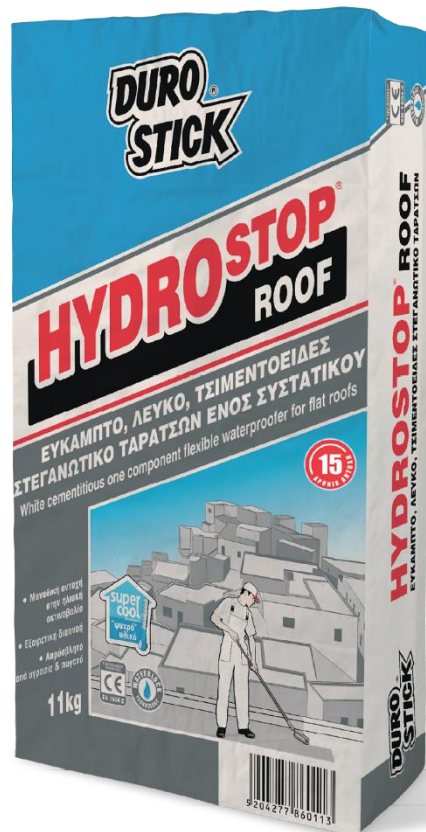


# HYDROSTOP ROOF



White cementitious one-component flexible waterproofer for flat roofs



## ■ PROPERTIES

Flexible and brushable, one-component white mortar, that is mixed only with water. An innovative waterproofing product for roofs that provides long-lasting waterproofing solutions. Its formula consists of high-quality cement, selected quartz aggregates, acrylic, water-repelling and elastomeric resins. It is water vapour permeable without being water permeable, providing a constant coefficient of thermal conductivity ( $\lambda$ ) of the roof insulation. Presents excellent adhesion and covers hairline cracks. Before coating, place the self-adhering fiberglass tape DS-230 over all the cracks. Protects concrete from carbonation effectively.

The durable and flexible membrane created after its application is highly durable against solar radiation and protects against standing water and frost. It also participates in the integrated thermal waterproofing

systems for roofs, COOL ROOF and COOL ROOF LIGHT of DUROSTICK.

Certified by the University of Athens (Department of Physics, Division of Applied Physics), as 'Cool' material of low thermal conductivity and high reflectivity.

Classified as product for surface protection of concrete surfaces (c) per EN 1504-2, principle 1 (Ingress protection), principle 2 (Moisture control), principle 5 (Physical resistance) and principle 8 (Increasing resistivity).

## ■ APPLICATIONS

HYDROSTOP ROOF is mainly used for roof waterproofing, on properly prepared surfaces to ensure long-lasting protection. It is suitable for waterproofing basements before their backfilling.

The technical specifications and directions of use contained in this technical data sheet 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.

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However, it is necessary to protect the waterproofing coating by covering it with dimple membrane throughout the waterproofed surface. It can also be applied on the interior walls of basements to waterproof them if their exterior is unprotected. Before the application, remove the affected by moisture plaster from part or the entire basement wall surface. Ideal for waterproofing surfaces that have, or may develop in the future, hairline cracks from expansions and vibrations. These surfaces could be balconies, above ground storage tanks, swimming pools etc. It is recommended for waterproofing surfaces before tiling. Suitable for the perimeter waterproofing of exterior walls, preventing rising damp from bouncing rain, just by coating 15-30cm of wall surface from the ground level.

### ■ USE

#### 1. Surface preparation

When dealing with unprotected roofs, first remove any dust, oils, loose sections, moss and algae. Parts of the surface that need preparation (smoothing or pitching), should be primed using the acrylic emulsion D-20 of DUROSTICK. Before the emulsion dries, apply the fiber-reinforced cement screed D-6 of DUROSTICK, as needed. Alternatively, the use of traditional cement screeds (sand and cement, mixed on a 4:1 ratio) must be fortified using DUROSTICK D-20, at a mixing ratio of 1:1 with water or DUROMAX at a mixing ratio of 1: 5 with water. Prime all areas that have multiple cracks, from 0.5-1mm wide, using the micromolar stabilizer AQUAFIX. Once dry, apply HYDROSTOP ROOF to cover the cracks. Sections with cracks of 1-3mm width are primed with the primer for polyurethane sealants PRIMER-PU and then they are sealed using DUROFLEX-PU of DUROSTICK. Cracks wider than 3mm are sealed using the injecting epoxy resin DUROSTICK D-33.

