Kalekim

3027 İzolatex UV

UV Resistant Waterproofing Mortar

Technical Data Sheet

3027 İzolatex UV

Description

Two component, highly flexible, UV resistant waterproofing mortar with effective resistance against salt and carbon dioxide used for interior and exterior concrete and masonry structural elements, composed of emulsion polymer based liquid component and cement based white powder, containing chemical additives that increase water impermeability and workability.

Fields of Application

- Waterproofing of balconies, terraces and roofs subject to light pedestrian and load traffic without additional covering.
- Waterproofing of swimming pools, bathrooms, showers, hammams before laying ceramic tiles.
- Applied on surfaces such as concrete, plaster, screed.

Properties

- Resistant to UV.
- Excellent bonding on all concrete and masonry.
- Approved to be used in contact with potable water tanks.
- Resistant to chemicals like sodium sulphate, sodium chloride and sodium hydroxide.
- Protects against de-icing salts like calcium and sodium chloride, sea water, carbon dioxide gas.
- Prevents carbonation in concrete.
- Applicable both on horizontal and vertical surfaces.
- Resistant to freeze-thaw.
- Easy to apply either by brush, roller or trowel.

Preparation of Substrates

- The substrates should be dry, clean and solid.
- The surfaces to be coated should be free of adhesion preventive foreign substances such as dust, dirt, mould oil, paint etc.
- The sub-surfaces that are not strong enough to carry themselves e.g. cracked plasters, weak surfaces, or residues of moss should be cleaned from the application surface.
- It should not be applied under direct sunlight and the applied surface should be protected from rain within 24 hours.
- Use Tamirart series repair mortars in case of any loose and uneven substrates to get a sound and flat surface.
- Corners should be rounded with Tamirart S40.
- In cases where one could not round the corners with structural repair mortar, it is recommended to select the most suitable type of Kalekim Waterproofing Tape at the joints such as horizontal - vertical joints, parapet corners, luminaires, chimney bottoms. This step should be applied after the primer.
- The surface should be primed with Kalekim Astar (Primer) depending on the absorbency of the substrate before application.

Application

- Pour 8 liters of liquid component into a suitable clean container.
- Then slowly add 25 kg powder component and mix with a low speed mixer to obtain a homogenous lump free mix. Mixing with max 500 rpm. mixer is recommended.
- Allow the mortar to stand for 5 minutes to mature. After remixing for 1-2 minutes, the paste is ready for application.
- Apply a thin layer of İzolatex UV with brush, roller or trowel, then after 5 - 6 hours apply a second coat to have a final thickness of approximately 3 mm. Layers should be applied perpendicular to each other.
- Kalekim Waterproofing Tape should be applied to the corners and joints at the application area.

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Post-Application Protection & Suggestions

- İzolatex UV should be used within 3 hours. Unfavourable climatic conditions (high temperature, low humidity, wind etc.) can reduce this time to just a few minutes. Dispose mortars of which pot life is expired.
- Product should be used within shelf life. Do not use the product of which shelf life is expired.
- Clean tools and hands with water.
- Protect the surface from direct sunlight, rain, freezing and wind for the first 24 hours after application.
- After applying İzolatex UV, wait at least 7 days for curing in favourable climatic conditions before laying ceramic tiles.
- When İzolatex UV is used for waterproofing of drinking water tanks, do not fill the tank before waiting 28 days for curing. Before using the tank, washing it down with hot water several times is recommended.
- During the coating process, the insulation material should not be mechanically damaged.
- The consumption values in the table refers to an average consumption amount. It may vary depending on the application conditions and surface properties.
- Since it contains cement, it irritates the eyes, respiratory system and skin.
- For further information refer to the safety data sheet.

Storage

- Liquid component: Store in temperatures from +5°C to +23°C in original sealed packing and keep out of direct sunlight.
- Powder component: Should be kept dry and cool at between +5°C and +35°C in damp free conditions avoiding direct sunlight. Do not stack more than 10 bags on top of each other.
- Should be protected from water, frost and adverse weather conditions.
- Shelf life is maximum 12 months under above mentioned storage conditions.

Packaging

- Powder component: 25 kg multi-ply paper bags.
- Liquid component: 8 lt drums.
- Set of 33 kg

Quality Certificates

CE

EN 14891 Class CMO1P
EN 1504-2 Class PI,MC,IR-C

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Technical Properties

(at 23°C and 50% RH)

General Data

Appearance	1st component: White powder 2nd component: White liquid
Shelf Life (Powder and liquid)	12 months when stored in the original sealed packaging.

Application Data

Application Temperature	(+5°C) – (+35°C)
Mixing Ratio	8 lt liquid / 25 kg powder
Mixing	~3 mins. with max. 500 rpm mixer
Pot Life	3 hours
Consumption	1.7 kg/m² (per 1 mm thickness)
Waiting Time Between the Coats	5 - 6 hours
Waiting Time / Overcoatibility:	Min. 3 days
Time to Waterproof	7 days

Performance Data

Density (EN 1015-6)	1700±100 kg/m^3
Impermeability to Water (for 3 mm thickness)	7 bar (positive)
Adhesion Strength (EN 1542)	≥1.00 N/mm^2
Adhesion Strength After Freeze-Thaw Cycles (EN 1542)	≥1 N/mm²
Adhesion Strength After Water Immersion (EN 1542)	≥1 N/mm²
Resistance to Accelerated Ageing (EN 1062-11)	No visual change. After 2000 hours UV radiation and humidity
Adhesion Strength After Contact With Lime Water(EN 14891)	≥0.50 N/mm²
Adhesion Strength After Contact With Chlorinated Water (EN 14891)	≥0.50 N/mm²

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Technical Properties

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Performance Data

Chemical Resistance (EN ISO 2812-1)	No visible deformation after 30 days
Crack Bridging (23°C,%50 RH) (EN 14891)	≥ 0.75 mm
Crack Bridging (-5°C,%50 RH) (EN 14891)	≥ 0.75 mm
Crack Bridging (EN 1062-7) (21 °C)	≥ 1.25 mm (A4)
Chloride Diffusion (ASTM C1202)	≤ 200 Coulomb (Class: Very low permeability)
Carbon Dioxide Permeability (EN 1062–6)	Sd >50 m (Sd: Equivalent air thickness)
Capillary Water Absorption (EN ISO 1062-3)	< 0.1 kg/m²$h^{0.5}$
Heat Resistance	(-30° C) - (+80° C)
Dangerous Substances:	See SDS
Reaction to Fire:	European classification Cs1d0

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