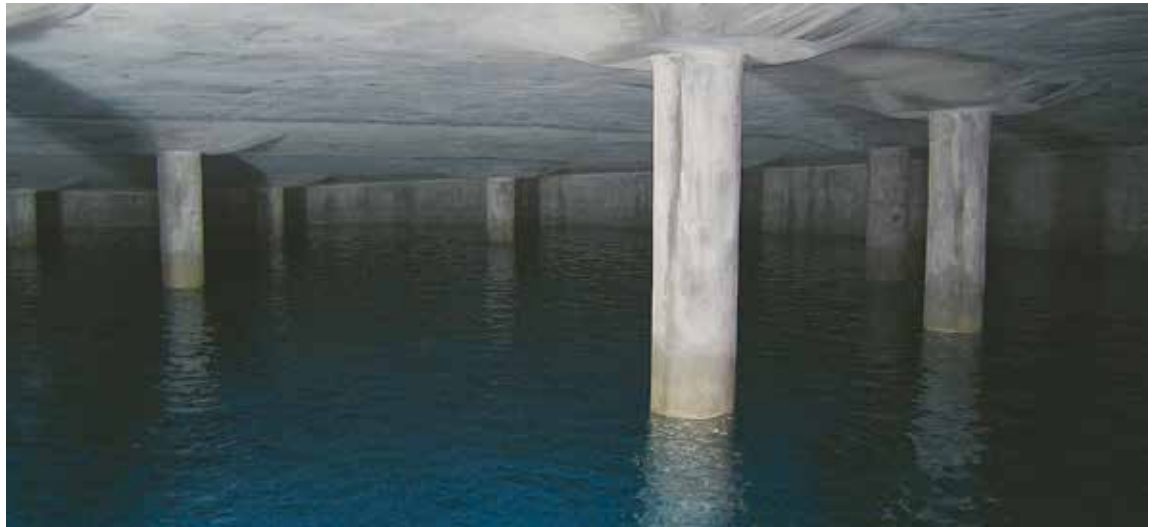
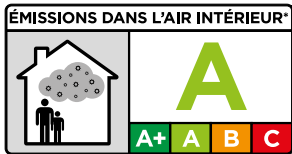




ACQUASHIELD-1K

One component mineral-based waterproof slurry

- Rigid waterproof cement-based coating
- Composed by quartz sand, Portland cement and additives. Does not contain material that may have negative effects on cement or reinforced cement
- Easy hardening process; becomes rigid; in case of possible surface cracks you may use ACQUASHIELD-2K
- Application schedule against aqueous solutions aggressive to concrete in accordance with DIN 4030



TECHNICAL FEATURES:

ACQUASHIELD-1K is an osmotic cement based waterproofing product, rigid once it is hardened. ACQUASHIELD-1K is made of sand of quartz, Portland cement and additives. It does not contain any material that may cause negative effects on the scaffold or on concrete.

ACQUASHIELD-1K hardens becoming a rigid, impenetrable coat; if there is possibility of formation of cracks on the surface use ACQUASHIELD-2K.

AREAS OF APPLICATION:

Waterproofing on concrete, walls and plaster, for internal and external use, in the following areas of application:

- Civil engineering: underground construction, sanitations, water tanks, swimming pools, pits
- Buildings: cellars
- Buildings in contact with water: tunnels, swimming pools, channels and containment walls
- Restoration of buildings: old buildings and not waterproof against damp and water penetrating from the exterior.

CONTRACT ITEM SPECIFICATION:

Supplies and setting of rigid cementitious mortar for internal and external waterproofing on all the load-bearing supports which are normally uses, as ACQUASHIELD-1K di Benfer



TECHNICAL ASSISTANCE



INSURANCE GUARANTEE



TECHNICAL MEETINGS



PROFESSIONAL USE

METHOD OF USE:

SUBSTRATE PREPARATION:

Surface must be clean, solid and accurately analysed. It must be free of oily materials, dust, holes, cracks and irregular parts. ACQUASHIELD-1K is ideal for smooth cement, screeds, asphalt mastic, plaster and masonry panels. Greenery covered, concrete surfaces for channel blocks and sanitations; Precast concrete blocks must be plastered with cement mortar BENFERCURE-VARIO or ACQUASHIELD-1K.

Use right methods to prepare supports according to their condition, for example brushing it, cleaning, roughing, grinding, or cleaning with a high-pressure water clean.

Details:

- Hollow parts and prominent corners. Between walls and bases you have to create a hollow area of 4 cm of width with premixed mortar BENFERCURE-VARIO or ACQUASHIELD-2K Comp.B
- The existing cracks can be sealed with ACQUASHIELD-2KF adding BSWTAPE in the first coat.

PRODUCT PREPARATION:

ACQUASHIELD-1K is supplied in powder. In the building site, mix in a clean bucket with clean water until you obtain a consistency that can be spread with a brush or using spray machines. You need 6,7 liters of water for every bag of powder of 25 kg.

PRODUCT APPLICATION:

Prepare the substrate appropriate to its requirements.

The application must be carried out in several coatings, with a consumption of 1-2 kg/ m² for every coat.

Apply at least two coats of ACQUASHIELD-1K by brush or trowel.

Only apply the second and successive coats once the one beneath will not be damaged by foot traffic or during application (approx. 4 hours). Protect ACQUASHIELD-1K from weathering and mechanical damage through suitable protective measures.

ADVICE:

ACQUASHIELD-1K contains cement and it has an alkaline reaction with water. Afterwards:

- Protect your skin and your eyes
- Keep out of reach of children
- In case of irritation of the skin and of the eyes, wash accurately with clean water
- Use protection gloves
- In case of contact with your eyes, contact a doctor immediately.
- To increase the pot-life/workability at high temperatures, leave the material in a fresh environment at over +5°C and exposing it to higher temperatures only a few time before mixing it. The adding use of cold water may increase the pot-life/ workability, if adding water is necessary.

CLEANING: with water whilst still fresh, difficult to remove once dried.

PACKAGING: 25 kg bags, 6 kg bags.

SHELF LIFE: 12 months when stored dry in the original unopened packaging.

STORAGE: Use opened packaging promptly.

CONSUMPTION:

	Consumption	Thickness of coating
• Soil moisture:	3,5 kg/m	Approximately 2,0 mm
• Water in the soil:	3,5 kg/m ²	Approximately 2,0 mm
• Water in the soil and in counterthrust:	3,5 kg/m ²	Approximately 2,0 mm

It is necessary to apply 1,1 mm of fresh coating to obtain 1 mm of thickness of dry film.

PRODUCT TECHNICAL DATA

Basis:	Premixed powder
Colour:	Grey
Conservation:	2 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:	6,7 lt of water per 25 kg bag
Mixing time:	2-3 min. (drilling machine min. 300 - 500 r/min)
Consistency:	Thixotropic mortar
Apparent mass volume:	1700 kg/m ³
Application temperature:	From + 5° C to + 35° C
Pot life:	About 60 minutes at 23°C, about 20 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:	Between 4 and 6 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
Adhesion strength:	≥ 0,5 N/mm ²
Tensile strength:	≥ 0,5 N/mm ²
Tensile strength after water immersion:	≥ 0,5 N/mm ²
Tensile strength after thermal aging:	≥ 0,5 N/mm ²
Tensile strength after frost-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 with positive hydrostatic pressure 5 bar:	No penetration
Water permeability with negative hydrostatic pressure 1,5 bar:	No penetration
Resistance to compression:	16,8 N/mm ² at 28 days (ASTM C 579)
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.