



3025 Ultralastic

#### Description

Rapid curing, highly flexible, resistant to sulphate and durable waterproofing and concrete protection mortar for interior and exterior applications, composed of emulsion polymer based liquid component and powder component including waterproofing, and workability improving mineral additives, and special elements.

#### Fields of Application

- Waterproofing of;
  - Underground concrete elements like foundations, retaining walls, basement walls.
  - The soil contacting areas of concrete elements.
  - Permanently wet areas like swimming pools and water basins.
  - Wet areas like bathrooms, showers.
  - Wall interfaces.
  - Balconies and terraces.
  - The areas subject to saline water.
  - Concrete basins subject to sea water and de-icing salts.
  - Concrete, plaster and screeds.
- Waterproofing under ceramic tiling.
- Waterproofing over old tiling.
- All places where quick installation is needed.

#### Properties

- Thanks to its fast setting feature, it can be started 3 hours later application of tile and light pedestrian traffic after 2nd coat applied.
- Resistant to rain within 2 hours, to pressurized water within 16 hours after application.
- Resistant to ageing and UV light.
- Excellent bonding on all concrete and masonry
- Highly flexible.
- It can be painted or covered with a covering material in a short period of time after application.
- Allows further application over the surface rapidly, paintable.
- Applicable both on horizontal and vertical surfaces.
- Prevents carbonation in concrete.
- Resistant to freeze-thaw.
- Prevents concrete against de-icing salts like calcium and sodium chloride, seawater and carbon dioxide gas.
- 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 adhesive 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. If the surface is porous, the pores should be sealed by a thin layer of 3025 Ultralastic with a trowel.
- Corners and joints should be smoothened 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.



## 3025 Ultralastic

**Application**

- Pour 12 kg of powder component in half of the liquid component (4.0 lt) slowly, mix well for the first 60 seconds (max. 500 cycle/min), until homogenized. After the first 60 seconds of mixing, pour remaining liquid component (4.0 lt) into the mixing container and mix the fresh mortar homogeneously 120 seconds more.
- Mix with a low speed of 400-600 rpm mixer to obtain a homogenous lump free mix.
- Allow to stand for 5 minutes to mature. After 15-20 seconds remixing, the paste is ready for application.
- Application should be done in one or two layers depending on the situation of the area to be waterproofed. Max. 1.5 mm thickness is allowed at once.
- Second layer should be applied after 1.5 hours and in the perpendicular direction to the first one.
- Please see the technical table for recommended consumption amounts at different fields of usage.
- Corners and joints should be smoothened with Kalekim Waterproofing Tapes.

**Post-Application Protection & Suggestions**

- During the coating process, the insulation material should not be mechanically damaged.
- Fresh mortar should not be left open where might be exposed to direct sunlight, strong air flow, high air temperature (above + 35 ° C), rain and frost.
- Fresh mortar should be used within 45 minutes. 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.
- The product should be used within the shelf life. Products with expired shelf life should not be used.
- Hands and application tools should be washed with water after application.
- When 3025 Ultralastic 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.
- 3025 Ultralastic should not be applied in rainy weather, the applied surface should be protected from rain for a minimum of 2 hours.
- For best results, the temperature during application and curing should be between 5°C and 35°C. Curing time increases at low temperatures.
- Consumption values in the technical 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**

- Packages should be kept dry and cool at between +5°C and +35°C in damp free conditions avoiding direct sunlight.
- Packages should be protected from water, frost and adverse weather conditions.
- Shelf life is maximum 12 months under above mentioned storage conditions.

**Packaging**

- Powder component: 12 kg bag
- Liquid component: 8 L plastic pail
- 20 kg set

**Quality Certificates**

Conforms;  
EN 1504-2 / PI, MC; IR-C Class  
EN 14891 / CMO1P Class  
EN 15814



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#### Technical Properties

(at 23°C and 50% RH)

#### General Data

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

#### Application Data

Application Temperature Range	(+5°C) – (+25°C)
Mixing Ratio	8 lt liquid / 12 kg powder
Mixing	~3 mins. / 400-600 rpm
Pot Life	45 minutes
Consumption	
Areas subject to water at a normal level	2.4 kg/m <sup>2</sup> (2 layers)
Waterproofing against permanent water pressure at balconies and terraces, pools and water tanks	3.2 kg/m <sup>2</sup> (2 layers)
Soil contacting concrete elements and foundations:	4.5 kg/m <sup>2</sup> (3 layers)
Waiting Time Between Coats	1.5 hours
Waiting Time Before Tiling	3.0 hours
Curing Time	Max.12 hours (regardless of weather conditions)

#### Performance Data

Density (mixture)	1.45 ± 0,1 g/cm <sup>3</sup>
Impermeability to Water (EN 14891)	≥7 bar after 6 hours ( positive 28 days)
Tensile Adhesion Strength (EN 14891)	≥0.5 N/mm <sup>2</sup>
Tensile Adhesion Stregth After Water Contact /Heat Treating / Freeze Thaw Cycle (EN 14891)	≥0.5 N/mm <sup>2</sup>
Crack Bridging (EN 14891)	≥1.50 mm (+23 °C) ≥1.00 mm (-5 °C)
Adhesion Strength (EN 1542)	3 hours: ≥ 0.5N/mm <sup>2</sup> 24 hours: ≥ 1.0 N/mm <sup>2</sup> 28 days: ≥ 1.5 N/mm <sup>2</sup>
Adhesion Strenght After Cycling Without De-icing Salts Impact (EN 13687-3/ EN 1542)	≥ 1.0 N/mm <sup>2</sup>
Crack Bridging (EN 1062-7)	≥ 3.0 mm (A5) (21 °C)
Capillary water absorption (EN 1062-3)	<0.1 kg/m <sup>2</sup> h0.5
Heat Resistance	(-40° C) - (+80° C)
Dangerous Substance	See SDS.