Waterproofing Systems / Cement + Acrylic Based

AQUACEMENT® 2K 251

Double Component Super Elastic Waterproofing Material

DESCRIPTION

Cement and **acrylic based**, **super-elastic**, double component waterproofing material which can **bridge cracks**. Components must be mixed to provide waterproofing. Resistant to **positive** and **negative** water pressure.

APPLICATION AREAS

- Indoor and outdoor
- Horizontal and vertical applications
- Waterproofing areas subject to slight vibrance and movements such as groundwork, retaining walls and basement,
- Water tanks, swimming pools (under the coating)
- Waterproofing of terrace roofs and balconies (under the coating),
- Elevator pits,
- Cisterns, irrigation channels, manholes, concrete pipes,
- Wet areas such as bathrooms and kitchens,
- Facilities such as thermal springs, Turkish baths,
- Waterproofing of concrete flower receptacle.

TECHNICAL PROPERTIES

Appearance	A: Grey colored fine powder B: White colored liquid
Density	A: ~1.40 kg/L B: ~1.04 kg/L
Mixture Ratio	10 kg liquid / 25 kg powder
Pot Life	30 minutes
Application Temperature	Between +5°C and +35°C
Flexibility	Very good
Resistance to Pressurized Water	5 bars positive (DIN 1048) 1 bar negative (EN 14891)
Tensile Adhesion Strength	≥ 1 N/mm^2 (EN 1542) (28 days)
Capillary Absorption and Water Permeability	w < 0.1 kg/(m^2.h$^{0.5}$) (EN 1062-3) 0.018 kg/(m^2.h$^{0.5}$) (TS 4045)
Resting Period	3 – 5 minutes
Time to Use	Mechanical Strength: 3 days Water Impermeability: 7 days
Time to Cover	3 days
Service Temperature	Between -20°C and +80°C

ADVANTAGES

- Can cover cracks up to 1.50 mm when applied minimum 3 mm at +23˚C, up to 1.75 mm when a mesh is used between the layers (EN 1602-7). Its crack bonding property is above 0.75 mm even at -5˚C
- Resistant to negative (1 bar) and positive (5 bars) water pressure.
- Easy to apply on horizontal and vertical surfaces with a brush, roller, trowel or spraying machine.
- Not affected by sudden temperature changes when cured. Resistant to freeze-thaw cycle.
- Provides seamless and jointless waterproofing.
- Provides high-performing waterproofing.
- Elastic, does not shrink or crack.

- Water vapor permeable, allows the concrete to breathe.
- Non-toxic, perfect for water tanks.
- Forms a perfect waterproofing layer under ceramic tiles and screed thanks to its flexibility and high adhesion strength.
- Protects concrete surfaces from carbonization and chloride.

CONSUMPTION

1.25 – 1.50 kg/m^2 on each layer, in 1 mm thickness.
It is recommended to apply minimum 2 layers (2.5 - 3 kg/m^2).
For stronger protection, it is recommended to apply 3 layers (3.75 - 4.5 kg/m^2).

PACKAGING

Component A: 25 kg kraft bags
Component B: 10 kg plastic jerrycans

APPLICATION

PREPARATION OF THE SURFACE

- The surface must be cured.
- The surface must be clear of materials that prevent bonding, such as dust, oil, tar, paint, silicone, curing materials, detergents and mold oils.
- Repair the weak parts of the concrete, remove poorly adhered plasters; make the surface sound and solid. Repair the static cracks in the building with a plaster with **AQUALATEX** or **REPAIRGROUT EXPAN High Strength Shrinkage-Free Grout Mortars**. Fill the dynamic (moving) cracks with **FIXA**'s appropriate MS, hybrid or polyurethane sealants. Block water incoming holes with **AQUASTOP**.
- Saturate the surface with water and keep it moist during the application.
- Bevel the corners.

PREPARATION OF THE MORTAR

- Put 10 kg of component B in a clean plastic bucket. Add 25 kg of component A slowly into the liquid and mix with preferably with a 400-600 rpm mixer until there are no lumps. Do not add water. Mix again for 30 seconds before application following 3 – 5 minutes resting.
- Use the mortar in 30 minutes. Do not use if this duration is exceeded.

APPLICATION

- Apply AQUACEMENT 2K 251 Double Component Super Elastic Waterproofing Material on the surface at least in 2 layers that are perpendicular to each other. Wait at least 5 – 6 hours between two layers at +20°C, this duration should not exceed 24 hours. Apply the second layer before the first layer is completely dry. In case the first layer is dry, moisten the surface again before the application of the second layer. Protect the surface against sunlight and fast drying for 3 days after the application of the second layer.
- Use **IMPERMO Waterproofing Mesh** between the layers to increase the bearing capacity of the product.
- It gains mechanical strength in 3 days, becomes water impermeable in 7 days. It reaches its final strength in 14 days.
- Protect against punctures and impacts until it is over-coated.

CAUTION

- Avoid application at temperatures below +5°C and above +35°C.
- Avoid application in areas that are frozen, at risk of freezing within 24 hours, or in areas open to direct sun and wind.
- Do not add water to the product.
- Always add the powder into the liquid component.
- Wet film thickness must be maximum 2 mm in a single layer.

SHELF LIFE

Expires in 12 months. Store unopened packages in a dry environment, stack maximum 10 packages on a pallet. Shake the liquid component before use and protect against frost.

HEALTH AND SAFETY

As with all chemical products, avoid contact with food products, skin, eyes and mouth during use and storage. During the application, use work clothes, protective gloves and glasses in accordance with the occupational and worker health rules. Consult a doctor if accidentally swallowed. In case of contact with skin, rinse with water. Keep out of the reach of children.