

ACQUASHIELD-FAST

Self cross-linking, flexible mineral-based waterproofing slurry

- Fast interior drying
- Resistant to rain, traffic and ready to be covered after 4 hours
- Easily applied with a roller, brush or spatula
- Waterproof and flexible levelling-off for cement based substrates even on uneven surfaces
- Waterproofing of baths, showers, and swimming pools before ceramic tile laying
- Total and durable protection and waterproofing of screeds on balconies and terraces
- Waterproofing on pre-existing ceramic floors
- Waterproof, flexible levelling-off on cement-based plasters, even if cracked
- Waterproof coating of walls in contact with the ground, foundations and lift-shafts
- Waterproof coating of tanks for containing water
- Waterproof, flexible levelling-off on plaster-board
- In accordance with standard EN 14891, CM O1 P • **CE**

TECHNICAL FEATURES:

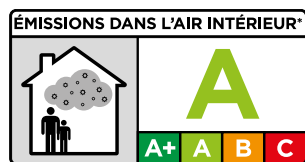
ACQUASHIELD-FAST is a highly resistant, fast cement-based two component mortar with quartz with granulometry lower than 0.3 mm and new generation additives (component A) and high-tech synthetic polymers in water dispersion (component B). It can be easily applied even vertically with a roller and brush and provides exceptional adhesion. It has been formulated and developed to protect cement-based plasters and concrete structures - including those in contact with the ground, such as exterior cement-based screed on terraces, balconies and swimming pools - against premature ageing caused by the action of water, salts and frost. The particular polymer filming present in component B, which develops in the product drying phase both on the surface and in mass in the internal microcavities, creates a barrier to the passage of water and salt that may be contained therein and against polluting gases in the air, thus creating long-lasting protection from those substances such as chlorides, sulphates, carbon dioxide and sulphur dioxide, which are the cause of the deterioration of concrete and reinforcing rods. Thanks to the fast drying process, the waterproofing sheath is resistant to rain in just 3 hours and can be walked on and is ready to be covered after 4 hours. The product is particularly suitable for the waterproofing of tanks intended for water containment and can also be used on old substrates such as pre-existing ceramic floors, provided that they are clean, resistant, well anchored and are free of any water stagnation.



25 kg + 10 kg



2 x 6,5 kg + 5,2 kg



TECHNICAL ASSISTANCE



INSURANCE GUARANTEE



TECHNICAL MEETINGS



PROFESSIONAL USE

CONTRACT ITEM SPECIFICATIONS:

Supply and setting of bicomponent, flexible and rapid drying mortar for waterproofing, it is self hardening and conforms to EN ISO 14891: CM O1 P, rapid internal drying, rain resistant after 3 hours, traffic resistant and ready to be coated after 4 hours, as ACQUASHIELD-FAST by Benfer.

At least two coats of ACQUASHIELD-FAST are necessary for a total thickness of 1,5 mm. The second coating must be applied only when the first one cannot be damaged by following coatings (not before 60 minutes at 23°C). Do not apply thick coats over 2 kg/m² (approx. 1 mm of thickness of dry film) in one application, to avoid the possible formation of cracks and slits. The designer may consider the use of a security felt ACQUASHIELD-RSHEET to incorporate in the inner part of the first coating of product, especially when the waterproofing coating is subject to oscillations.

AREAS OF APPLICATION:

- Waterproof and flexible levelling-off for cement based sub-bases even on surfaces
- Waterproof, flexible, skimming on cement-based plasters, even if cracked
- Waterproof coating of walls in contact with the ground, foundations and lift-shafts
- Waterproofing of baths, showers, balconies, terraces, and swimming pools before the ceramic tiles laying
- Waterproof coating of tanks for containing water
- Waterproof flexible coat on plaster-board

SUITABLE SUBSTRATES:

- Concrete
- Cement based, standard ord heated screeds
- Cement based plasters
- Cement based and polymers-based flexible waterproofing products
- Masonry or cement blocks
- Old tiles
- Drywall or other cement based or gypsum based panels

METHODS OF USE:

SUBSTRATES PREPARATION:

Substrates must generally be properly anchored, stable, free from shrinkage, totally clean and free from standing water. Absorbent substrates must be moistened especially in high ambient temperatures, and in any event the produced cannot be used in temperatures higher than 35°C. On absorbent surfaces, it is recommended to apply BENFERPRIM. Care must be taken during the first 48 hours after application to protect the works from flooding and frost that would damage the waterproof membrane. During summer, neither the powder component nor the liquid component should be exposed to direct sunlight few hours before mixing. In addition, the product must be suitably protected following application to prevent it drying too quickly.

If parts of the substrate are crumbling, missing or have voids, the substrate must first be restored with suitable mortars for filling or restoration. Never apply the product to wood, metal, or bitumen coatings. On gypsum first apply BENFERPRIM.

To ensure successful waterproofing of terraces and balconies, contractors must make certain that good professional practices are adopted during all preceding steps of the building process, and not only during application of the waterproofing compound.

Certain important aspects, for example, are:

- To verify that a suitable gradient has been included (at least 0.5 / 1 cm drop per linear metre);
- To line the skirtings of adjoining walls vertically to a height of at least 30 cm, ensuring a perfectly watertight join with the floor membrane, using the special rubberized strips located between first and second coats of ACQUASHIELD-FAST.
- To include expansion, control and perimeter joints and make certain they are sealed correctly, likewise using the special rubberized strips
- To make certain that drip beads and gutters gathering water below the level of the membrane are properly located and formed, so that there is no way the water can be absorbed back into the slab beneath the membrane;
- To be sure to seal the balusters of any railings. If these are inconveniently shaped and not isolated with suitable sealants, then can provide a route along which water will infiltrate under the waterproofmembrane.

