



## FUTURPOL-THERMO

### ONE-COMPONENT WATER-BASED LIQUID POLYURETHANE MEMBRANE FOR WATERPROOFING AND THERMAL INSULATION

One-component thixotropic thermo-insulating water-based aliphatic polyurethane coating that forms an elastic membrane that insulates and waterproofs. In summer it improves the thermal bridge break, lowering heat transmission and in winter it protects from the cold from the outside to the inside, in interior walls with poor insulation and a high degree of condensation. It raises the dew point, making the condensation problem disappear.

#### PROPERTIES

Water-based product for easy application and repair.

Thixotropic behavior that self-levels when applied on both horizontal and vertical surfaces.

Forms continuous elastic membranes without joining joints.

Permeable to water vapor, allowing perspiration of the surfaces where it is applied.

Excellent resistance to environmental humidity, atmospheric pollutants and solar exposure (U.V.).

The white color acts as a solar reflector, reducing the interior temperature of the building considerably. Excellent thermal insulator (100% closed cells).

Very good adhesion on porous (concrete, mortar, etc.) and non-porous (cement tiles, wood, rusty metal, galvanized steel, etc.) substrates.

Elastic even at temperatures below 0°C.

Ability to bridge cracks.

#### PHYSICAL-CHEMICAL CHARACTERISTICS

<b>Appearance*:</b>	Pasta
<b>Presentation:</b>	10 L containers
<b>Color available:</b>	White
<b>Chemical nature:</b>	One-component water-based aliphatic polyurethane
<b>Density at 20 °C*:</b>	0.4-0.5 Kg/L (20 °C, ASTM D1475, DIN 53217)
<b>Viscosity:</b>	10000-15000 cP (ASTM D2196-86, 25 °C)
<b>Service temperature:</b>	-20 to 90 °C
<b>Application temperature:</b>	> 5 °C
<b>Heat conductivity:</b>	0.04 w/mk (EN ISO 12667)
<b>Tensile strength:</b>	50 Kg/cm2 (ASTM D412, DIN 52455, 23 °C)
<b>Elasticity:</b>	> 300% (ASTM D412, EN ISO 52455)
<b>QUV (Weather Resistance):</b>	> 2000 h (ASTM G53, 4 h, 60 °C (UVB lamp) and 4 h at 50 °C)

\* Quality specifications.

#### MODE OF USE

Before applying the product, check that the support is clean and free of traces of oil, grease, silicone, contaminating waxes or soil materials. If repair is needed, apply appropriate repair mortars.



Apply at room temperature between +5 °C and 35 °C. The service temperature is between -20 °C and 90 °C. It is important to control the dew point to prevent condensation from occurring and avoid whitish areas on the coating.

It is necessary to start from a porous concrete support, without grout and free of curing liquids. Minimum compressive strength of concrete: 15 N/mm<sup>2</sup>. Minimum tensile strength of concrete: 1 N/mm<sup>2</sup>. 28-day hardness of concrete: 15 MPa.

Before applying the product we recommend priming with FUTURPOL-THERMO diluted in water. To create a vapor barrier, apply FUTURPRIMER A.

Stir the product before applying it. Use a low-speed electric stirrer (100 rpm) until you obtain a homogeneous product.

The product can be diluted with a maximum of 5-10% water to improve its spread and application.

Apply with a brush, roller or airless spray in two coats with a yield of 1.5-2 L/m<sup>2</sup> in one or two coats. Repainting will be done once the previous layers are dry to the touch, after 2-4 hours.

To clean materials and utensils, use water before the product hardens. Once the product has hardened it can only be removed by mechanical means.

Stable for 12 months from its manufacturing date, in its original, well-closed and undamaged container. Store in a dry and cool place at temperatures between +5°C and +25°C.

Incorrect treatment of cracks and singular points can lead to a reduction in the useful life of the membrane. Do not apply to supports in poor condition or at risk of rain or humid weather. Before applying the product, check that the surfaces are dry.

## APPLICATIONS

Waterproofing and thermal insulation on interior and exterior surfaces.

For application on fiber cement, concrete, stucco, on old well-adhered acrylic membranes, etc.

Very useful in all types of construction and masonry companies, rehabilitation of buildings, conservation of official buildings, communities, large communities, etc.

The information and recommendations we provide are based on our Research and experience and we believe they are correct. Since the application of the products by our Clients is beyond our control, we cannot assume responsibilities arising from misuse of our products.