reflectivity is desired, apply DOMOREFLECT ULTRA HYBRID as a last layer
- All tools and application equipment must be cleaned thoroughly and immediately after their use with plenty of water.
- The polymerization of the applied membrane is accelerated by high temperatures and slowed down by low temperatures.
- The application temperature is +5°C to 35°C. Do not apply when rain or frost is expected in the following two days.

Consumption

200-300 g/m² as primer.

0.7-1.1 kg/m² for 2 layers on primed surfaces depending on the nature of the substrate.

1.2-1.7 kg/m² for crack waterproofing (3 layers) depending on the nature of the substrate and the reinforcement.

Storage

Can be stored for at least 12 months from production date in the original pail, in a cool environment protected from frost and direct sunlight.

Packaging

Pails of 1 kg, 5 kg & 15 kg.

Colors

White.

Other colors available on request.

Certificates

The product is certified according to EN 1504-2 (Concrete Protection Systems), in categories 1.3-Ingress Protection (IP), 2.2-Moisture Control (MC) and 8.2-Increasing Resistivity (IR).

Volatile Organic Compounds

EU REGULATION 2004/42: According to Directive 2004/42/EU (Annex II, Table A), the maximum allowed content of VOC (Product Category i / Type WB) is 140 g/L (limits of 2010) for the final product. The final DOMOREFLECT PU 122 contains max <140 g/L.

Specifications

Form	Thick liquid
Shading	White
Specific weight	1.46 ± 0.04 kg/L (23°C)
Application temperature	+5°C to +35°C
Dried on touch	1-2 hours
Recoating	8-12 hours
Walkability	24 hours
Emission coefficient (ASTM E408)**	0.89
Solar Reflectance Index – SRI (ASTM E1980)*	103
Maximum tensile stress (EN ISO 527-3)	>2.8 MPa
Elongation at break (EN ISO 527-3)	>200%
Elastic modulus (EN ISO 527-3)	>7.0 MPa
CO ₂ diffusion (EN 1062-6)	180 m
Water vapor permeability (EN ISO 7783)	0.19 m (Class I)
Capillary water absorption (EN 1062-3)	0.02 kg/m ² h ^{0.5}
Adhesive strength (EN 1542)	2.99 N/mm ²
Characterization EN 1504-2	Ingress Protection - Moisture Control - Increasing Resistivity

* Energy Testing Laboratory of KAPE

** Solar and Energy Systems Laboratory of the National Nuclear Center "Demokritos"

All the technical data stated in the present Technical Data Sheet are based on laboratory tests and the knowledge and experience of the company. Different conditions may apply at field applications that are beyond the control of the company. Therefore, the end user is ultimately responsible to make sure that the product is suitable for the application in question and to know the real conditions of the project.