

## PU 2050 INSULATION

**Description**

Water based, Insulation-sealing elastomeric polyurethane coating, with excellent quality, ideal for roof insulation and vertical wall surfaces. Provides a flexible, waterproof and vapor-permeable membrane, highly elastic, crack-bridging, with high adhesion on porous and non porous substrates such as concrete, wood, old sealant layers etc. Renowned for its antifungal protection and high resistance to weathering and ageing, also for the excellent resistance to stagnant water.

It maintains its properties over a wide temperature range (-20°C to 80°C) protecting roof and wall surfaces against UV radiation moisture, mildew and yellowing. Withstands in expansions, contractions. Due to its special composition prevents the ingress of dirt and retains its color shade and its properties over time.

**Technical Information**

Shade	White
Specific Weight	1,30 ± 0,05 kg/lit (ISO 2811)
Solids (%)	64 % (±2%) by weight (ISO 3251 non-volatile)
Reflectance	reflectance factor SR: 0,87 (ASTM E903-96)
Elongation	350% at 25 °C (100% at -10 °C) (ASTM D 412)
VOC*	Ready for use max: 20 g/lit EU LIMITS (2010): 40 g/lit SUBCATEGORY c - exterior walls of mineral substrate, type WB

**Drying Time (25°C)**

Touch dry	1-2 hr
Recoating	12 hr (the first layer)
Full drying	24 hr

*(The above times are indicative and depend on the thinning percentage, relative humidity and temperature)*

**Surface Preparation**

Surfaces must be cleaned from grease, oil and any other pollutants. Previous layers that are loose or detached must be removed by mechanical means. The use of sander and high suction vacuum cleaner is necessary and appropriate to achieve economy to material and to achieve excellent adhesion. If there is dust and loose pieces in the surface are not removed, it is proposed to jetting.

The surfaces must be dry before the application and and to be protected from rising moisture attack. The control and the determination of moisture content of the substrate is a necessary process, because the surfaces must accept overlap when the humidity is less than 6% (at least one month after the creation of the surface). In any case, proposed the use of primer for better adhesion and to protect from moisture.

**Application**

Sealing of cracks : PU 2050 can be used for the local sealing of cracks. In the case of large cracks, proposed filling with suitable sealant (e.g. Epoxy putty 800, etc.) For best results, prepare the surface with solvent acrylic primer 2000 or 2012 acrylic water-based primer or 2015 acrylic primer. After the primer has dried, about 3-4 hours after the application of the primer, followed by a coat of PU 2050 and as it is fresh, fiberglass mesh tape or polyester fabric. Then, after 12 hours from the application of the first layer, follow two successive coats PU TOP 2050 along the cracks to completely cover the fiberglass mesh.

Consumption: 200-250 l/m along the crack.

Isolation without reinforcement: For best results, prepare the surface with solvent acrylic primer 2000 or 2012 acrylic water-based primer. Then, about 3-4 hours after the application of the primer, apply preferably two layers PU TOP 2050 with a roller or brush with total consumption 1,0-1,5 l/m<sup>2</sup> and total thickness 0,4-0,6 mm. The first layer is diluted by 10-30% and the final is not diluted. The final layer should be done crossed and, after the first coat has been dried, at least 12 hours after the application of the first layer. Ensure that the first coat is dry and that the surface has no pores before application of the final coat. Do not apply in surfaces with rising moisture attack.

**Isolation with reinforcement:** In order to provide higher standard roof waterproofing solutions and protection time up to 10 years, the use of reinforcement is proposed. After the appropriate preparation of the surface with solvent acrylic primer 2000 or 2012 acrylic water-based primer and as the primer has dried, about 3-4 hours from the application of the primer, and after the applying of the first layer and is as fresh, we instate the polyester reinforcement. The enhanced with the reinforcement first layer is covered with at least one additional layer of the product. Total consumption 2,1-2,8 l/m<sup>2</sup> and total thickness 1,0-1,5 mm.

**Application conditions**

The film thickness per coat should not exceed 0,5 mm.

Do not apply at temperatures below 10°C. Protect from rain and contact with water for at least 48hours after application of PU TOP 2050. Clean tools immediately after use with water or detergent solution

Application temperature	10–30 °C
Relative air humidity	< 70%
Substrate moisture	< 6%

The application of the product in temperature and humidity outside the recommended, may affect the final properties of the product. Do not apply to walls or roofs when they have high humidity.

Suggested solvents	Water
--------------------	-------

**Storage**

For 12 months in a dry and cool place (10-30 °C).

**Safety**

Please consult the Material Safety Data Sheet. Available upon request.

This Technical Data Sheet replaces and cancels every previously issued. The information, instructions, recommendations and specifications mentioned in this data sheet, represent the results and experience obtained from testing under controlled or specially adapted conditions. The accuracy and relevance of these results to the actual conditions, in which you apply the product, must be determined and depend only on the purchaser and/or applicator.