Capa **PROOF HYBRID W**

Aliphatic polyurethane waterproofing coating in water-based form for exposed roofs

info

- Hybrid polyurea
- Trowel or roller application
- Cold application
- High mechanical performance

DESCRIPTION

Elastomeric waterproofing coating made of aliphatic polyurethane water-based elastomeric polyurethane for·roofs, for·use when mechanical durability and excellent waterproofing properties are required. It forms a film that is impervious to moisture, resistant to UV rays and mechanical stress.

FIELDS OF APPLICATION

- Concrete roofs, hydraulic tiles, cementitious screeds.
- Weight-bearing roofs where high resistance to standing water is required.
- Metallic surfaces.
- Over new or old liquid waterproofing membranes.
- Over PU foam insulation for protection.
- On mineral bituminous membranes.

The above surfaces require proper preparation and priming prior to the application of CAPAPROOF HYBRID W.

PROPERTIES AND ADVANTAGES

- Great elongation mechanical resistance.
- Excellent resistance to standing water.
- Certified cool roofing properties (for white colour shade).
- Ideal waterproofing solution for weight-bearing roofs.
- Durable resistance to UV radiation and adverse weather conditions.
- Remains elastic over a wide temperature range from -15 °C to +80 °C.
- No signs of blisters or craters on the surface during the curing phase.
- Increased hardness and crack bridging properties.
- Also applicable in cloudy weather conditions.
- Environmentally friendly and easy to use (water-based, single-component).
- Long service life assured.

CERTIFICATES AND TEST REPORTS

- CE certification according to EN 1504-2.
- Certificate of Compliance No. 1922-CPR-0386.
- LEED v4.1 compliant: SS Credit - Heat Island Reduction - Option 1 - High reflectance roof, initial SRI ≥ 82.
- Complies with V.O.C. content requirements according to E.U. Directive 2004/42/EC.

PRESENTATION

13 kg packages in plastic pails.

EXPIRY

2 years, stored in its original sealed packaging, protected from frost, humidity and exposure to sunlight.

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COLOURS

- White
- Light grey
- Oxide red

Other colours available on request

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TECHNICAL CHARACTERISTICS

Density (EN ISO 2811-1)	1.35 kg/L (±0.5)
Elongation at break (ASTM D412)	480% (±30)
Tensile strength at max. load (ASTM D412)	2.28 MPa (±0.16)
Tensile strength at break (ASTM D412)	4.4 MPa (±0.2)
Tensile strength at break (reinforced with CAPAPROOF MESH, ASTM D412)	>5Mpa
Adhesion strength (EN 1542)	>2.5N/mm²
Shore hardness A (ASTM D2240)	68
Liquid water permeability (EN 1062 - 3)	<0.1 kg/m2h0.5
CO2 permeability: air layer thickness equivalent to diffusion Sd (EN 1062-6)	>50 m
Water vapour permeability: thickness of the air layer equivalent to diffusion Sd (EN ISO 7783)	0.6 m (Class I - permeable)
Accelerated UV ageing in the presence of humidity (UVB-313, 4h UV @60oC + 4h condensation @50oC, ASTM G154)	Pass (> 1000 hours)
Service temperature	-15 °C min. / +80 °C max.
Total reflectance SR% (ASTM E903-12, ASTM G159-98)	84% (white)
Infrared emittance (ASTM C1371-04a)	0.89 (white)
Solar Reflectance Index SRI (ASTM E1980-01)	106 (white)
Consumption	1-1.2 kg/m2 for two coats (cementitious surface)

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APPLICATION CONDITIONS

Substrate moisture content	<4%
Relative humidity (RH)	<85%
Application temperature (ambient - substrate)	+ 5 °C min. / + 35 °C max.

CURING DETAILS

Drying time (+23 °C, RH 50%)	2-3 hours (initially)
Dry for repainting (+23 °C, RH	24 hours
Total hardening	-7 days

** Low temperatures and low humidity during application and/or curing extend the above times, while high temperatures and high humidity reduce them.*

SUITABLE PRIMERS ON COMMON SUBSTRATES

Substrate	Priming	Description - Details
Concrete, cement screed	CAPAPROOF PRIMER EP W	High adhesion water-based primer on cementitious substrates

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INSTRUCTIONS FOR USE

Substrate Preparation:
The surface must be stable, clean, dry, protected from rising damp and free of dust, oil, grease and loose materials. Poorly adhering materials and older coatings should be removed, and the surface should be thoroughly cleaned mechanically or chemically. Depending on the substrate, an adequate mechanical preparation may be necessary to smooth out irregularities, open the pores and create optimal conditions for adhesion. Surfaces should have appropriate slopes and should be sufficiently flat, smooth and continuous (i.e., free of holes, cracks, bays, etc.) If not, they should be treated accordingly (e.g. with a suitable putty).

Priming:
Prior to the application of CAPAPROOF HYBRID W, the appropriate primer must be applied, according to the substrate. In the case of cementitious substrates, we recommend applying CAPAPROOF PRIMER EP W diluted with water in the proportion for CAPAPROOF PRIMER EP.
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Application:
After priming the surface, apply CAPAPROOF HYBRID W, after stirring well, in at least two coats by roller, brush or airless spray gun. The first coat is thinned to 5% with clean water, while the second coat follows after application (as must all subsequent coats). 24 hours, applied undiluted. Each coat of CAPAPROOF HYBRID W must be applied in a vertical direction, or differently from the previous one.