PRODUCT PREPARATION: ACQUASHIELD-FAST consists of two predosed components, i.e. part A, in powder form, weighing 25 kg and part B, in liquid form, weighing 10 kg. The two components must be thoroughly mixed with a mixer at low speed, by pouring the powder slowly into the latex, until the mix is uniform. The product is now ready for use and must be used within 45 min at +23°C and 15 min at 35°C. On no account add water, cement or other components, as these would compromise the performance of ACQUASHIELD-FAST.

Do not mix an exceeding quantity of product to the quantity you can use within the pot life.

PRODUCT APPLICATION: The product must be applied with a smooth spreader in two subsequent coats with a maximum thickness of approximately 2 millimetres each. The second coat must be applied across the first, when the first has hardened sufficiently (about two hours at 23°C). In hot, ventilated environments, it is important to moisten absorbent substrates and to suitably protect the applied product against excessively quick drying. It is also important to protect the applied product against frost in the first 3 hours. When fixing ceramic floor or wall tiling on ACQUASHIELD, it is necessary to wait 4 hours and to use flexible adhesives such as BENFERFLEX C2, BENFERFIX EXTRA with CEMLATEX 600, BENFERGRIP+ with CEMLATEX 600 and BENFERFIX RAPIDO with CEMLATEX 600. The joints must be made with DEKOGROUT+, DEKOGROUT, DEKOGROUT-2K or EPOXYJOINT.

LIGHT FOOT AND FULL SERVICE: The waterproofing membranes made with ACQUASHIELD-FAST will be ready to receive the second coating after 2 hours, water resistant after 3 hours, light foot traffic and ready to be overcoated after approx. 4 hours. It is into full service after 3-7 days depending on the adhesives used for laying tiles, formats, surfaces and environmental temperature.

IMPORTANT ADVICE:

- Pay attention to every particular part of the building, such as connections between vertical and horizontal, discharges and joints, access through doors. In every case, the continuity of the waterproofing layer must be guaranteed in every condition, most of all following movements due to expansion, shrinkage or other stress. For this reason it is appropriate to use the accessories of BSW-TAPE range.
- Dampen the support before the application of ACQUASHIELD-FAST.
- To obtain an appropriate thickness of product we recommend to lay ACQUASHIELD-FAST with a trowel with 5 mm teeth and press on the product with the smooth part of the trowel to make the product compact and without empty spaces.
- The second coating must be applied only when the first one cannot be damaged by following coatings (not before 60 minutes at 23°C). Do not apply thick coats over 2 kg/m² (approx. 1 mm of thickness of dry film) in one application, to avoid the possible formation of cracks and slits.
- For laying of ceramic tiles on the waterproofing system ACQUASHIELD-FAST, we recommend the use of flexible, cementitious adhesives of BENFER range.
- Calcium sulphate based supports must be previously treated with primer BENFERPRIM or STARPRIM to avoid formation of ettringite.
- Do not add water or latex to the product that has already started to harden. This is the serious risk to develop inadequate resistance.
- ACQUASHIELD-FAST is a product with hydraulic hardening and it must be protected by water and by frost until it is completely hardened.
- ACQUASHIELD-FAST contains cement which has an alkaline reaction to contact with humidity, so it is necessary: to protect from contact with the skin and the eyes; in case of irritation, wash carefully with fresh and clean water; in case of contact with the eyes, take contact with a doctor.

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-FAST of 2 mm, coverage is 3 kg/m².

PACKAGING: ACQUASHIELD-FAST is packed in 25 or 6,5 kg polylined bags (component A), and 10 or 5,2 kg plastic drums (component B).

It is supplied of 42 bags and 40 drums or 27 boxes/pallet.

STORAGE: In the original unopened packaging in a dry and cool place.

SHELF LIFE: 12 months from the date printed on the packaging.

PRODUCT TECHNICAL DATA

Classification EN 14891:	CM P
Basis:	Premixed powder (Comp. A) liquid polymer (Comp. B)
Color:	Grey (Comp.A), white (Comp.B)
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:	2,5 : 1 part
Mixing time:	2-3 min. (drilling machine min. 300 - 500 r/min)
Consistency:	Thixotropic mortar
Apparent mass volume:	1600 kg/m ³
Application temperature:	From + 5° C to + 35° C
Pot life:	Approx. 45 min. at + 23°C, about 15 minutes at + 35°C
Maximum/minimum thickness:	From 1 mm to 2 mm per coat (at least 2 coats)
Waiting time before applying second coat:	60 min. on non-absorbent support
Light traffic on dry supports	4 hours*
Resistance to rain after approx.:	3 hours*
Resistance to high pressure water after approx.:	3 days
Setting of tiles after approx.:	4 hours

Adhesion strength:	≥ 0.5 N/mm ²
Tensile strength after water immersion:	≥ 0.5 N/mm ²
Tensile strength after thermal ageing:	≥ 0.5 N/mm ²
Tensile strength after freeze-thaw cycles:	≥ 0.5 N/mm ²
Tensile strength after contact with limewater:	≥ 0.5 N/mm ²
Tensile strength after contact with chloride water:	≥ 0.5 N/mm ²
Water permeability:	None
Crack bridging ability at low temperature (-5°C)	> 0.8 mm
Crack bridging ability under standard conditions:	≥ 1.2 mm
Stretching to breaking point according to EN 53504:	≥ 120%
Resistance to temperature:	From -30° C to + 90° C

* at 23°C and 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.