

AQUASIL FLEX

Flexible, 2-components brushable sealing slurry

Description

Flexible, 2-component brushable sealing slurry for complete and permanent waterproofing of concrete, brickwork, plaster and generally mineral construction materials. Aquasil Flex has the ability to bridge surface cracks and is ideal for waterproofing substrates that show or are expected to show hairline cracks due to thermal contractions-expansions or vibrations. For example, surfaces to be covered with tiles on balconies, terraces, swimming pools and bathrooms, inverted insulation roofs, walls and floors of basements, tanks, tunnels, foundations, canals, etc. Aquasil Flex guarantees no water penetration under both positive or negative hydrostatic pressure, while at the same time the surface stays vapor permeable. It is suitable for direct contact with drinking/potable water. It can be backfilled, covered with tiles, marble, stone or other covering material, as well as plastered or left as is and act as finish coat.

Application examples

The material is used for waterproofing and sealing the following surface types:

- Basements
- Substrates to be covered with tiles
- Inverted insulation roofs
- Cellars
- Tanks
- Tunnels
- Foundations
- Wells
- Brick or cement block structures
- Swimming pools
- Elevator shafts, etc.

Technical Characteristics

Form: Component A: cement-based powder
Component B: emulsion

Colour: Grey

Density: between 1,4-1,6 Kg/L

Pot life: at least 70 minutes

Maximum coat thickness (2-3 coats): ≤ 5mm

Minimum coat thickness (2-3 coats): ≥ 2mm

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

Temperature resistance: -30 °C to +80 °C

Exposure to rain: after 3 hours

Earth filling: after 3 days

Foot traffic: after 24 hours

Water vapor permeability: Class II

Capillary water absorption: < 0,1 kg/m² h^{0.5}

Compressive strength at 28 days: ≥ 19 N/mm²

Flexure strength at 28 days: ≥ 9 N/mm²

Bond strength on concrete after 28 days: ≥ 1,5 N/mm²

Static crack bridging ability 23 °C: EN 1062-7: Class A2

Dynamic crack bridging ability 23 °C : B1 (1000 cycles, $f = 0,03\text{Hz}$, $W_o = 0,15\text{mm}$, $W_u = 0,10\text{mm}$, crack change 50µm)

Water penetration under positive hydrostatic pressure:
(EN 12390-8, 3 days > 5 bar): No penetration

Water penetration under negative hydrostatic pressure at 1,5 bar: No penetration

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 board
- cement board
- mosaic
- cement screeds
- cement blocks
- Masonry
- artificial or natural stone etc.

Highly absorbent 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, in order to reduce water absorption and to avoid quick mortar dehydration.

Mixture preparation

The 2 parts are supplied in cans, ready for mixing. Stir adequately all component A (mortar) into component B (emulsion) using an electric agitator operating at low rpm. You may add up to 0,2L water for a less thixotropic composition depending on application (applied by spatula or brush). Adding more water than the prescribed ratio may result in reducing the final 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. In case the surfaces intended for application of AQUASIL FLEX will be fitted with tiles, we recommend using tile adhesive for non-absorbent substrates. Finally, if surfaces are to be plastered, we recommend making the plaster elastic by using BAULAT emulsion admixture.

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

2-4 kg/m² total consumption.

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 and in the original sealed packaging.

Packages

33kg (25kg mortar, 8 kg emulsion)

Volatile Organic Compounds (VOCs)

According to the Directive 2004/42/CE, Annex II, table A, the maximum permitted VOC content for product subcategory j, type WB (water-borne) is 140 g/L in the ready-to-use product.

The VOC content of Aquasil Flex in its ready-to-use condition is significantly below this limit.

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 used 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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