

Brushable, elastomeric waterproofing liquid membrane for flat roofs

Description

ISOFLEX is a brushable, solvent-free, elastomeric, waterproofing liquid membrane for flat roofs, offering:

- A uniform, elastic, waterproof, vapor-permeable sealing layer, without forming seams or joints.
- Excellent bonding to various substrates like concrete, wood, metal and any type of waterproofing membranes.
- High elasticity.
- High weather resistance and durability.
- High whiteness and solar reflectance.
- Improvement of energy performance of the building by decreasing the roof temperature.
- Application even on irregular substrates.

It is certified with the CE marking as a coating for surface protection of concrete, according to EN 1504-2. Certificate Nr. 2032-CPR-10.11.

Fields of application

ISOFLEX is ideal for waterproofing terraces, balconies etc. It is also a simple and safe solution for sealing difficult areas (corners, edges, joints roof outlets) and for sealing isolated cracks.

Furthermore, it can be used as cool roof paint due to its high solar reflectance.

Technical data

Colors:	white, redbrown
Hardness according to SHORE A:	50
Density:	1.41 kg/l ± 0.02 kg/l
Elongation at break: (ASTM D 412)	626%

Capillary absorption: (EN 1062-3, requirement of EN 1504-2: w < 0.1)	0.01 kg/m ² ·h ^{0.5}
Permeability to CO ₂ : (EN 1062-6)	Sd > 50 m
Water vapor permeability: (EN ISO 7783-2, Class I < 5m)	Sd=0.80m (permeable)
Adhesion: (EN 1542, requirement for flexible systems without trafficking: 0.8 N/mm ²)	1.3 N/mm ²
Artificial weathering: (EN 1062-11, after 2000 h)	Pass (no blistering, cracking or flaking)
Reaction to fire: (EN 13501-1)	Euroclass F
Solar reflectance (ISOFLEX white): (ASTM E903-96)	90%
Infrared thermal emittance: (ISOFLEX white) (ASTM E408-71)	ε = 0.86
Minimum application temperature:	+5°C
Temperature resistance:	from -15°C to +90°C
Viscosity:	≈ 80,000 mPa·s
Drying time at +20°C: (EN ISO 2811-1)	3 h (in touch)
Recoat time at +20°C: (EN ISO 2811-1)	24 h (in touch)

Directions for use

1. Substrate preparation

The substrate must be dry, clean, free of grease, loose particles, dust etc. Any existing cavities in concrete should be filled in advance. The substrate may be primed with the special primer ISO-PRIMER at a consumption of approx. 200 g/m².

2. Application

a) Total waterproofing of the surface

ISOFLEX is applied by brush or roller in 2 layers, after the primer has dried. The second layer should be applied crosswise after the first one has dried.

In areas with severe cracks, it is recommended to reinforce ISOFLEX with a 10 cm wide fiberglass-mesh tape (65 g/m²) or polyester-fabric tape (30 g/m²) along the cracks. In detail, after the primer has dried, the first layer of ISOFLEX is applied along the cracks and, while still fresh, the 10 cm wide fiberglass-mesh or polyester-fabric tape is embedded lengthwise. Subsequently, two extra layers of ISOFLEX are applied over the entire surface.

Consumption: approximately 1.5 kg/m², depending on the substrate.

In case of dense, multiple cracks appearing all over the surface, it is strongly recommended to thoroughly reinforce the ISOFLEX membrane with 100 cm wide strips of fiberglass mesh (65 g/m²) or polyester fabric (30 g/m²). These strips shall overlap one another by 5-10 cm.

In detail, after the primer has dried, a first layer of ISOFLEX is applied to a width of 100 cm (as wide as the reinforcement is), and, while still fresh, a strip of fiberglass mesh or polyester fabric is embedded. The same application procedure is followed until the remaining surface is covered. Subsequently, two extra layers of ISOFLEX are applied on the entire surface.

Consumption: approximately 2.0-2.5 kg/m², depending on the substrate and the type of reinforcement.

b) Local waterproofing of cracks

In this case, the primer is applied on the substrate only along the cracks at a width of 10-12 cm. After the primer has dried, the first ISOFLEX layer is applied and, while still fresh, a 10 cm wide fiberglass-mesh (65 g/m²) or polyester-fabric tape (30 g/m²) is embedded lengthwise. Subsequently two extra ISOFLEX layers are applied along the cracks, completely covering the reinforcement.

Consumption: approximately 200-250 g/m of the crack length.

Tools should be cleaned with water, while ISOFLEX is still fresh.

Packaging

ISOFLEX is supplied in plastic containers of 1 kg, 5 kg, 15 kg, 25 kg and in drums of 150 kg.

Shelf-life - Storage

24 months from production date, if stored in original, unopened packaging, at temperatures between +5°C and +35°C. Protect from direct sun exposure and frost.

Volatile Organic Compounds (VOCs)

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/l (2010) for the ready-to-use product. The ready-to-use product ISOFLEX contains 1,66 g/l VOC.



2032

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2032-CPR-10.11

EN 1504-2

Surface protection products

Coating

Permeability to CO₂: Sd > 50m

Water vapor permeability: Class I
(permeable)

Capillary absorption: $w < 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$

Adhesion: $\geq 0.8 \text{ N/mm}^2$

Artificial weathering: Pass

Reaction to fire: Euroclass F

Dangerous substances comply with 5.3

ISOMAT S.A.

BUILDING CHEMICALS AND MORTARS

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