

# **ELASTOSIL 1K**

One component, flexible fiber-reinforced cement based brushable sealing slurry.

## Description

ELASTOSIL 1K is a high-tech flexible fiber-reinforced cementitious brushable waterproofing/sealing product, for waterproofing surfaces subjected to deformations such as concrete, brickwork, plaster and generally mineral construction materials. It consists of a mixture of high strength white cement, fine aggregates, microsilica, synthetic silicone sealants, special additives, fibers and modified acrylic synthetic polymers with high elasticity. After mixing with water, it creates a spreadable paste, which after drying creates an absolutely water-tight and flexible membrane

#### Application examples

The material is used for waterproofing: Terraces balconies, pools, bathrooms and inverted roofs covered with tiles. Ideal for basements, cellars, tanks, tunnels, foundations, buildings made of bricks or concrete blocks internally or externally, against humidity or water under pressure.

### Advantages

- Provides permanent waterproofing under both positive and negative hydrostatic pressure.
- Vapor permeability.
- Crack-bridging capability
- Excellent adhesion on wet surfaces without priming.
- Protects concrete from carbonation.
- Does not corrode concrete steel.
- Can be backfilled, cladded with tiles, marbles, stones or other, plastered or left as is as a finishing coat.
- It is easily and economically applied.
- Acts as reflective barrier of solar radiation.
- Very long life expectancy as a finishing coat on terraces (with reinforcement of glass mesh)

## **Technical Characteristics**

Form: cement-based dry mortar

Colour: white

Pot life: at least 50 minutes

Dry mortar density: 1,2 Kg/L

Wet mortar density: 1,8 Kg/L

Temperature: -30 °C to +80 °C

Maximum coat thickness (2-3 coats): ≤ 4 mm

Minimum coat thickness (2-3 coats):  $\geq 1 \text{ mm}$ 

Application temperature: +5 °C to + 35 °C

Full curing/ready to use: after 7 days

Bond strength on concrete after 28 days:  $\geq 1.5 \text{ N/mm}^2$ 

Capillary water absorption: <0,1 kg/m<sup>2</sup>h<sup>0.5</sup>

### Substrate preparation

Provide stable surfaces. Remove loose or detached fragments, dirt, oil, dust etc. Seal off and repair any major voids and gaps. Smoothen the surface by breaking pointed projections and fill all voids with repair mortar. Any repairs of surfaces shall be carried out using suitable BAUER products. In case materials are applied in interior basements, provide gutters in corners, made with suitable repair mortar (e.g. BETOFIX).

#### Substrates

- concrete
- render/plaster
- plaster boards
- cement boards
- mosaic
- cement screeds
- cement blocks
- ceramics
- Brick
- artificial or natural stone etc.

Application on wet surfaces does not require primer.

## High-absorption substrates

For surfaces exposed to extreme solar radiation and during extreme summer heat or in case substrate is excessively absorbent, we recommend applying one coat of primer (PRO 101 or BAULAT, suitably thinned with water) or slight wetting the substrate preventing still water spots, to reduce water absorption and to avoid quick mortar dehydration.

#### Mixture preparation

The material must be prepared in a suitable container; first pouring approximately ¾ of the required quantity of water and then gradually add the contents of the

bag, stirring at the same time by an electric agitator operating at low rpm. Then add the remaining water until a uniform mixture is achieved with the required workability. The quantity of mixing water written on the package is indicative. You may add more or less water for a more or less thixotropic composition, depending on the intended application use (applied by spackle knife or flat brush). Adding much more water than the prescribed quantity (> 0.5 l) may result in reducing the strength of the mortar. We recommend regular stirring without adding water.

#### Instructions for use

Apply the product using roller brush, hard brush or spackle knife/spatula/putty knife cross wise in two or more coats. The second coat can be applied on top of the first one after it has soaked sufficiently for at least 5-10 hours before complete drying. Where required, apply a third coat in the similar way. Each coat should not be thicker than 1-2mm. Ensure that the product penetrates and seals off all voids. In case of filling surfaces with demolition debris, allow complete drying of the product so that sufficient strength is developed, at least for 3 days.

Application is not recommended under extreme solar radiance (temperature greater than 35° C) or rainfall, or in periods when temperature is expected to drop below zero. During the summer season, keep surfaces slightly damp by lightly spraying water for a couple of days after application.

Clean tools with water immediately after use.

### Product specifications

It is classified as Concrete Surface protection products - Coating for ingress protection and moisture control according to EN 1504-2.

#### Consumption

1,5-3 Kg/m<sup>2</sup>.

## Storage

Preferably in sheltered areas, low in moisture, protected from ice, high temperature and exposure to sunlight for at least 12 months from the date of production.

#### **Packaging**

Heavy duty paper bags 20 kg

## Precautions & safety

The product contains cement and is classified as irritant. No special precautions are necessary for product application except for standard precautions applicable to all construction operations i.e. using gloves and goggles; preventing prolonged skin contact; etc. In case of eye contact, immediately wash with plenty of water and seek medical advice if necessary. Collect empty

bags and plastic covers and dispose in refuse bins designated for this purpose. Consult instructions for safe use indicated on product packaging. For more information please refer to the material safety data sheet of the specific product.

#### **Notes**

Technical details, properties, recommendations and information on BAUER products are supplied in good faith. They are based on the company's research and experience, provided that they are stored and applied under normal conditions. As the method of using materials as well as project and environment conditions are beyond the control of the company in each individual application setting, the product user is held solely responsible for the result of application. No responsibility under any legitimate relationship can be substantiated against the company, based on the information set out hereunder. Product users are advised to refer to the latest revision of the technical manuals, available at the product's official website.

#### Other information

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