



FUTURPOL-HYBRID 2K

LIQUID WATER-BASED POLYURETHANE MEMBRANE FOR WATERPROOFING AND PROTECTION

Two-component product based on aliphatically modified polyurethane with thixotropic behavior, water-based, which once polymerized forms a completely waterproof, elastic and jointless membrane. Applicable on both horizontal and vertical walls for waterproofing and anti-humidity protection.

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

PHYSICAL-CHEMICAL CHARACTERISTICS

	Component A	Component B
Appearance*:	Pasta	Liquid
Presentation:	25 Kg metal containers (Component A: 0.250 Kg, Component B: 25 Kg)	
Mixing ratio:	Component A: 0.250 parts. Component B: 25 parts	
Available colors:	White, grey, green, red, brick red and black	
Chemical nature:	Water-based polyurethane	
Density at 20 °C*:	1,300 ± 0.050 Kg/L (20 °C, ASTM D1475)	
Solid content:	70%	
Viscosity:	10000-15000 cP	
Application temperature:	> 5 °C	
Hardness:	90 (Shore A, ASTMD 2240, DIN 53505)	
Tensile strength:	6.0 N/mm ² (ASTM D412, DIN 455, 23 °C)	
Elasticity:	> 300% (ASTM D412, EN ISO 527-3)	
Elasticity at 23 °C:	50 % (ASTM D412, DIN 455)	
Water vapor transmission:	0.8 g/m ² .h	
Chemical resistance:	Alkali resistance: NaOH, 5%, pH 14, 10 days: Deterioration Resistance to alkalis: KOH, 15%, pH 15, 10-25 days: Deterioration Acid resistance: HCl, 1N, pH 0.5, 10 days: Deterioration Acid resistance: H ₂ SO ₄ , 5%, pH 0, 10 days: Deterioration Resistance to acids: H ₃ PO ₄ , 10%, pH 0.5, 10 days: Deterioration Resistance to alcohols: Isopropanol, 5%: No permanent swelling	
Technical Data ETA 17/0922:		
Minimum membrane thickness:	1.6mm	
Water vapor diffusion:	860 μ	



Resistance to drafts:	> 50KPa
Root resistance:	NPA
Dangerous substances:	Does not contain
Slip resistance:	NPA
Fire resistance:	NPA
Useful life time:	W2 (10 years)
Climate zone:	S (Severe)
User load:	P3 (With internal reinforcement)P1 (Without internal reinforcement) TH4 P2 ((Without internal reinforcement) TH3
Maximum slope:	S1-S4
Minimum and maximum surface temperature:	TL3 (- 20 °C), TH4 (90 °C)
Static punching:	90 °C (With reinforcement): 200 N (L3) 90 °C (Without reinforcement): 70 N (L1)
Accelerated aging < 80 °C, 100 days: (EOTA TR-11)	Fatigue movements: Pass Dynamic punching: I4 (-20 °C) Tensile strength 2/3 MPa (EN ISO 527-3, without reinforcement)Elongation at traction 58/30% (EN ISO 527-3, without reinforcement)
UV radiation resistance (EOTA TR-10):	Dynamic punching: I4 (-10 °C) Tensile strength 2/4 MPa (EN ISO 527-3, without reinforcement)Tensile elongation 58/18 % (EN ISO 527-3, without reinforcement)
Hot water resistance (EOTA TR-12):	90 °C with reinforcement: 200 N (L3) 90 °C without reinforcement: 150 N (L2)

* 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 temperature of the support must be between +5 °C and 35 °C. The support must be dry and with relative humidity 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/mm². Minimum tensile strength of concrete: 1 N/mm². 28-day hardness of concrete: 15 MPa.

Mix the two components in the recommended proportion: 25 parts of component B for every 0.250 parts of component A. Beat component B well in its container, then add component A and mix with a low-speed mechanical stirrer (300 -400 rpm) for a minimum of 2-3 minutes until a homogeneous product is achieved. If overmixed, occluded air bubbles may appear. Once the two components are mixed, it is ready for use. The open application time (Pot Life) is 45 minutes at 20 °C.

The product is ready for use once the two components have been mixed. It can be diluted up to a maximum of 5-10%.

Apply with a brush, roller or airless spray.

Apply with a roller in very thin layers of In case of waterproofing applications, the minimum consumption will be 1.5-2 Kg/m², always armed with FUTUR ARMOR POLYESTER 50 G between layers.

For waterproofing and protection of metal sheets and polyurethane foam, the consumption will be approximately 1.5 Kg/m², assembling only the singular points.

In the case of protective paint, the consumption will be 0.8-1.2 Kg/m² without assembly.

Repainting will be done once the previous layers are dry to the touch, approx. Once 2-4 hours have passed.

Maintenance and cleaning: To maintain the appearance of the floor after application, all spills must be removed immediately after they have occurred. The floor must be cleaned regularly using rotating brushes, high-pressure



cleaners, vacuum cleaners, using neutral detergents and appropriate waxes.

Once the container is opened, we recommend its complete consumption. Once the two components have been mixed, the mixture obtained must be applied, respecting the pot-life.

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.

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

APPLICATIONS

Very useful in all types of construction companies, quick repair contracts, general masonry, community maintenance, building repair and restoration, waterproofing, etc.

For application in the waterproofing and protection of:

Polyurethane foam.

Inclined and inverted roofs.

Lightweight metal or inclined fiber cement roofs.

Exterior walls, perimeter walls, vertical and horizontal surfaces on roofs, facades, etc.

Applicable on concrete surfaces, fiber cement, cement tiles, wood, rusty metal, galvanized steel, 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.