



Cold-applied elastomeric hybrid polyurea - polyurethane waterproofing system

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

# **DESCRIPTION**

Dual-component, elastomeric, brushapplied, polyureapolyurethane hybrid waterproofing coating for the protection of various surfaces. It forms a blister-free, moisture-impermeable film, with remarkable resistance to water absorption, high mechanical propeties and excellent resistance to chalking.

#### **CERTIFICATES AND TEST REPORTS**

- CE certification according to EN 1504-2
- Certificate of Compliance No. 1922 -CPR -0386.
- Complies with V.O.C. content requirements according to E.U. Directive 2004/42/EC

### FIELDS OF APPLICATION

- Concrete roofs, hydraulic tiles, cementitious screeds.
- Roofs where high resistance to standing water is required.
- Metallic surfaces, e.g. piping.
- Directly over new or old liquid waterproofing membranes.
- On mineral bituminous membranes.
- Unexposed surfaces (e.g., under tiles).
- Subway exterior walls (before backfilling).
- PU foam insulation protection.

The above surfaces require proper preparation and priming prior to the application o€APAPROOF PUA COLD H.

#### **PRESENTATION**

13,5kg and 6,5kg. metal containers in kit (A+B).

#### EXPIRY

Component A: 2 years, stored in its original sealed packaging, protected from frost, humidity and exposure to sunlight. Component B: 1 year, stored in its original sealed packaging, protected from frost, humidity and exposure to sunlight.

#### PROPERTIES AND ADVANTAGES

- High mechanical properties: ideal solution for weighbearing roofs.
- High resistance to standing water.
- Remarkable resistance to UV radiation, no chalking.
- Exceptional adhesion on various substrates.
- Remains elastic over a wide temperature range from 35 °C to +80 °C.
- No signs of blisters or craters on the surface during the curing phase.
- Resistant to early rain within 3 hours after application.
- Excellent crack bridging properties.
- Apply by roller or air less paint gun.
- · Long useful life.
- Compatible with other polyurea coatings.
- Ultra-long service life assured.

#### COLOURS

• Light beige RAL 1015 Available in other shades upon request. Consult with the Technical Department.



# **TECHNICAL FEATURES**

Mixing ratio A:B (by weight) 13:5:6.5

Density (EN ISO 2811 - 1) 1.45 kg/L (±0.1)

Elongation at break (ASTM D412) 430% (±30)

Tensile strength at break (ASTM D412) 4.4 MPa  $(\pm 0.2)$ 

Tensile strength at break (reinforced with >6MPa

CAPAPROOF MESH, ASTM D412)

Adhesion strength (EN 1542) >3N/mm

Shore hardness A (ASTM 60

Liquid water permeability (EN 1062 - 3) <0.1 kg/m2h0.5

CO2 permeability: air layer thickness >50

equivalent to diffusion Sd (EN 10626)

Water vapour permeability: thickness of the air 1.3 m (Class I - permeable) layer equivalent to diffusion Sd (EN ISO 7783)

Accelerated UV ageing in presence ofhumidity Pass ( > 1000 hours)

(UVB-313, 4h UV @60oC + 4h condensation

@50oC, ASTM G154)

Service temperature -35 °C min. / +80 °C max.

Consumption: 1-1.2 kg/m2 for two coats (cementitious surface)

### **APPLICATION CONDITIONS**

Substrate moisture content

Relative humidity (RH)

Application temperature (ambient substrate)

<4% <85% + 5 °C min. / + 35 °C max.

### **CURING DETAILS**

Shelf life (23 °C, RH 50%)

Drying time (+23 °C, RH 50%)

Dry for repainting (+23 °C, RH 50%)

Resistance to early rain

Total hardening

8 hours
24 hours
3 hours

-7 days

80 minutes

 $^{*}$  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

Concrete, cement screed

Bituminous membranes

Priming

CAPAPROOF PRIMER EP

CAPAPROOF PRIMER EP

Description - Details

Water -based epoxyprimer

(Application temperature: +12 °C min. / +35 °C max.)

