

Domorelect 102 Hybrid

Hybrid technology waterproofing roof coating

DOMOREFLECT 102 Hybrid is a fiber, hybrid technology elastomeric coating for roof waterproofing. It offers excellent resistance to extreme variations in temperature, environmental pollution and UV radiation. It creates a fully waterproof, water vapor permeable membrane of high reflectivity which maintains a low temperature on the external surface during summer months. It is environmental friendly.

Field of application

DOMOREFLECT 102 Hybrid is suitable for application on:

- Flat or inclined roofs
- Hard to waterproof points and cracks using reinforcement mat
- Vents, chimneys
- All construction materials (mortar, concrete, brick, stone, roof tile, metallic surfaces, etc.)
- Old waterproofing layers (acrylic, polyurethane, etc.), provided that the surface has been cleaned mechanically
- Roofs with installed equipment (solar panels, air conditions, etc.)

Advantages

- Creates an impermeable waterproofing membrane with resistance to stagnant water.
- Water vapor permeable, allows transpiration of the substrate.
- High resistance to temperature fluctuations (-30°C to +90°C).
- Resistant to UV rays.
- Highly reflective.
- Easy to apply also on tough spots (corners, joints, cracks, etc.).
- Excellent adhesion to the substrate.
- Elastic, bridges hair cracks.
- Can be applied also on uneven substrate.
- Excellent coverage and whiteness.
- Easy to clean, does not retain dust or dirt.

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 102 Hybrid diluted 10-15% w/w with water depending on the nature of the substrate. In case of particularly loose substrates, prime the surface with DOMORESIN diluted with water at a ratio of 1 to 3.

Application:

2-3 layers: DOMOREFLECT 102 Hybrid undiluted.

Apply with a roll, brush or airless.

Each layer is applied crosswise, after the previous has been fully dried (after 2,5-3 hours depending on the ambient temperature).

In places with cracks apply polyester cloth tape as reinforcement. In this case, apply the primer and when it is fully dry spread one layer of DOMOREFLECT 102 Hybrid. Then apply the reinforcement tape along the cracks, while the material is still wet and then apply another two successive layers of DOMOREFLECT 102 Hybrid.

On surfaces with many and dense cracks, it is recommended to fully reinforce the surface using polyester cloth in a width of 1 m and weight of 60 gr/m².

Additional information:

- 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.

1,3-1,5 kg/m² for 2 layers on primed surfaces depending on the nature of the substrate.

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 102 Hybrid contains max <140 g/L.

Specifications

Form	Liquid
Shading	White
Specific weight	1.45 ± 0.01 kg/L (23°C)
Temperature application	+5°C to +35°C
Dry to touch (23°C) (ASTM D1640-03)	2 hours 40 min
Recoating	2,5-3 hours
Final dry film thickness for 1 mm of liquid film and a consumption of 1,42 kg/m² (EN ISO 2808)	
Emission coefficient (ASTM E408)**	0.91
Solar Reflectance Index – SRI (ASTM E1980)*	102
Maximum tensile stress (EN ISO 527-3)	2,4 MPa
Elongation at break (EN ISO 527-3)	215%
Elastic modulus (EN ISO 527-3)	6,1 MPa
CO ₂ diffusion (EN 1062-6)	>50 m
Water vapor permeability (EN ISO 7783)	<5 m (Class I)
Capillary water absorption (EN 1062-3)	< 0,1 kg/m ² h ^{0.5}
Adhesive strength (EN 1542)	1.98 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.