



# ACQUASHIELD-1KF

One component, flexible cementitious and polymers waterproofing slurry

- 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
- Low consumption just 2,3 kg/m<sup>2</sup>
- Conforms to EN14891
- **CE**



## TECHNICAL FEATURES:

Waterproofing adherent flexible cementitious and polymers waterproofing system for tiles with crack-bridging and low consumption.

## 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, on terraces and balconies. Wall and floor junctions are reinforced with the incorporation of BSWTAPE.

ACQUASHIELD-1KF is suitable for damp areas classified as A1/A2 in conformity with criteria of technical tests, and in for damp areas classified as O/ A01/A02 in conformity with ZDB information sheets (\*1).

**CONTRACT ITEM SPECIFICATIONS:** Supplies and setting of single component, flexible waterproofing coverings, polymers and cement-based, conforms to EN ISO 14891 for an internal or external waterproofing of all supporting substrate which are normally used in buildings, such as ACQUASHIELD-1KF by Benfer.

At least two coats of ACQUASHIELD-1KF are necessary for a total thickness of 1,5 mm. Second coating must be applied only when the first one cannot be damaged by following coatings (not before 4 hours at 20°C). Do not apply thick coats over 2 kg/m<sup>2</sup> (approx. 1 mm of thickness of dry film) in one application, to avoid the possible formation of cracks and slits.



TECHNICAL ASSISTANCE



INSURANCE GUARANTEE



TECHNICAL MEETINGS



PROFESSIONAL USE

**SUBSTRATE PREPARATION:**

The substrate must be prepared as prescribed by norm DIN 18157. The substrate must be suitable to bear heavy weight, flat and not porous. It must be free of gravel, grease, dust, cracks and ripples or any inhibitor of adhesion, such as oil, paint, inconsistent parts or dispersed material. Smooth concrete, plasters of category PII and PIII, brick walls, cement screeds, plasterboards resistant to damp, fibres or gypsum panels, are all suitable supports. Smooth the substrate which have large pores, such as cement block for foundations, concrete heavy blocks and masonry. Wet the substrate so they will be humid without standing water at the moment of application. Apply the primer BENFERPRIM to very porous supports, based of gypsum or in plasterboard, the adhesion will be improved in this way.

**PRODUCT PREPARATION:**

Place approx. 4,0-4,5 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.

**PRODUCT APPLICATION:**

Apply ACQUASHIELD-1 KF 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/m<sup>2</sup> in one operation, as cracks may appear in the waterproofing coat due to the high polymer content.

**Internal corners and joints between floor and wall: suitable waterproof sealing tapes:** BSWTAPE and special pieces, shaped as required.

Paste our waterproof BSWTAPE, suitable for the application with ACQUASHIELD-1KF and incorporate it in second coating.

**IMPORTANT ADVICES:**

- Protect areas not to be treated with ACQUASHIELD-1 KF from its effects.
- Avoid dropping below the dew point (condensation formation) during the drying phase of ACQUASHIELD-1 KF.
- 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. Forced air heaters are not recommended for drying in these rooms.
- 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 BENFERPRIM 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.
- For waterproofing to PVC and stainless steel flanges: abrade the flange, degrease with universal cleaner, apply ACQUASHIELD-1 KF and bed in BSWTAPE Sleeve.
- The relevant current regulations are to be observed.

Please observe a current valid EU Health & Safety data sheet.

**CLEANING:** Tools must be cleaned with a damp cloth or sponge while the product is still wet.

**CONSUMPTION:** On a smooth substrate, and with a total application thickness of ACQUASHIELD-1KF of 2 mm, coverage is 3 kg/m<sup>2</sup>.

**PACKAGING:** ACQUASHIELD-1KF is packed in 15 kg poly-lined bags is supplied in Europallet of 630 Kg

**STORAGE:** In the original closed package in a cool dry place.

**SHELF LIFE:** 12 months from the date of manufacturing.

PRODUCT TECHNICAL DATA	
Classification according to EN 14891:	CM
Basis:	Premixed powder
Color:	Grey
Conservation:	12 months in the original closed package in a cool dry place
Danger of harm:	Possible irritation of the eyes and skin upon contact
Flammability:	No
Mixture ratio:	4-4,5 lt of water for 15 kg bag
Mixing time:	2-3 min. (drilling machine min. 300 - 500 r/min)
Consistency :	Thixotropic mortar
Apparent mass volume:	1300 kg/m <sup>3</sup> ,
Application temperature:	From + 5° C to + 35° C
Pot Life:	60 min at +23°C/20 min at +35°C
Maximum/minimum thickness:	From 1 mm to 2 mm per coat (at least 2 coats)
Waiting time before applying second coat:	Between 90 min. – and 4 hours, according to climate conditions
Light traffic on dry supports:	1 day
Exposure to rain after approx.:	8 hours
Resistance to high pressure water after approx.:	7 days
Setting of tiles after approx.:	1 day
Tensile strength:	≥ 0,5 N/mm <sup>2</sup>
Tensile strength after water immersion:	≥ 0,5 N/mm <sup>2</sup>
Tensile strength after thermal aging :	≥ 0,5 N/mm <sup>2</sup>
Tensile strength after frost-no frost cycles :	≥ 0,5 N/mm <sup>2</sup>
Tensile strength after contact with limewater:	≥ 0,5 N/mm <sup>2</sup>
Tensile strength after contact with chloridewater:	≥ 0,5 N/mm <sup>2</sup>
Water permeability:	No penetration
Crack bridging:	≥1,20 mm
Expanding to crack according to EN53504:	115%
Resistance to temperature:	From -30°C to + 90°C * at +23°C, 50% relative humidity

PLEASE NOTE: The information given in this chart is based on our best experience and indicative only. It must in any event be verified by the end user, who assumes all liabilities deriving from utilization of the product.