Epoxy primer for applications on bituminous membranes with or without slates



# **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 dhering materials and older coatings should be removed, and the surface should be thoroughly cleaned mechanically or chemically panding 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 doubus (i.e., no holes, cracks, bays, etc.). If not, they should be treated accordingly (e.g. with a suitable putty).

#### Priming:

Prior to the application of CAPAPROOF PUA COLD H, the appropriate primer must be applied, depending on the substrate (see table). In the case of cementitious substrates, we suggest applying CAPAPROOF PRIMER EP W water -based epoxy primer. In this case, the application temperature must be higher than +12 °C.

#### Application:

After priming the surface, CAPAPROOF PUA COLD H is applied und iluted in at least two coats by roller, brush or airless spray gun. Each coat must be applied in a vertical direction, or differently from the previous one.

Before mixing the two components, component A should be thoroughly stirred mechanically for approx minute. Components A and B should then be mixed in the predetermined ratio (13.5A:6.5B w/w) and stirred for approx. 3 minutes with a low-speed electric mixer until the mixture is uniformly blended.

Along intersections between feet and floor (as well **a** in all other corners), at construction details (such as around and inside roof drains), along joints and when covering cracks, it is recommended to locally apply CAPAPROOF PUA COLD H. beforehand, reinforced with the specially designed nonwoven polyester fabric CAPAPROOF MESH weighing 100gr/m2 ("wet-on-wet" application of two layers with the fabric placed in the middle).

## INDICATIVE SYSTEM STRUCTURE

WATERPROOFING OF EXPOSED ROOFS ON CEMENTITIOUS SUBSTRATE ROOF / TERRACE / BALCONY WATERPROOFING UNDER ROOF TILES

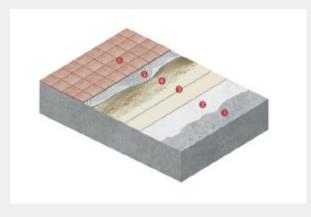
- 1. Cementitious Substrate
- 2. Priming: CAPAPROOF PRIMER EP W
- 3. Waterproofing Base Coat: CAPAPROOF PUA COLD
- 4. Corner reinforcement: CAPAPROOF MESH
- 5. Waterproofing finish: CAPAPROOF PUA COLD

Consumption of CAPAPROOF PUA COLD: 1 -1.2 kg/m2 (for two coats)

- 1. Cementitious Substrate
- 2. Priming: CAPAPROOF PRIMER EP W
- 3. Waterproofing Coats t8 CAPAPROOF PUA COLD H (min. coats)
- 4. Quartz Sand (Emission)
- 5. Elastic tile adhesive
- 6. Tiles

Consumption of CAPAPROOF PUA COLD H: 1 -1.2 kg/m2 (for two coats)





### SPECIAL NOTES

- CAPAPROOF PUA COLD H should not be applied in wet conditions, or if wet or rainy conditions are expected to prevail during the application orcuring period of the product.
- The components should not have been stored at very low or very high temperatures, especially before mixing. Mixing and stirring of the mixture should preferably be done in the shade. Stirring of the mixture should be done medmically and not manually with a stirring rod, etc.
- Excessive agitation of the material should be avoided to mitigate the risk of air entrapment. After stirring the mixture, its advisable to apply the material promptly to avoid the development of high the peratures and possible hardening inside the can.
- 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 theor (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 homontal 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.
- The consumption of each unreinforced layer of CAPAPROOF PUA COLD H should be less than 1 kg/m2, to mitigate the risk of solvent entrapment in the massof the waterproofing membrane.
- For projects with higher mechanical strength and crack bridging requirements, it is recommended that CAPAPROOF PUA COLD H be reinforced in depth with CAPAPROOF MESH polyester non -woven fabric over the entire application surface
- In the case of new cement screed, shortly after its laying it is advisable to make adequate joints (for 1520m2 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 closedell 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 transfeed 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 PUA COLD H 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 forreinforcement.
- 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.

#### NOTE

The recommendations for use are based on our knowledge and experience. The technical data have been obtained under normal laboratory conditions and may vary depending the conditions of installation. As the conditions of application are beyond our control, the information in this sheet does timply any liability on the part of the company.

