

HYDROSTOP-PU



Polyurethane waterproofer for flat roofs



■ PROPERTIES

Brushable, elastomeric waterproofer that combines water-soluble polyurethane and acrylic resins. Apply the product to create a seamless membrane without seams nor joints, that is impervious to water and provides excellent roof protection. Certified by the University of Athens (Department of Physics, Division of Applied Physics), as 'Cool' material of low thermal conductivity and high reflectivity in the visible spectrum at a rate of 93%. Its application reduces the indoor temperature of spaces under the roof during the summer and keeps it watertight during the winter months. As a result, it also contributes to the reduction of energy consumption for cooling and heating. Classified as product for surface protection of concrete surfaces per EN 1504-2.

■ ADVANTAGES

- It does not require the addition of reinforcing polyester mesh.
- Easily applied using a paint roller, a painting or waterproofing (emulsion) brush, as well as an airless spray gun

- Seals minor cracks and prevents them from reappearing
- Excellent resistance to frost, standing water and sunlight
- It is not chalk by UV radiation
- Excellent resistance to the formation of mold and algae
- Resists the corrosive gases of the atmosphere, as well as chlorides, carbon dioxide and sulfur oxides
- Water vapour permeable
- Walkable, without sticking
- Does not create bubble up
- Does not saponify
- Excellent resistance to extreme weather conditions, from -25°C up to +80°C
- Its final surface prevents mud rain and other pollutants to adhere, thus maintaining its whiteness and its reflectivity long-term.

■ APPLICATIONS

DUROSTICK's HYDROSTOP-PU is suitable for waterproofing roofs, terraces, parapet walls, gutters,

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gypsum and cement boards, as well as properly installed and well adhered asphalt roofing rolls.

■ USE

1. Preparation of cementitious, unprotected surface:

Using a roofing scraper or a wide chisel, remove all deteriorated sections, if any. Continue by using a hard, street type, broom. Remove all black spots (mold/mildew) using DUROSTICK's D-95 CLEANER or a bleach/water solution, at a mixing ratio of 1:1. Scrub the surface thoroughly and rinse with plenty of water. All surfaces to be waterproofed must be dry and should not get wet for the next 48 hours, in order to avoid surface moisture from being trapped.

2. Preparation of surfaces coated with waterproofing product(s):

Detached torch-down roofing: remove it using a wide roofing scraper and a roofing torch simultaneously.

Well-adhered existing torch-down roofing material, only require to thoroughly remove all the dust from their surface and to seal any detached sections if they exist.

Worn-out or detached elastomeric sealants, remove them using a roofing scraper or other mechanical means.

3. Application

Using a roller and a brush, prime the surface using the water-soluble, micromolar stabilizer AQUAFIX or the SOLVENT-BASED PRIMER diluted 50% with THINNER 101 of DUROSTICK. Alternatively, dilute the product by adding 30% water and prime the entire surface. Once the primer has been absorbed into the surface and is completely dry, it is possible for some hairline cracks to become visible. Treat those cracks by applying several coats of HYDROSTOP-PU, until they are completely sealed. Each new coat is applied once the previous one is dry. Seal wider cracks ($\geq 1\text{mm}$) using the elastomeric sealant DS POLYMER or by using the polyurethane elastomeric sealant DUROFLEX-PU of DUROSTICK. Once the sealant is dry, apply 2 or 3 coats of the polyurethane waterproofer HYDROSTOP-PU over the sealed cracks.

Complete the waterproofing process by coating the entire area with 2-3 crosswise coats, to cover any minor substrate imperfections. Apply each coat 6-18 hours after the previous one was applied (depending on ambient conditions) or once the previous coat has completely cured and it is walkable.

■ USEFUL TIPS - NOTES

- Mix well before use
- Waterproof all vertical surfaces around the roof (parapet walls), along their entire height
- Avoid exceeding thicknesses of 0.5mm per coat.
- Low ambient temperatures delay the final curing time while high ambient temperatures speed up the curing process
- Avoid applying the product in high humidity conditions or when there is possibility of rain within the next 24 hours..

■ CLEANING

Clean all tools with water and soap or detergent, if needed, immediately after use.

■ CONSUMPTION

- Minimum consumption: 0.75lt to 1.2lt/ m^2 for 2 coats, depending on the substrate.
- 1.2lt to 1.5lt/ m^2 for 3 coats, depending on the substrate (long-lasting protection).

■ STORAGE

Store in places protected from frost, in factory sealed containers, for 18 months from production date.

■ SAFETY DIRECTIONS

The product needs no hazard labeling under current European and National legislation. However, it is recommended to keep away from the reach of children.

If swallowed, seek immediate medical advice and show the container or label.

■ PACKAGING

- Carton box with 12 pcs of 750ml each one
- 3lt container (on a 120pcs pallet)
- 10lt container (on a 48pcs pallet)
- 15lt container (on a 24pcs pallet)

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TECHNICAL SPECIFICATIONS (Measurement conditions 23°C and 50% R.H.)	
■ Form - Color	Viscous paste - White
■ Composition	Hybrid Dispersion System
■ Density	1.35±0.05kg/lt
■ Elongation (per ASTM D 412)	> 400% (ASTM D 412)
■ Full watertightness	> 1.5 N/mm ² (ASTM D 412)
■ Capillary absorption and permeability to water	0.01kg/m ² ·h ^{0.5} (EN 1062-3, requirement EN 1504-2: w < 0,1)
■ Permeability SD to CO ₂ , per EN 1062-6	SD > 50 m
■ Water vapour permeability S _d per EN ISO 7783	S _d = 1.73m (water vapour class I, S _d < 5m)
■ Adhesion strength per EN 1542	1.2 N/mm ² (requirement for flexible systems with no traffic: 0.8 N/mm ²)
■ Impact resistance per EN ISO 6272-1	5 Nm (class I)
■ Application temperature	From +5°C to +35°C
■ Temperature resistance	From -25°C to +80°C

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

Limit value of maximum V.O.C. content per EU
(Directive 2004/42/CE) for the specific product (category
A/c: 'Coatings for exterior walls of mineral substrate',
Type WB): 40gr/lit (2010). The ready to use product
contains maximum 10gr/lit V.O.C.

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