

Release 2: 04/07/2019

## hydroflex hybrid•pu

# hybrid-polyurethane elastomeric waterproofing roof-coating

- High solar reflectance
- Elasticity maintained at temperatures from -20°C to +80°C
- Excellent weathering resistance
- Also applied as cold roof coating
- Low emission of Volatile Organic Compounds (VOC)

















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## HYDROFLEX HYBRID•PU

hybrid-polyurethane elastomeric waterproofing roof-coating

### **DESCRIPTION**

High quality, hybrid elastomeric coating, composed out of special hybrid 50/50 polyurethane/acrylic polymers. Fast curing, forming a totally watertight, highly elastic and durable membrane without seams or joints. The waterproofing membrane is resistant to UV radiation, with high solar-reflectance properties and highly resistant to stagnant water.

It exhibits excellent weathering resistance (up to 10 years) when reinforced with the special polyester fleece. Classified as coating (C) for the protection of concrete structures according to European standard EN 1504-2.

### **APPLICATIONS**

Ideal for the waterproofing of terraces, balconies and roofs, over old waterproofing membranes (bitumen sheets, polyurethane, acrylic), as well as difficult areas like corners, edges and joints between adjacent different materials. Also suitable for local sealing of cracks on flat roofs and waterproofing under tiles in wet areas. It exhibits high solar reflectance which makes it capable to be applied as cool roof-coating.

### PROPERTIES / ADVANTAGES

- Highly elastic membrane without seams or joints.
  Maintains elasticity within a broad temperature range from -20°C up to +80°C.
- Highly resistant to UV radiation.
- Resistant to stagnant water and frost.
- Excellent weathering resistance (up to 10 years) when reinforced with the special polyester fleece.
- Excellent bonding to any old waterproofing membrane and substrates like concrete, wood or metal.
- High solar reflectance.
- Decreases the roof temperature and thus improves the energy performance of the building.
- Crack-bridging ability.
- Environmentally friendly. Low VOC content, according to Directive 2004/42/EC.

### HARMONIZED STANDARDS / REGULATIONS

- EN 1504-2:2004: Product for the protection of concrete surfaces Coating (C). Meets the requirements of the standard.
- Directive 2004/42/EC (Annex II, table A): Maximum

VOC content for product category c, type Y: 40g/lt (2010) for ready-to-use product. HYDROFLEX•HYBRID PU contains <40g/lt of VOCs.

### **APPLICATION INSTRUCTIONS**

- The substrate must be clean, free of dust, grease, subtle materials, etc., and concrete surfaces must be repaired from serious cracks before application.
- Afterwards, the surface is treated with the special primer HYDRO•PRIMER or ACRYLIC PRIMER.
- After the primer has dried, HYDROFLEX•HYBRID PU is applied with a brush or a roller in two layers. The second layer is applied crosswise after the first one has dried (approximately after 16-24 hours).
- In case of dense, multiple cracks appearing all over the surface, it is strongly recommended to thoroughly reinforce HYDROFLEX●HYBRID PU membrane with 100cm wide stripes of polyester fleece (50g/m²). The placed reinforcement shall overlap one another by 10cm. The reinforcement is applied into the fresh first layer of HYDROFLEX●HYBRID PU and subsequently, two more layers are applied.
- In difficult areas (corners, edges, joints between different materials, etc.) or for the treatment of cracks on concrete surfaces, it is advised to reinforce HYDROFLEX•HYBRID PU with suitable polyester fleece (50gr/m²) stripes of 10cm width. The reinforcement is applied into the fresh first layer of HYDROFLEX•HYBRID PU and subsequently, two more layers are applied.

### **CLEANING OF EQUIPMENT**

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

### **RECOMMENDATIONS**

- Temperature during application should be between 5°C and 30°C. Low temperatures retard cure while high temperatures speed-up cure.
- Avoid product application during excess humid (>70%) conditions.
- Avoid product application if rain or frost is expected in the next 48 hours.
- HYDROFLEX HYBRID PU must dry completely before the application of the waterproofing layer.

TECHNICAL CHARACTERISTICS	
PRODUCT CHARACTERISTICS	
Appearance	viscous liquid
Colour	white
Composition	polyurethane/acrylic hybrid polymers
Density	1.40 ±0.05 kg/lt
APPLICATION CHARACTERISTICS (+23°C / 50% R.H.)	
Application temperature	minimum: +5°C / maximum: +30°C
Tack free time (EN ISO 2811-1)	2-3 hours (22°C, 50% R.H.)
Recoat time (EN ISO 2811-1)	16-24 hours (22°C, 50% R.H.)
Final curing time	7 days (22°C, 50% R.H.)
Consumption	approximately 0.5-1.0 kg/m² per layer, depending on the application method and the roughness of the substrate
PERFORMANCE CHARACTERISTICS	
Adhesion to concrete (EN 1542)	≥ 1.50 N/mm <sup>2</sup>
Elongation at break (ASTM D 412)	≥ 400%
Capillary absorption and permeability to water (EN 1062-3)	$\leq 0.01 \text{ kg} \cdot \text{m}^2 \cdot \text{h}^{0.5} \text{ (W3 < 0.10)}$
Operating temperature span after curing	-20°C to +80°C
Reaction to fire (FN 13501-1)	Class F

Note: Measurements were conducted in a laboratory environment. The varying conditions present on-site (temperature, humidity, ventilation, substrate absorbency) may affect the material's properties.

### **SAFETY PRECAUTIONS**

- The product is not classified as dangerous according to the legislation on the classification and labeling of substances and mixtures (1907/2006/EU-REACH).
- It is recommended to always wear appropriate protective equipment for eyes and skin (protective clothing, gloves and goggles).
- In case of application in an enclosed space, ensure that there is adequate ventilation.
- If skin contact occurs, rinse well with plenty of clean water.
- In case of eye contact, rinse well with plenty of clean water and get medical advice immediately.
- Please read the relevant Safety Data Sheet for further and complete instructions about the safe use of the product.
- PRODUCT FOR PROFESSIONAL USE.

### **PACKAGING - STORAGE**

Available in:

5kg and 15kg plastic containers.

Storage: 24 months from production date, if stored in original, sealed container, protected from direct sunlight and frost.

### LEGAL NOTICE

The technical characteristics and recommendations for the use and application of the **FINOMIX** range of products are based on the knowledge and experience of the company. The above information shall be considered merely indicative and subject to confirmation after long-term practical application. For this reason, anyone who intends to use the product must ensure that it is suitable for the envisaged application. Since the specific site conditions during the applications are beyond the control of our company, the user alone is fully responsible for any consequences deriving from the use of the product. FINOBETON S.A. (FINOMIX) has the right to modify the properties of its products without prior notice. This release voids any previous publications issued for this technical specifications sheet.

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