

# **Betonfix RS**

ST7-0217

Cement mortar for finishing of concrete substrates, masonry, plasters as well as for bonding and thermal insulation systems certified Kibitherm.

Maximum granulometry 0,5 mm.







#### **DESCRIPTION**

**Betonfix RS** is a ready-to-use skimming mortar, containing hydraulic binders, selected aggregates with maximum 0.5 mm granulometry and chemical additives, making it highly waterproof and adhesive to the substrate. The product can be applied in thin coat (max. total thickness up to 5 mm). It is CE marked as non structural mortar R2 in compliance with the UNI 1504-3 and the requirements of ETAG004 for skim coating and bonding products for KIBITHERM insulating systems.

## **ADVANTAGES**

- Versatile: extremely versatile for different uses.
- **Durable**: durability and resistant to atmospherical agents, proved by works of the 80s.
- Easy to apply: excellent workability and easy to apply (manually or with mechanical device).

#### **USES**

Internal and external plastering, bonding and skimming of insulation panels even in insulation system. Skimming of gravel clumps and porosity of new and old concrete structures (through sanding in order to grant surfaces to be cleaned, washed, without varnishes...)

## **WORKS**

- External insulation systems;
- Skimming of plasters and concrete structures;
- Cortical repairing and protection of degradated reinforced concrete structures with exposed metal reinforcement.

#### **APPLICATION**



Manual application



Mixing water: 5-6 lt/ 25Kg



Max thickness per coat:

- 1,5-2 mm for horizontal application
- 1,5-2 mm for vertical application
- 1,5-2 mm for overhead application

**Betonfix RS** must be applied on clean, even surfaces, free of grease or any other substance which might affect adhesion to the substrate. Betonfix RS is ready-to-use on the addition of drinking water per each pack, according to the consistency required; mix carefully with a low-rev mechanical stirring device (200-300 rev/min) until a smooth mixture is obtained.

When used to finish porous substrates (concrete, plasterwork, etc.), prepare the substrate by soaking, avoiding any pools of water: these can be removed by compressed air or liquid vacuum pump. Ensure that all parting compound residues have been completely removed before applying **Betonfix RS** to reinforced concrete (water sanding is recommended). **Betonfix RS** must be applied with a spreader with a maximum 2 mm thickness for each coat, keeping the surface rough if any further layer of **Betonfix RS** is envisaged. The fi nal coat may be smoothed with a sponge float or metal spreader for a very smooth finish.

Where the product is used to affix insulating panels for external insulation systems, apply  $3.5-4.5~{\rm kg/m^2}$  (depending on the substrate's planarity) to the outer rims of the panel and to the fixing points in the central areas, ensuring that the product does not overspill onto the joints between the insulating panels during installation. Where the product is used to finish insulation panels for external insulation systems, apply evenly to form a first layer of 1-2 mm thickness ( $2-2.5~{\rm kg/m^2}$ ).

After application and before the product sets, lay the 160 g/m² reinforcing mesh, being careful to fully embed it in the base layer by going over it again with the smooth spreader.



After the first layer has set, apply a second layer of **Betonfix RS** about 1-1.5 mm thick.

At least 1.5-2 kg/m² must be used for this second coat.

Do not apply when it is about to rain, in direct sunlight or in strong winds. **Betonfix RS** is ideal for the levelling of even old plastic coatings, as long as they are well-anchored and non-friable.

For levelling of damaged facades, contact our Technical Support Dpt for assistance.

#### **CONSUMPTION**

1,4 Kg/m<sup>2</sup>/mm.

#### **PACKAGING**

Sac. da 25 Kg. Pallet 60x25 – 1500 Kg.

# **STORAGE**

Protect from humidity. Store in a dry, sheltered place. Stored in these conditions and in unopened containers, the product remains stable for 12 months.

