

# ISOFLEX-AEGEAN

## Polyhybrid, elastomeric, liquid waterproofing membrane for flat roofs with timeless whiteness

### Description

ISOFLEX-AEGEAN is a polyhybrid, elastomeric, water-based, liquid waterproofing membrane for flat roofs formulated with a blend of resins, featuring also timeless whiteness and durability. Has excellent adhesion to a variety of substrates, including concrete, wood, metal and any type of waterproofing membranes and is applicable even to irregular substrates. After curing, it forms a continuous, elastic, waterproof and vapor-permeable membrane, without seams or joints, offering:

- High elasticity
- High resistance to weather and aging
- Timeless whiteness and high solar reflectance
- Building energy efficiency improvement by decreasing the roof surface temperature
- Resistance to ponding water

ISOFLEX-AEGEAN (white) has been successfully tested by a third-party laboratory for its high solar reflectance, which improves building energy efficiency and, in turn, reduces cooling costs, making it an ideal solution for cool roofs.

Certified according to EN 1504-2 and classified as a coating for surface protection of concrete. CE marked. Certificate No.: 2032-CPR-10.11.

### Fields of application

ISOFLEX-AEGEAN is ideal for waterproofing flat roofs, curved roofs, etc. Constitutes a simple and safe waterproofing solution for roof details, such as corners, edges and joints between different adjacent materials, as well as for isolated cracks. Furthermore, thanks to its high solar reflectance, it can be used as a cool roof coating.

### Technical data

Color:	white
Density:	1.39 ± 0.02 kg/l
Elongation at break: (EN ISO 527)	350%
Capillary water absorption: (EN 1062-3, requirement of EN 1504-2: w < 0.1 kg/m <sup>2</sup> ·h <sup>0.5</sup> )	0.01 kg/m <sup>2</sup> ·h <sup>0.5</sup>

Water vapor permeability: (EN ISO 7783-2, vapor-permeable, Class I, S <sub>d</sub> < 5 m)	S <sub>d</sub> = 0.40 m
Adhesion strength: (EN 1542, requirement for flexible systems with no traffic: 0.8 N/mm <sup>2</sup> )	2.9 N/mm <sup>2</sup>
Artificial weathering: (EN 1062-11, after 2000 h)	Pass (no blistering, cracking or flaking)
Reaction to fire: (EN 13501-1)	Euroclass F
Minimum application temperature:	+5°C
Service temperature:	from -25°C to +80°C
Solar Reflectance (SR): (ASTM E903-96, ASTM G159-98)	85%
Infrared Emittance ε (±0,02): (ASTM C1371-04a)	0.85
Solar Reflectance Index (SRI): (ASTM E1980-01):	106
Viscosity: (EN ISO 2884-2)	≈ 30,000 mPa·s
Drying time at +20°C: (EN ISO 2811-1)	2 h (touch dry)
Recoat time at +20°C: (EN ISO 2811-1)	20 h (touch dry)

### 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 repaired in advance. The substrate is then primed with the special primer ISO-PRIMER with a consumption of approx. 200 g/m<sup>2</sup>.



# ISOFLEX-AEGEAN

---

## 2. Application – Consumption

### a) Full-surface waterproofing

As soon as the primer has dried, ISOFLEX-AEGEAN is applied by brush or roller either in two layers with a consumption of 0.5-0.75 kg/m<sup>2</sup>/layer, depending on the substrate.

The second layer should be applied crosswise, after the first one is dry and walkable.

In areas of severe cracks, it is recommended to locally reinforce ISOFLEX-AEGEAN with a 10 cm wide strip of fiberglass mesh (65 g/m<sup>2</sup>) or polyester fleece (30 g/m<sup>2</sup>) along the cracks. In that case, after the primer has dried, a layer of ISOFLEX-AEGEAN is applied along the cracks and, while still fresh, the 10 cm wide strip of fiberglass mesh or polyester fleece is embedded lengthwise. Subsequently, two extra layers of ISOFLEX-AEGEAN are applied over the entire surface.

In case there are dense, multiple cracks appearing all over the surface, it is strongly recommended to fully reinforce ISOFLEX-AEGEAN membrane with 100 cm wide strips of fiberglass mesh (65 g/m<sup>2</sup>) or polyester fleece (30 g/m<sup>2</sup>). These placed strips must overlap by 5-10 cm. In that case, after the primer has dried, a layer of ISOFLEX-AEGEAN is applied as wide as the upcoming reinforcement, and, while still fresh, a strip of fiberglass mesh or polyester fleece is embedded. The same application process is followed over the remaining surface. Subsequently, two extra layers of ISOFLEX-AEGEAN are applied over the entire surface.

Consumption: 2.0-2.5 kg/m<sup>2</sup>, depending on the substrate and the type of reinforcement.

### b) Local waterproofing of cracks

In this case, the substrate is primed only across the cracks to a width of 10-12 cm. After the primer has dried, a layer of ISOFLEX-AEGEAN is applied and, while still fresh, a 10 cm wide strip of fiberglass mesh (65 g/m<sup>2</sup>) or polyester fleece (30 g/m<sup>2</sup>) is embedded lengthwise. Subsequently, two extra ISOFLEX-AEGEAN layers are applied along the cracks, completely covering the reinforcement.

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

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

## Packaging

ISOFLEX-AEGEAN is available in 1 kg, 4 kg, 13 kg and 25 kg containers.

## 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 sunlight and frost.

## Volatile Organic Compounds (VOCs)

According to 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-AEGEAN contains 4.70 g/l VOC.

# ISOFLEX-AEGEAN

---



2032

**ISOMAT S.A.**

17<sup>th</sup> km Thessaloniki – Ag. Athanasios  
P.O. BOX 1043, 570 03 Ag Athanasios, Greece

17

2032-CPR-10.11

DoP No.: ISOFLEX-AEGEAN / 1436-02

EN 1504-2

Surface protection products

Coating

Permeability to CO<sub>2</sub>: Sd > 50m

Water vapor permeability: Class I (permeable)

Capillary absorption: w < 0.1 kg/m<sup>2</sup>·h<sup>0.5</sup>

Adhesion: ≥ 1.0 N/mm<sup>2</sup>

Artificial weathering: Passes

Reaction to fire: Euroclass F

Dangerous substances comply with 5.3

**ISOMAT S.A.**

BUILDING CHEMICALS, MORTARS & PAINTS

HEADQUARTERS – THESSALONIKI, GREECE

17<sup>th</sup> km Thessaloniki – Ag. Athanasios Road

P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

T +30 2310 576000

[www.isomat.eu](http://www.isomat.eu) e-mail: [support@isomat.eu](mailto:support@isomat.eu)