

ELASTOROOF HYBRID



TECHNICAL DATA SHEET

Description of the product

ELASTOROOF HYBRID is a **spreadable elastomeric roof hybrid sealant** based on acrylic and **polyurethane** resins. It is intended for the waterproofing of roofs, balconies, etc. It creates an **elastic and impermeable membrane** (even from stagnant water). It maintains its elasticity in a wide range of temperatures (from -10°C to 60°C) and it has the ability to **bridge small cracks** of 1-1.5 mm. Characterized by ease of application, the product is **easily applied** and spreads evenly. It is characterized by **extremely good passability**, it can be walked over without "sticking", even at high temperatures.

It is suitable for cool painting of roofs, due to its particularly high whiteness and high reflectivity of solar radiation. Solar radiation is reflected from the surface **reducing the energy requirements** to achieve suitable internal temperature as well as the CO₂ emissions.

Certified with the CE mark, as a protection product for concrete surfaces by preventing moisture, according to EN 1504-2 standard.

Recommended uses

It is applied on roof old coatings (bitumen, acrylic, polyurethane) as well as on concrete surfaces, plaster, concrete and roof tiles with excellent adhesion

Technical characteristics

Resin: Acrylic and polyurethane resins

Density: 1.42±0.04 gr/ml

(EN ISO 2811.01, 20°C)

Production Viscosity: 115±7 KU

(ASTM D 562, 25°C)

Storage Viscosity: 115±10 KU

(ASTM D 562, 25°C)

Solids b.w.: 63±2%

(EN ISO 3251)

Solids b.v.: 48±4%

(ISO 3233)

pH: 8.5±1

(ISO 976)

Packaging stability: 10/10 (1 month, 50°C)

(ASTM D 1849)

Freeze-thaw stability (-5°C): OK

(ELOT 777)

Minimum Film Forming Temperature: 5°C

(ELOT 788 §5.2)

VOC (Volatile Organic Compounds): **ELASTOROOF HYBRID** belongs to the category A/c WB (Exterior walls of mineral substrate). EU Limit Value: 40 g/l. The ready to use product contains max. 30 g/l.

Shades

Available in white.

Properties

Whiteness index: ≥ 85

(ASTM E 313)

Yellowing index: ≤ 2.0

(ASTM E 313)

Solar Reflectance SR: 84%, **SRvis:** 88%, **SRnir:** 85%

(ASTM E 903, ASTM G 159)

Emittance (ε): 0.88±0.02

(ASTM C1371)

Solar Reflectance Index (SRI): 106

(ASTM E 1980)

Exposure to UV-A artificial weathering: 2000h OK

(DIN EN 1062.11)

minimal loss of gloss, minimal darker

DIN EN ISO 16474.3

Blistering 0(S0)

DIN EN ISO 4628.2

Cracking 0(S0)

DIN EN ISO 4628.4

Flaking 0(S0)

DIN EN ISO 4628.5)

Adhesion (Pull-Off): 2.3 N/mm²

(EN 1542)

Water Vapour Permeability S_D(H₂O): Κλάση I, S_D≤5 m

(EN ISO 7783, EN 1504.2)

Carbon Dioxide Permeability S_D(CO₂): S_D>50 m

(EN 1062.6, EN 1504.2)

Water permeability (w24): w<0,1 Kg/(m²•h^{0,5})

(EN 1062.3, EN 1504.2)

Crack bridging (Μέθοδος Α):	>1.250mm (static, 23C) (Κλάση A4)	(EN 1062.7)
Tensile properties		
<i>Maximum elongation:</i>	-10°C: 247%	
	23°C: 563%	
	60°C: 249%	(EN ISO 527.3)
<i>Tensile strength:</i>	-10°C: 1.39 N/mm ²	
	23°C: 2.46 N/mm ²	
	60°C: 1.36 N/mm ²	
Gloss 85°:	9±2 (60°), 14±2 (85°) (mid-sheen)	(EN ISO 2813, EN 1062.01)

Spreading rate

Recommended total thickness: 300 µm.

Spreading rate: 4.5-6.5 m²/Lt for 2 layers and roller application. For difficult cases, where a more effective waterproofing is required or where there are problematic substrates, it is recommended to apply a third layer (or a total dry paint thickness of 300µm, which corresponds to a consumption of 0.7Lt/m²).

Application instructions

Surface preparation: Before application, the surface is thoroughly cleaned of dust, so as not to hinder adhesion. Especially, if there are loose parts of the substrate, greasy stains and any kind of green or mold, these are thoroughly removed - e.g. mechanically where possible (for the loose parts). In this way we improve the adhesion conditions and therefore the effectiveness of the waterproofing. We check if there are pre-existing construction failures or any cracks and irregularities on the surface, which will allow the entry of water and/or the rise of humidity within the masonry and we repair them before applying the product.

The cleaned surfaces are then primed to normalize the absorbency of the substrate. **PRIMEX MICRO** is recommended for priming. After the drying of the primer, apply **ELASTOROOF HYBRID**. For **PRIMEX MICRO** this can be done after 2-3h, according to the weather conditions. In areas of the surface that present roughness, irregularities and/or discontinuities, an additional coat of **ELASTOROOF HYBRID** is required to ensure a continuous impermeable membrane. For difficult surfaces, a third coat may be required throughout the entire roof area.

Thinning: The product is ready for use. It is advisable not to dilute it, as we want the formation of a thick film thickness, which enhances its effectiveness.

Application method: Roller, brush, trowel.

Application: Stir the product well before use. For excellent waterproofing results, it is recommended to apply it in two thick layers. The second layer must be applied "crosswise" to the first and after 24 hours. If the exterior temperature is low and it is a humid period, it is recommended to wait 48 hours, and under no circumstances should the application be made in rainy weather – the surface should not get wet for 2-3 days after the product is applied. It should not be applied at temperatures below 5°C or on a "frozen" (below 5°C) roof surface. Accordingly, in the summer months, it is recommended to apply in the morning hours, before the surface temperature and solar radiation increase.

Tools are cleaned immediately after the application with soap and water.

Drying time

Dry: 120min (DIN EN ISO 9117.3)

Drying time was measured at the Institut für Lacke und Farben (ILF), for a single layer application thickness (142µm).

Dry Through: The membrane is passable 48 hours after drying.

Recoating time: In 24-48 hours, depending on weather conditions, the application of the second layer can be done, however it needs protection from intense mechanical stress.

Drying and recoating time may be prolonged under conditions of low temperature and high relative humidity.

Packaging

ELASTOROOF HYBRID is available in 0.75 Lt, 3 Lt and 9 Lt cans.

Storage

2 years, provided the cans remain closed and in normal storing conditions. **ELASTOROOF HYBRID** can be stored after opening if the can is kept properly sealed in a cool sheltered place at temperatures 5-30°C.

Health and safety

Please refer to the labeling mentioned on the can. In case more information is needed refer to the Material Safety Data Sheet.

Notes

- It is not permeable by stagnant water (pond resistance).
- It is resistant to UV-radiation.
- It is recommended to avoid heavy mechanical stress.
- On difficult surfaces, the **PRIMEX SUPER GRIP** quartz adhesion primer can also be used before application.
- The measurements of reflectance and emittance were carried out by the "Building Environment Studies Group" of the Department of Environmental Physics and Meteorology of the National and Kapodistrian University of Athens.

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