



Technical Data Sheet

AQUAFIN®-1K-flex

Art.-No. 2 04262

One component, flexible cementitious waterproofing slurry

Properties:

- Seamless and jointless flexible crack-bridging waterproof system
- Suitable for all load-bearing substrates usual in construction
- Hydraulic setting
- Simple efficient application
- Can be applied by brush, trowel or suitable spray equipment
- Bonds without priming to damp substrates
- Vapour permeable, resistant to frost, UV and ageing
- Structural waterproofing in accordance with DIN 18 195 part 2 table 8

Areas of application:

Bonded waterproofing system for tiles:

For secure and effective waterproofing beneath tiles, where impermeability to water is required for longer term to constant water exposure e.g. in domestic bathrooms and kitchens, private and communal washrooms as well as on swimming pool surrounds. Wall and floor junctions are reinforced with the incorporation of ASO-Joint-Tape-2000 or ASO-Joint-Tape-2000-S.

AQUAFIN-1K-flex is suitable for classifications A1/A2 in accordance with technical regulated areas and the wet duty classifications 0, A01, A02 in accordance with the ZDB data sheet. [*1].

Technical Data:

Basis:	polymer/mortar combination
Fresh mortar density:	approx. 1.3 g/cm ³
Pot life:	approx. 60 minutes
Substrate / application temperature:	+5° C to +30° C
Tensile adhesion strength to DIN EN 1542:	> 0.5 N/mm ² after 28 days
Tear strength to DIN 53504:	> 0.4 N/mm ² at +23° C

Elongation at break to DIN 53504:	> 8% at +23° C
Crack-bridging to DIN 28052-6 (PG MDS) 0.4 mm crack maintained for 24 hours:	passed
Vapour transmission rate μ :	approx. 2300
Sd value:	approx. 5.5 m
Consumption:	approx. 1.15 kg/mm dry film thickness

Exposure type/Fresh mortar requirements/
Wet film thickness/Dry film thickness/
Bonded waterproof membrane for tiles:
approx. 2.5 mm / approx. 2 mm
Allowance has not been made for greater material
consumption on uneven substrates.

Product resilience *):

- Through foot traffic after approx. 7 days
 - Can be covered with tiles after approx. 24 hours
 - With water after approx. 7 days
- | | |
|------------|--|
| Packaging: | 20 kg bags |
| Storage: | cool and dry, 6 months in the
original unopened
packaging. Use opened
packaging promptly. |
| Cleaning: | clean tools in the fresh state
with water, dried mortar can
only be removed with
AQUAFIN-Cleanser |

*) at +20° C and 60% relative humidity

Substrate preparation:

With waterproof membranes for tiles, DIN 18157
prevails with regard to the substrate, substrate
preparation and product application. The substrate must
be load-bearing, largely flat and have a closed surface.

AQUAFIN®-1K-flex

It must be free from gravel pockets, cavities, gaping cracks and ridges, dust and be free from adhesion inhibiting materials such as e.g. oil, paint, laitance and loose parts.

Suitable substrates are concrete with a dense microstructure, render PII and PIII, fully pointed masonry work, cement-based screed, moisture resistant plasterboard and gypsum fibreboards. Smooth over substrates with large pores such as concrete foundation blocks, heavy concrete blocks and brickwork. Pre-wet the substrate so that it is matt damp at the time of application. Prime very porous substrates such as e.g. aerated concrete or lime/sand blocks etc. with ASO-Unigrund to improve the bond.

Product preparation:

Place approx. 6.2 – 6.4 litres of water into a clean mixing bucket and stir together with the powder to a homogenous, lump free consistency. Using a rotating mechanical mixer (approx. 500 – 700 rpm) a mix time of 2-3 minutes is required. Apply AQUAFIN-1K-flex by spray, brush or trowel techniques in a minimum of two operations. The second coat as well as further coats should only be applied when the first coat will not become damaged by foot traffic or from further application. Avoid application thicknesses greater than 2 kg/m² in one operation, as cracks may appear in the waterproofing coat due to the high polymer content.

Internal angles and wall/floor junctions:

Suitable waterproof tapes:

Waterproof membrane with tiles

- ASO-Joint-Tape-2000 and pre-formed pieces as necessary
- ASO-Joint-Tape -2000-S and pre-formed pieces as necessary
- ASO-Joint-Tape -2000-Sanitair

Bond the SCHOMBURG waterproof tape suitable for the relevant area of application with AQUAFIN-1K-flex and subsequently tie in seamlessly with the surface waterproof membrane.

Advice:

- Protect areas not to be treated with AQUAFIN-1K-flex from its effects.
 - Avoid dropping below the dew point (condensation formation) during the drying phase of AQUAFIN-1K-flex.
 - At high temperatures a slightly sticky surface may be encountered due to the high polymer content. In this case we recommend that post treatment is carried out with water in order to guarantee complete hydration.
 - In rooms with low temperatures, higher humidity and inadequate ventilation, an extended drying time is to be expected.
 - When there is strong sunlight, work in the shaded areas against the direction of the sun. Dampen very dry and porous substrates before application or prime with ASO-Unigrund as necessary. The substrate may be matt damp. Avoid the formation of puddles.
 - During the curing process no water should come into contact with the waterproof membrane. Water pressure from the rear can lead to delamination in frost.
 - Eliminate direct contact with metals like copper, zinc and aluminium by priming until the pores are closed. Pore-tight priming can be produced by two coats of ASODUR-GBM. The first coat is applied to the substrate, which has been cleaned with universal cleaner, and carefully worked in by brush. After this coat has reacted sufficiently so that it can no longer be disturbed (approx. 3 – 6 hours), brush on a second coat and broadcast with quartz sand (0.2 – 0.7 mm grain size). Consumption: approx. 800 – 1000 g/m² ASODUR-GBM.
 - For waterproofing to PVC and stainless steel flanges: Abrade the flange, degrease with universal cleaner, apply AQUAFIN-1K-flex and without voids or folds, bed in the ASO-waterproofing gasket-floor or alternatively the ADF-pipe gasket. Tie in seamlessly with the waterproof membrane.
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- The relevant current regulations are to be observed.
Therefore e.g.:
DIN 18195
DIN 18157
DIN 18352
DIN 18560
DIN EN 13813
DIN 1055
- "Guidelines for the planning and implementation of the waterproofing of construction units in contact with the ground, with flexible waterproof slurries", second edition April 2006, Deutsche Bauchemie e.V.
The BEB information sheets distributed by the "Bundesverband Estrich und Belag e.V."
The technical information for the "coordination of cut out points for heated floor constructions".
The ZDB information sheets distributed by the German professional tile association:
[*1] Advice on the installation of bonded waterproof membranes with tile and slab wall and floor finishes for interior and exterior areas. (January 2005).
[*3] Movement joints in tile and slab wall and floor finishes.
[*5] Ceramic tiles and slabs, natural and concrete stone/slabs on cement-based floor constructions with insulation.
[*6] Ceramic tiles and slabs, natural and concrete stone/slabs on heated cement-based floor constructions.
[*7] "Floor construction with tiles and slabs in exteriors".

Please observe a valid EU health and safety data sheet.
Low chromate.

GISCODE: ZP1