AQUA-FLEX



Two-component, flexible, cement-based, brushable sealing slurry

Description

AQUA-FLEX is a two-component, flexible, brushable sealing slurry. It consists of a cement-based powder mortar (component A) and a resin emulsion (component B). After hardening, it forms a seamless, jointless membrane with the following advantages:

- Crack-bridging ability 1-2mm.
- Total waterproofing against hydrostatic pressure up to 7 atm, according to DIN 1048.
- Protection of concrete from carbonation.
- Vapor permeability.
- Suitability for potable water tanks.
- Resistance to aging.
- Bonding to wet surfaces without priming.
- Simple and low-cost application.

It is classified as a coating for surface protection of concrete, according to EN 1504-

Fields of application

It is used for waterproofing surfaces made of concrete, plaster, bricks, cement-blocks, mosaic etc. that show or are expected to show hair cracks. Ideal for application on terraces, rooftops, balconies and damp areas to be covered with tiles (bathrooms, kitchens), inverted roofs, underground reservoirs, flower stands etc. It can also be used for waterproofing basements, internally or externally, against humidity or water under pressure.

Technical data

Basis:	Component A cementitious formulated powder	Component B dispersion of mixed polymers
Colors:	grey	white

Mixing ratio: 3 parts by weight 1 part by weight <u>Combined product:</u>

- Mixing time: 3 min
- Compressive 17.50 2.50 N/mm2 strength:
- Flexural strength: 8.50 1.50 N/mm2
- Adhesion: ≥ 1.0 N/mm2
- Permeability to CO₂: 145 m
- Water vapor Sd=0.45m permeability:
- Pot life:
- Bulk density: +20C 1.90 kg/l

60 min at

Durability against

- Rain: after approx. 4 hours.
- Walking: after approx. 1 day.
- Tile fixing: after approx. 1 day.
- Water under pressure: after approx. 7 days.
- Pit filling material: after approx. 3 days.

Directions for use

1. Substrate preparation

- The substrate must be clean, free of oily residues, loose material, dust, etc.
- Water leaks should be plugged with AQUAFIX liquid by adding Portland cement.

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- Any cavities on concrete surface should be filled and smoothed out with cement mortar, after all loose aggregate has been removed and the surface has been well moistened.
- Starter bars and wooden molds should be cut to a depth of about 3 cm into the concrete and the holes should be sealed, as described above.
- Existing construction joints are opened longwise in a V shape to a depth of about 3 cm and are subsequently filled, as above.
- Corners like wall to floor junctions should be filled and smoothly rounded with cement mortar improved (fillets having a triangular cross-sectional area with sides of 5-6 cm).
- In case of masonry walls, joints should be first filled carefully; otherwise, it is recommended to apply a cement mortar layer.
- For sealing basements in old buildings, any existing wall plastering should be removed to a height of up to 50 cm above the water level and then proceed as above.

2. Application

The whole content of the 25 kg bag (component A) is added into the 10 kg of the liquid component B under continuous stirring, until a uniform viscous mixture is formed. suitable for brush application. The entire surface of the substrate should be well dampened, but without ponding. The material is applied by brush in 2 or more layers, depending on the water load. Layers thicker than 1 mm should be avoided, because the material may crack. Each new coating is applied after the previous one has dried. The

freshly coated surface should be protected from high temperatures, rain and frost.

Consumption

Depending on the water load, minimum consumption and relevant thickness should be as follows:

Water load	Minimum consumption	Minimum thickness
Moisture	2.0 kg/m ²	Approx. 1.5 mm
Water without pressure	3.0 kg/m ²	Approx. 2.0 mm
Water under pressure	3.5-4.0 kg/m ²	Approx. 2.5 mm

Packaging

- 35 kg package (25 kg formulated cementitious powder bag + 10 kg dispersion mixed polymer).
- 18 kg package (13 kg formulated cementitious powder bag + 5 kg dispersion mixed polymer).

Shelf-life/Storage

Component A:

12 months from production date, if stored in original, unopened packaging, in places protected from moisture and frost.

Component B:

12 months from production date, if stored in original, unopened packaging, at temperatures between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.



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