

Two-component cement mortar which provides waterproof, protective elastic coatings

Description

Betonfix GS5 is a two-component cement mortar which provides waterproof, protective elastic coatings. On mixing of the two components (A: powder; B: liquid), Betonfix GS5 reacts to form a protective coating which is easily applied to both horizontal and vertical surfaces, with excellent chemical resistance to sulphates, antifreeze salts, acid rain and chlorides; the coating is waterproof to positive water pressures of over 1.5 atmospheres and guarantees strong adhesion to concrete, ceramic, wood, clay brick, masonry and natural stone. Betonfix GS5 meets the requirements specified in EN 1504/2 ("protection systems for concrete surface") and EN 14891 (liquid applied waterproofing products for use beneath ceramic tiling bonded with adhesives - Requirements, test methods, assessment compliance, classification and description").



Uses

Depending on the mixing ratio between the two components (A: B) the product performs different functions.

When component A is mixed with 33% by weight of component B (3:1) it is used for:

- Bathrooms, showers, small planters;
- Small balconies and terraces with splitting/expansion joint;
- Elastic-protective smoothing for plasters and concrete structures with presence of micro-cracks caused by shrinkage or that may undergo small deformation under load;
- Protection of concrete structures subjected to chemical attack as deicing salts, carbon dioxide, sulfates, chlorides.

When component A is mixed with 50% by weight of component B (2:1), Betonfix GS5 is used for treatment of joints and implications for the construction and waterproofing that require the use of products with special qualities of elasticity such as:

- terraces already subject to dynamic cracks;
- terraces for which, because of deformation during maturation and / or exercise, it becomes necessary to create joints¹.

Application

Do all the preliminary preparatory works for a correct application of the product.

- When waterproofing the outside of the counter-earth walls, proceed with the formation of lower channel with appropriate slope for water drainage.
- When waterproofing balconies and terraces, check the slopes and, where appropriate, make corrections interventions aimed at them.

Particular attention should be paid to the preparation of media:

- The existing coatings must be controlled, mechanically cleaned and prepared to reach a background sound and adherent.

¹ All joints should be properly calculated by the architect and / or the supervisor taking into account the technical characteristics of the adjacent building materials, exposure of the building and the construction method adopted. In general, the maximum size above which it is necessary to achieve separation and expansion joints (for which it is therefore appropriate to apply the system-component cement to 50%) are: 10 square meters in the case of bonded screeds, at least every 15 sqm floating screed on CLS rough, at least every 20 square meters for floating screeds on CLS or smooth sheets desolidarizzazione.

- In case of poor adhesion to the substrate, remove them. Any holes or irregularities of the substrate must first be repaired with products Kimia. In the case of surfaces already tiled, removed the first row of wall tiles to a height of 20 cm, run the washing of the surface with acid solution P.
- In case of degraded-concrete substrates, check the depth of degradation and maintain an appropriate course of cortical recovery. Concrete castings, properly completed, must be structurally sound (the tensile pull off the concrete must be > 1.5 Mpa). Each party posting and not equipped with sufficient mechanical properties will be removed. To remove dust, existing coatings, grease, rust, release agents, paint, cement laitance and any other substance or material which may affect the adhesion of subsequent coatings, clean the substrate thoroughly by sandblasting, jetting to high pressure, brushing. Deep and extensive irregularities (gravel nests etc.) must first be remedied with Kimia mortars.
- The points of contact between substrate and catch basins, tiles removed, cleaned and reassembled the outer edges of the couplings, will be waterproofed using Kimicover JOINT/P, Betonfix GS5 (A:B=1:2) armed with Kimitech 120.
- The connections between walls and floors will be waterproofed using Kimicover JOINT, Betonfix GS5 (A:B=1:2) armed with Kimitech 120.

Pour the liquid (component B) into a clean container and slowly add the powder (component A) to one of the two possible ratios, mixing slowly and carefully with the mechanical stirrer for a few minutes to obtain a smooth mixture free of any lumps or particles of undispersed powder at the bottom or on the sides of the container. Apply a first coat of Betonfix GS5 with a smooth spreader. Lay Kimitech 350 mesh (depending on the application) over the fresh product and apply a second layer of Betonfix GS5. Once set and in any case after at least 24 hours, apply a further finishing layer of Betonfix GS5.

Do not exceed 2 mm for hand and do not make a total thickness exceeding 4 mm.

After 7 days glue ceramic tile with Aderflex KR. Respected existing expansion joints in the background, sealing them with Tecnoseal products.

Packaging

- Component A (powder): 25 kg multilayer paper bags. 1,500 kg pallets.
- Component B (liquid): 25 kg plastic canister. 600 kg pallets.

Coverage

1.4-1.5 kg/m² (component A+B) per millimetre of thickness, depending on the mixing ratio chosen.

Storage

Protect Betonfix GS5 from humidity and heat: store in a sheltered, out of direct sunlight and dry place. Stored in these conditions and in unopened containers, the product remains stable for 12 months.

Characteristics	Component A (Value)	Component B (Value)
Appereance	Powder	Liquid
Colour	grey	white
Apparent specific weight UNI 9446	1,4 ± 0,1 g/cm ³	1,03 ± 0,2 g/cm ³
Hazard classification 1999/45/CE e 67/548/CEE	Irritant	Irritant
pH	11,5 ± 0,5	6,5 ± 0,5
Solid	100 %	51-53 %
Maximum inert material size UNI EN 1015-1	0,5 mm	
Brookfield viscosity (300 r.p.m. e 25°C) UNI 8490-3		40-80 mPa·s
Application temperature	+2°C - +30 °C	+2°C ~ +30 °C

Proprietà del sistema	A:B=3:1 (Value)	A:B=2:1 (Value)
Appereance	grey	grey
Consistency	Plastic	Fluid
Density	1500 Kg/m ³	1420 Kg/m ³

Warning

Product for professional use.

Always check the integrity of the packaging prior to use and do not use the product in case of lumps. Do not mix the product with water. Do not add cement, mortar or other additives. In case of partial mixing respect the proportions by weight (not volume) indicated on this sheet and packaging. Once mixed (component A + component B) do not make any further additions. Use the entire contents once opened packaging. The equipment used for the installation of the product can be cleaned with water before hardening and once hardened Betonfix GS5 can only be removed mechanically. Avoid application of the product at temperatures below + 2 ° C.

The moisture of the media (with hygrometer measurement) should be up to 4% and there should be no presence of capillary moisture or vapor pressure in accordance with ASTM (testing of polyethylene sheet).

Do not use to waterproof bathtubs and swimming pools. In case of existing large terraces with insufficient or no joints, waterproof with Kimicover products. Do not waterproof gypsum or anhydrite-based funds without using special primer on steel or wood, bituminous membranes on inverted roof insulation to panels made with lightweight insulation or screeds. Pedestrian areas can not be left exposed.

In order to waterproof large terraces or roofs, place steam chimneys (approximately every 20-25 square meter). This operation is necessary if the installation is carried out on particularly absorbent substrates that retain moisture.

Take all necessary precautions for proper curing of the product. Where the application is made under conditions of low relative humidity, wind and direct sun, it is advisable to protect the surfaces treated with protective sheeting.

Treated surfaces must be protected from rain, fog or from contact with water for at least the first 24 hours after laying.

The technical characteristics and methods of the Application by us in this bulletin are based on our current knowledge and experience, but may not provide any guarantee by us on the final result of the applied product.

The customer is required to ensure that the sheet is valid and not superseded by any update and verify that the product is fit for purpose.