Characteristics	Value	
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Appearance	Powder	
Colour	Grey, white	
Apparent specific weight UNI 9446 [g/cm³]	1,22 ± 0,1	
Hazard classification 1999/45/CE e 67/548/CEE	Irritant	
Max dimension of aggregate UNI EN 1015-1 [mm]	0,5	
Apparent volumetric mass of fresh mortar UNI EN 1015-6 [Kg/m³]	1680 ± 50	
Consistency UNI 7044/72 [%]	50-70 %	
Mixing process UNI EN 1015-9 [minuti]	75 ± 5 mins	
Min. application temperature [°C]	5	
pH of mixture	12 ± 0,5	
Exudation UNI 8988	none	
Hazardous substances	In compliance with DM 10/05/2004	

Characteristics	EN 1504-3 limits for R2 mortars	Value
Compressive strength in 28 dd UNI EN 12190 [MPa]	≥ 15	> 15
Chloride content [%]	≤ 0,05	
Adhesion to concrete UNI EN 1542 [MPa]	≥ 0,8	1,3
Adhesion to concrete (UNI EN 1542) after dry cycles EN 13687-4 [MPa]	≥ 0,8	> 0,8
Adhesion to concrete (UNI EN 1542) after thunder-shower cycles EN 13687-2 [MPa]		> 0,8

Characteristics	EN 1504-3 limits for R2 mortars	Value
Adhesion to concrete (UNI EN 1542) after frost-thaw cycles EN 13687-1 [MPa]		1
Waterproofing (capillary absorption coefficient, UNI EN 13057) [Kg/m²·h¹/²]	coefficient, UNI EN 13057) ≤ 0,5	
Reaction to fire EN 13501-1	Euroclass	A1

Characteristics	Limit values as per ETAG 004	Value
Absorption of water by method 5.1.3.1 ETAG 004 [Kg/mq]	After 1 h < 1 After 1 d < 0,5	After 1 h < 1 After 1 d < 0,5
Thermo-hygrometric behaviour (hot-rain cycle, hot-cold cycle)	No defects as per 5.1.3.2.1	Resistant to hygrometric cycle
Frost-thaw behaviour	Absorption at 1 day < at 0,5 Kg/mq the system is resistant to frost-thaw	Resistant to frost-thaw
Resistance to impacts	See par. 5.1.3.3 of ETAG 004	Use category
Permeability to water vapour 5.1.3.4 ETAG 004	< 2	Range between 0,085 (skimming only) and 0,355 (with plaster finishing)
Adhesion between base layer and insulator [MPa]	In dry condition > 0,08	OK
Adhesion between adhesive and substrates (concrete or bricks)	In dry condition > 0,25; 2 days immersion + 2 hours drying > 0,08; 2 days immersion + 7 hours drying > 0,25.	OK
Adhesion between skimming coat and insulator	In dry condition > 0,08; 2 days immersion + 2 hours drying > 0,03; 2 days immersion + 7 hours drying > 0,08.	OK
Adhesion after ageing [7 days immersion + 7 days at (23 ± 2)°C, (50 ± 5)% UR]	Between skimming and insulator > 0,08 MPa	OK

## **VARIANTS**

The product is available in several non-standard versions that are characterized by: different granulometries (1 mm) (**Betonfix RS GG**).

#### **WARNING**

Product intended for professional use.

Given the possibility that different supplies of the same raw materials have slightly discordant colors, including a lot of production and the other may be minor color variations that do not affect in any way the technical performance of the products supplied.

Before using, check the product has not been damaged, and do not use it if there are any lumps.

Do not remix by adding water to the product when it has



already started to set.

Wait at least 3 weeks before applying the product to new plasterwork.

**Betonfix RS** is a cement product and so all precautions should be observed to ensure correct curing.

The product should not be applied at temperatures below +5 °C. Keep castings damp to avoid over-rapid evaporation of liquid from the mix.

Wash equipment with water before the product sets.

The Obligations of marking are not related to the intrinsic nature of a given product, but to the use to which a specific material is used: before making the order in Kimia, the buyer shall submit all the documentation available to the D.L. in order to determine the materials suitability (in terms of certifications and performance) in relation to the use for which they are intended.

The technical specifications and application methods recommended herein are based on our current knowledge and experience and do not represent any form of guarantee of the final results obtainable with the product. It is the customer's responsibility to check that this data sheet is still effective and has not been replaced with a more recent version, and that the product is suitable for the intended use.