

HYBRID PU SHIELD

Product Information

HYBRID PU SHIELD is an elastomeric water-based product that is produced with acrylic and polyurethane copolymers and is used for waterproofing of horizontal flat roofs.

It creates a strong waterproofing ability due its high resistance in ponding water even in places where there isn't a good slope for draining rain water of flat roofs.

It has a very high elasticity and resists in systolic and diastolic movements of hair line capillary gaps in all type of surfaces of concrete, metal or wood.

It is high weather resistance and high durable for a long time. It provides high whiteness and solar reflectivity. It offers a very good energy saving performance lowering the surface temperatures and adequately the energy consumption for cooling the interior of buildings underneath.

Product Properties

Colors: White, Red brown

Density: 1.40 g/ml (23°C)

Water Vapor Permeability: $S_d=3.93$ m
(EN ISO 7783, Permeable Class I, $S_d < 5$ m)

Water permeability: $w=0.019$ kg/m²h^{0.5}
(EN ISO 1062-3: 2008, $w \leq 0.10$, low, W3)

Permeability to CO₂ $S_d=174$ m
(EN 1062-6, $S_d > 50$ m).

Adhesion: 1.0 MPa
(EN 1542)

Artificial Weathering UV: (EN 1062-11 after 2000 hours exposure: without chalking, blistering, cracking or flacking)

Viscosity: 135 KU

Reaction to fire: Class F
(EN 13501-1)

Time to touch: 2-3 hours (23°C)

Time to recoat: 18-20 hours (23°C)

Substrate Preparation- Product Application

Substrate should be clean and free from loose particles, dust, oily or greasy materials. Other gaps

or voids in substrate should be filled and repaired before application. Application with Acrylic Primer diluted with water 1:3 follows with a total consumption of 100-200 gr/m² depending on the absorption of the substrate.

Product Application

The product is applied to consumption of about 0.600-0.750 Kg/m² per layer and every new layer follows after drying enough and walkability of the surface is achieved.

In case that on surface occurs high cracking (larger than capillary or hair line and more frequent in numbers) reinforcement is suggested with polyester fiberglass mesh tape or polyester fleece that should be covered on their edge. In this case and after primer's drying one layer of product is applied and before is fully dried polyester fleece is applied in touch or better embedded in the product. A second layer is suggested over the surface of the polyester fleece or fiberglass tape. Eventually, for better results and performance 2 more layers of product follow with a maximum consumption of 0.750 kg/m².

Rollers, brushes and airless guns could be used for application and should be cleaned thoroughly immediately after with potable water and detergent.

Packaging

HYBRID PU SHIELD is provided with packaging of 0.75 lt, 3 lt, 10 lt.

Shelf Life - Product Storage


Product has a 24 months shelf life in tight closed package that should be stored in 5-35°C and protected from direct sunlight and frost.

Volatile Organic Compounds VOC

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory i, type WB is 140 g/lt (2010) for the ready-to-use product.

The ready-to-use product HYBRID PU SHIELD contains VOC ≤ 20 g/lt.

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TOXROMA P.C 21° km. Old National Road Thessaloniki-Kavala p.c 57200 Kavalaria-Thessaloniki Greece 23
1922-CPR-5024 DoP No.: HYBRID PU SHIELD / 5020-1 EN 1504-2 Surface protection products Coating Ingress Protection Moisture control Increasing resistivity
Permeability to CO ₂ : S _d >50 m Water Vapour Permeability: Class I (permeable) Water Permeability: w<0.1 Kgr/m ² hr ^{1/2} Adhesion Strength: ≥ 1 N/mm ² Artificial Weathering: Pass Reaction to Fire: Euroclass F Dangerous Substances: Comply with 5.3

TO XROMA

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The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore, the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical datasheet automatically cancels any previous one concerning the same product .01/03-03-2023