

WATERPROOF PU 700



100% POLYURETHANE ROOF WATERPROOFER



■ PROPERTIES

Top quality and high performance, brushable one-component elastomeric polyurethane roof waterproofer with long life. Its use creates a uniform protective membrane, without seams or joints, with excellent resistance to UV radiation and standing water.

Classified as product for surface protection of concrete surfaces per EN 1504-2.

- Maintains its properties and flexibility at temperatures from -40°C to +90°C.
- It has high mechanical and chemical resistances - it is suitable for applications with demands of high mechanical stresses and performance.
- High resistance to abrasion, scratching, and foot traffic.
- Long-term waterproofing and protection.

■ ADVANTAGES

- Permanent adhesion to the substrate.
- Excellent water vapour permeability.
- Impermeable to water.
- Also suitable for roof gardens.
- Excellent walkability, without sticking, even at high temperatures.

■ APPLICATIONS

WATERPROOF PU 700 is suitable for waterproofing roofs, balconies, cement boards, and drywall. It is also applied over roof mosaics, concrete slabs, new or weathered liquid membranes, polyurethane foam, existing and well-adhered asphalt membranes, metal surfaces etc. In addition, it is suitable for application

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before the installation of thermal insulating slabs on roofs, in roof gardens, etc.

■ USE

1. Surface preparation

To ensure and facilitate the proper adhesion of the waterproofer, the application surface must be sound, flat, clean, and free from dust, oils, rust, and any loose paint. Remove existing paint, cement residue, moss, and fungus by mechanical sanding, and clean with a hard broom or a wet & dry vacuum cleaner. To fill gaps and repair surface defects, if any, use the appropriate DUROSTICK repair product(s). Before the application, the substrate moisture should not exceed 4%. Repair large cracks (>1mm) and seal the expansion joints by using the polyurethane sealant DUROFLEX-PU. Begin the waterproofing after 12 hours. Absorbent cement surfaces and unsound substrates are stabilized with WATERPROOF EPOXY PRIMER AQUA, diluted by up to 25% with water. Non-absorbent surfaces such as asphalt roofing roll or metal surfaces are primed with WATERPROOF EPOXY PRIMER AQUA, diluted by up to 10% with water. The consumption of the primer ranges from 125-150gr/m².

2. Application

Allow for 24-48 hours to pass from the completion of the primer application, and mix the waterproofer well before use. Apply two or three coats without dilution, with either a roller, a brush, or a spray gun. Apply each coat crosswise, with a difference of 8-24 hours between coats, depending on the weather conditions.

If the application surface has dense, multiple cracks, it is necessary to reinforce it with the use of the reinforcing polyester fabric DS-50 of DUROSTICK (weight of 50gr/m², and width of 1m). It is also possible to reinforce only a section of the surface, as required. Two to three hours after the primer application, apply a coat of WATERPROOF PU 700, as wide as the reinforcement strip(s) that will follow. While the coating is still fresh, place a strip of the reinforcing fabric. If additional strips will follow, do so with an overlap of 5-10cm with each other. Once the reinforcement is completed, apply two

coats of the waterproofer over the entire surface to fully coat the fabric.

When dealing with surface microcracks, spot-seal them using the polyurethane sealant DUROFLEX-PU, after applying the primer along the cracks. The waterproofing is completed by applying two crosswise coats over the entire surface.

■ NOTES

WATERPROOF PU 700 is not suitable for pool waterproofing which comes into direct contact with chemically treated water.

- Use the product to protect the vertical surfaces (parapets) around the perimeter of the roof along their entire height.
- Avoid applying the product if there is a chance of rain for the next 24 hours.

■ CLEANING

Clean all tools with THINNER 201 of DUROSTICK, immediately after use.

■ CONSUMPTION

- Minimum consumption of 1.5-1.8kg/m², depending on the substrate and application method.
- Maximum consumption of 750gr/m² per coat, to avoid bubble creation in its mass.

■ STORAGE

Store in its factory-sealed packaging, in areas protected from direct sunlight and frost, for 12 months from production date. If opened, it must be applied immediately, it cannot be stored after opening.

■ SAFETY DIRECTIONS

The product is classified as harmful. It is recommended to keep away from the reach of children. Before use, refer to the cautions on the product packaging or the Material Safety Data Sheet.

■ PACKAGING

Container 6kg, 25kg.

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TECHNICAL SPECIFICATIONS	
■ Color	White
■ Chemical base	Polyurethane resin
■ Drying time	12 to 24 hours, depending on moisture and temperature conditions
■ Viscosity per EN ISO 3219 [23°C, shear rate 100 (1/s)]	2000-3000 mPa.s
■ Density per DIN EN ISO 2811-1 (21°C)	1.45 gr/cm ³
■ Application temperature	From +8°C to +30°C
■ Temperature variation resistance	From -40°C to +90°C
■ Skin formation time (23°C, 50% R.H.)	4 hours
■ Elongation at break (DIN 53504)	800%
■ Tensile strength (DIN 53504)	4.10 N/mm ²
■ SHORE A hardness (DIN 53505)	81
■ Water vapour permeability (DIN EN 1931, 23°C -0/75% R.H.)	13,1 gr/m ² /day
■ Impermeability to water (DIN EN 1928, 1m water column, 24h)	Watertight
■ Accelerated weathering test, UV & water exposure, EOTA TR-010, Radiant exposure 400 MJ/m ² , 2400 hours	Passed, no significant changes
■ Resistance against thermal ageing, EOTA TR-011, 100 days at 80°C	Passed, no significant changes
■ Fatigue resistance, EOTA TR-008, -10°C, initial crack 1mm, change in crack width: 1mm, Number of cycles: 500:	No cracks or tears of the material
■ Capillary absorption and permeability to water	0.01kg/m ² ·h ^{0.5} (EN 1062-3, requirement EN 1504-2: w< 0.1)
■ Permeability s_D to CO ₂ per EN 1062-6	s_D > 50m
■ Permeability to water vapour s_D per EN ISO 7783	s_D = 0.70m (water vapour permeable class I, s_D < 5m)
■ Adhesion strength per EN 1542	>2 N/mm ² (requirement for flexible non-traffic systems 0.8 N/mm ²)

V.O.C. (Volatile Organic Compounds):

Limit value of maximum V.O.C. content according to EU (Directive 2004/42/EC) for the particular product (category A/i 'one-pack performance coatings', Type SB): 500gr/l (2010). The ready-to-use product contains a maximum of 499gr/l V.O.C.

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The technical specifications and directions of use contained in this technical brochure are the results of the knowledge and experience of the company's research and development department, as well as from the real-life applications of the product. The recommendations and suggestions regarding the use of the products are made without guarantee since the respective conditions during their application are beyond the control of the company. For this reason, it is the user's responsibility to make sure that the product is suitable for the intended application as well as the application conditions of the project.