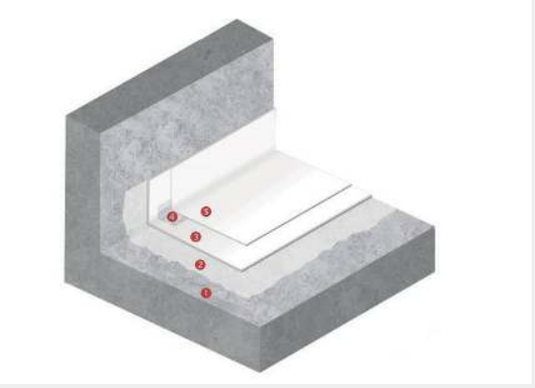
Along intersections between studs and the floor (as well as at all other corners), at construction details (such as around and inside roof drains), along joints, as well as when covering cracks, it is recommended that CAPAPROOF HYBRID W be applied locally. pre-applied, reinforced with the specially designed CAPAPROOF MESH 50gr/m2 weight non-woven polyester fabric (two-layer "wet-on-wet" application with the fabric placed in between).

For projects with higher requirements in terms of mechanical strength and crack bridging, it is recommended that CAPAPROOF HYBRID W be fully reinforced with CAPAPROOF MESH non-woven polyester fabric over the entire application surface.

INDICATIVE SYSTEM STRUCTURE

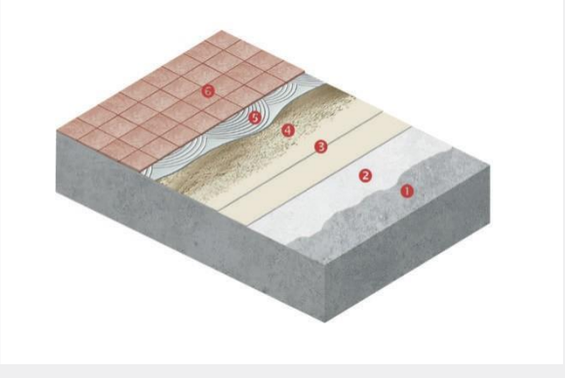
WATERPROOFING OF VISIBLE ROOFS ON CEMENTITIOUS SUBSTRATE
1. Cementitious Substrate
2. CAPAPROOF PRIMER EP W diluted with water (1:4 mixing ratio)
3. Waterproofing Base Coat: CAPAPROOF HYBRID W (diluted 5% with water)
4. Corner reinforcement: CAPAPROOF MESH
5. Waterproofing finish: CAPAPROOF HYBRID W (undiluted)

CAPAPROOF HYBRID W consumption: 1-1.2 kg/m2 for two coats



REINFORCED WATERPROOFING SYSTEM FOR WEIGHT-BEARING EXPOSED ROOFS
1. Cementitious Substrate
2. Priming: CAPAPROOF PRIMER EP W
3. Waterproofing Base Coat: CAPAPROOF HYBRID W (diluted 5% with water)
4. Wet-on-wet application of two layers with the fabric placed in the middle
5. Polyester reinforcement: CAPAPROOF MESH
6. Waterproofing finish: CAPAPROOF HYBRID W (undiluted)

CAPAPROOF HYBRID W consumption: 2-2.5 kg/m2



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SPECIAL NOTES

• CAPAPROOF HYBRID W should not be applied in wet conditions, or if wet or rainy conditions are expected to prevail during the application or curing period of the product.
• The substrate temperature during application and curing should be at least 3 °C above the dew point to avoid condensation problems.

• The application should continue sufficiently on the vertical surfaces of the roof (at least 30 cm), to form a uniform waterproofing membrane. In any case, it is advisable to cover the uprights in their entirety and to continue the waterproofing in their horizontal sections.

• The durability of the waterproofing system is enhanced by increasing the total dry film thickness, which can be achieved by applying an additional layer or layers.

• In areas where standing water is more likely to remain for an extended period of time, it is advisable to reinforce CAPAPROOF HYBRID W with CAPAPROOF MESH polyester fabric. In such a case, at least 3 coats of CAPAPROOF HYBRID W are required locally. In any case, however, it is vital that appropriate slopes be created in advance to facilitate the smooth flow of water away from the roof.

• In the case of new cement screed, shortly after its laying it is advisable to make adequate joints (for 15-20m2 of surface and at a depth approximately equal to ¾ of the thickness of the cement screed), which will then be duly sealed (e.g. with closed-cell PE foam cord and CAPAPROOF MASTIC PU after adequate priming of their sides). It is also necessary to create expansion joints around the entire perimeter, as above, and with a minimum width of 1 cm. Any existing concrete slab joints should be transferred to the new substrate.

MAINTENANCE INSTRUCTIONS

• The total hardening of the film occurs 7 days after the application of the final coat, depending also on the atmospheric conditions. During this period, it is recommended that access to the application area be prohibited or limited to specialised personnel only.

• It is recommended that the coating be inspected annually for any damage caused by accidental impact or misuse.

• In the event of any need for local repairs, CAPAPROOF HYBRID W must be reapplied at least at its original dry film thickness, after cleaning and priming (if necessary) the affected area. Where appropriate, CAPAPROOF MESH polyester non-woven fabric is recommended for reinforcement.

• Periodic cleaning with a water jet (combined with a neutral cleaning agent, if necessary) is recommended, especially in case of heavy accumulation of dirt, dust and contaminants on the surface.