### ■ NOTES

- When dealing with flat roofs subjected to heavy loads and mechanical stresses, or terrace surfaces over 60m<sup>2</sup>, it is recommended to encase within the first, still fresh, coat of HYDROSTOP ROOF, the alkaline resistant fiberglass mesh DUROSTICK DS-490

(mesh opening: 4x4mm, weight: 90gr/m<sup>2</sup>). Follow by **necessarily applying two more coats** of HYDROSTOP ROOF. In this way, exceptionally durable waterproofing for at least 15 years, excellent resistance to standing water, as well as covering small defects of the application substrate are all ensured.

- **The addition of any improving emulsions into HYDROSTOP ROOF is strictly prohibited.**

- The addition of pigments in powder form, DUROCOLOR POWDER-C (inorganic oxides coated with vinyl resins) into the mixing water of HYDROSTOP ROOF, creates a perfect combination of colored and long-term waterproofing with soft, permanent colors for unlimited applications.

**Preparation of surfaces coated with waterproofing product(s):**

- **Detached torch-down roofing:** Remove them using a wide roofing scraper and a roofing torch simultaneously.

- **Worn-out or detached elastomeric waterproofer,** are removed using a roofing scraper or other mechanical means.

- **To detect detached elastomeric materials that are not visible,** simply use a garden hose. Pour water on the roof surface from about 1 meter high. Notice the change of the sound the water makes when it hits the detached parts of the waterproofing and mark them. Cut the detached sections using a razor blade and scrape the defective material off.

- **Existing cementitious waterproofing layers that are well adhered,** must be first cleaned from any mud rain residues with water, and once thoroughly dry, coat the surface with HYDROSTOP ROOF.

#### 2. Application

Apply HYDROSTOP ROOF on thoroughly soaked surfaces, without any standing water. Coat the surface with 2-3 crosswise coats, 1mm thick each one, using an emulsion brush or a paint roller. Empty the bag into a clean container with cool water, at a mixing ratio of 11kg HYDROSTOP ROOF to 3.3-3.5lt water. Mix using a low rpm electric mixer, equipped with the appropriate attachment (recommended). Mix until a lump-free homogeneous mass is obtained,

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that can stay on the emulsion brush or paint roller without dripping. The mixture remains workable for 2 hours. The second and third coat may be applied within 2-3 hours from the previous coat(s) without additional soaking. Do not apply at temperatures below + 5°C and above + 35°C, or when the area forecast shows rain for the next 12 hours, after the application. When applying the product during the summer months, the final coat should be protected from strong sunlight, until fully cured. Best apply during the evening hours and soak every 12 hours for the next 24 hours, to avoid premature dehydration.

### ■ CLEANING

Clean all tools with water immediately after use.

### ■ CONSUMPTION

1.0kg/m<sup>2</sup>/mm thick coat.

### ■ STORAGE

Store in factory sealed packages, in dry and shaded places, for 12 months from production date.

### ■ SAFETY DIRECTIONS

The product contains Portland cement.  
Before use, refer to the cautions on the product's package or the Safety Data Sheet.

### ■ PACKAGING

Paper bag of 11kg each one on a 594kg pallet.

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TECHNICAL SPECIFICATIONS (Measurement conditions 20°C and 50% R.H.)	
■ Form - Color	Cementitious mortar - White
■ Bulk density of dry mortar	1.02±0.05kg/lt
■ Bulk density of fresh mortar	1.60±0.05kg/lt
■ Maximum grain size	0.50mm
■ Water requirement	3.3lt water in 11kg mortar
■ Application temperature	From +5°C to +35°C
■ Temperature resistance	From -35°C to +90°C
■ Pot life	2 hours
■ Coat thickness	1mm/coat
■ Foot traffic	After 3 hours
■ Water tightness per DIN 1048	To water pressure up to 7 Atm (kg/cm <sup>2</sup> )
■ Reflectivity to solar radiation per ASTM E 903-96 & ASTM G159-98	82 [SRvis%]

PRODUCT PERFORMANCES	
■ Abrasion resistance per EN ISO 2409	weight loss < 3000 mg
■ Permeability S <sub>D</sub> to CO <sup>2</sup> per EN 1062-6	S <sub>D</sub> = 300m
■ Water vapour permeability S <sub>D</sub> per EN ISO 7783-2	S <sub>D</sub> ≤ 2m (class I, water vapour permeable)
■ Capillary absorption and permeability to water w per EN 1062-3	w ≤ 0.02kg/m <sup>2</sup> .h <sup>0.5</sup>
■ Adhesion strenght per EN 1542	≥ 2.80 N/mm <sup>2</sup>
■ Impact resistance per EN ISO 6272-1	50Nm (class III)
■ Reaction to fire	Class F

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