Technical Datasheet

# ISOMAT FLEXCOAT

## Premium, elastic, waterproofing paint

### Description

ISOMAT FLEXCOAT is a premium, elastic, waterproofing paint based on 100% acrylic UV-cross-linking resins. Offers absolute water impermeability, protecting walls against rain damage. Features high elasticity and crack-bridging ability, making it ideal for surfaces prone to hairline cracks up to 1 mm. Maintains its elastic properties over a temperature range of -20°C up to +80°C. Being vapor-permeable, it allows building breathability, while preventing ingress of $CO_2$ and other aggressive agents. Provides excellent opacity and surface coverage, as well as strong adhesion to the substrate and outstanding resistance to weathering and UV radiation.
ISOMAT FLEXCOAT (white) has been successfully tested by a third-party laboratory for its high solar reflectance, contributing to improved building energy efficiency and, in turn, reducing cooling costs.
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

ISOMAT FLEXCOAT is suitable for a variety of new or old exterior surfaces, including render, exposed concrete, brickwork, asbestos cement, gypsum board, etc. Applicable also over bituminous coatings, bituminous membranes and polyurethane layers for protection against sunlight.
It is also recommended for use in interior spaces where frequent cleaning and high resistance are required, such as kitchens, bathrooms, garages, hospitals, industrial units, etc.

### Technical data

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|---|---|
| Colors: | white and thousands of selected colors (ISOMAT COLOR SYSTEM) |
| Type: | 100% acrylic paint |
| Flash point: | 98°C |
| Volume solids: | 50 ± 2 % |
| Viscosity (Poise): (EN ISO 2884-2) | 14-18 |
| Density: (EN ISO 2811-1) | 1.37 ± 0.03 kg/l |
| pH: (EN ISO 4316) | 8-9.5 at +20°C |
| Waterproofing: (DIN 1048-5) | 7 atm |
| Dry film thickness: (wet film: 125 μm) (EN ISO 2808) | 60 ± 2 μm per coat |
| Capillary water absorption: (EN ISO 1062- 3: $W_3$ low, w < 0.1 kg/m$^2$ h$^{0.5}$ ) | 0.01 kg/m$^2$·h$^{0.5}$ |
| Water vapor permeability: (EN ISO 7783:2011 $V_2$ medium, 0.14< $S_d$ < 1.4 m) | $S_d$ = 0.29 ± 0.05 m |
| $CO_2$ permeability: (EN 1062-6 requirement: $S_d$ > 50 m) | $S_d$ = 177 ± 10 m |
| Adhesion strength: (EN 1542, requirement for flexible systems with no traffic: > 0.8 N/mm$^2$) | ≥ 2.9 N/mm$^2$ |
| Artificial weathering: (no blistering, cracking or flaking) (EN 1062-11 after 2000 h) | Pass |
| Reaction to fire: (EN 13501-1) | Euroclass F |
| Solar Reflectance (SR): (ASTM E903-96, ASTM G159-98) | 89% |
| Infrared Emittance ε (±0,02): (ASTM E408-71) | 0.86 |
| Solar Reflectance Index (SRI): (ASTM G159-91) | 112 |
| Service temperature: | -20°C – +80°C |
| Minimum application temperature: | +5°C |
| Drying time (23°C): (EN ISO 9117) | 1 h (touch dry) |
| Recoat time (23°C): (EN ISO 9117) | 3-4 h |

<u>Measurements acc. to EN 13300</u>

| | |
|---|---|
| Gloss level: (EN ISO 2813: ≥ 10 at 85°) | ≤ 15, Eggshell |
| Whiteness: | ≥ 85% |
| Wet Scrub Resistance: (EN ISO 11998: < 5 μm at 200 wash cycles) | CLASS 1 |

# ISOMAT FLEXCOAT

Cleaning of tools:
Remove as much paint as possible from application tools before cleaning. Clean tools thoroughly with water and detergent immediately after use.

## Directions for use

**1. Substrate**
The substrate should be clean, dry and free of grease, dust and loose materials.

- Cracks or joints should be filled with ISOMASTIC-A sealant or ISOMAT ACRYL-STUCCO acrylic filler.
- Imperfections in concrete should be repaired with the polymer-modified mortar DUROCRET and in exposed concrete with the polymer-modified powder filler PLANFIX or PLANFIX-FINE.
- Plaster repairs are carried out with UNICRET or UNICRET-FAST mortars.

Priming with acrylic FLEX-PRIMER should follow, with a consumption of 100-200 g/m$^2$, depending on substrate absorbency. FLEX-PRIMER is well-suited for stabilization of loose or crumbly plasters.

**2. Application**
ISOMAT FLEXCOAT is used as is or thinned with water up to 5%. It should be thoroughly stirred before application. It is applied with roller, brush or airless spray in two coats. The second coat follows after the first one has dried. In case of severe, isolated cracks, ISOMAT FLEXCOAT may be reinforced along the cracks with PSF 30, 10 cm wide.
In case of multiple cracks, ISOMAT FLEXCOAT may be fully reinforced with PSF 30, 100 cm wide.

## Coverage

ISOMAT FLEXCOAT covers 8-12 m$^2$/l per coat, on previously prepared surfaces.

## Packaging

ISOMAT FLEXCOAT is supplied in plastic buckets of 3 l and 10 l.

## 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 c, type WB is 40 g/l (2010) for the ready-to-use product.
The ready-to-use product ISOMAT FLEXCOAT contains 30.73 g/l VOC.

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Research and Development Department 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. | Edition: 08.04.2025

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CE

**2032**

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2032-CPR-10.11

DoP No.: FLEXCOAT / 1423-03

**EN 1504-2**

Surface protection products

Coating

Permeability to $CO_2$: Sd > 50m

Water vapor permeability: Class I (permeable)

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

Adhesion: ≥ 1.0 N/mm$^2$

Dangerous substances comply with 5.3

Reaction to Fire: Class F

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