

# Betonfix RS

Cement mortar for finishing of concrete substrates, masonry, plasters. Maximum granulometry 0,5 mm.



Scheda Tecnica rev.01\_05/2025

## 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).

## ADVANTAGES

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

## USES

Internal and external plastering, 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

- Skimming of plasters and cementitious structures (SA41);
- cortical restoration and protection of degraded reinforced concrete structures with exposed metal reinforcement (SA65)

## CERTIFICATIONS

It is CE marked as non structural mortar R2 in compliance with the UNI 1504-3.



## APPLICATION

|                                                                                   |                                                                                                                                          |                                                                                     |                                                                                   |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | Manual application                                                                                                                       |  | Mixing water:<br>5-6 lt/ 25Kg<br>Variable according to<br>the desired workability |
|  | Max thickness per coat:<br>1,5-2 mm for horizontal application<br>1,5-2 mm for vertical application<br>1,5-2 mm for overhead application |                                                                                     |                                                                                   |

Betonfix RS must be applied on clean, sound 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 potable water according to the consumption indicated in the above table; mix carefully with a low-speed stirrer (200-300 rpm) 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 detached parts have been completely removed before applying Betonfix RS on RC structures (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 final coat may be smoothed with a sponge float or metal spreader for a very smooth finish.

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-brittle.

For skim coating of damaged facades, contact our Technical Dpt for assistance.

## CONSUMPTION

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

## PACKAGING

Bag 25 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                               |
|-----------------------------------------------------------------------------|-------------------------------------|
| Characteristics                                                             | Value                               |
| Appearance                                                                  | Powder                              |
| Colour                                                                      | Grey, white                         |
| Apparent specific weight<br>UNI 9446 [g/cm <sup>3</sup> ]                   | 1,22 ± 0,1                          |
| Hazard classification<br>1999/45/CE e 67/548/CEE                            | Irritant                            |
| Max dimension of aggregate EN 1015-1 [mm]                                   | 0,5                                 |
| Apparent volumetric mass of fresh mor-tar<br>EN 1015-6 [Kg/m <sup>3</sup> ] | 1680 ± 50                           |
| Consistency<br>UNI 7044/72 [%]                                              | 50-70 %                             |
| Mixing process en 1015-9 [minuti]                                           | 75 ± 5 mins                         |
| Min. Application temperature [°C]                                           | 5                                   |
| Ph of mixture                                                               | 12 ± 0,5                            |
| Exudation<br>UNI 8988                                                       | None                                |
| Hazardous substances                                                        | In compliance with<br>DM 10/05/2004 |

| CHARACTERISTICS<br>(MIXING WATER 21%)                                                                                             | EN 1504-3<br>LIMITS FOR R2<br>MORTARS | VALUE      |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------|
| Compressive strength in 28<br>days EN 12190 [MPa]                                                                                 | ≥ 15                                  | > 15       |
| Chloride content [%]                                                                                                              | ≤ 0,05                                | 0,04       |
| Adhesion to concrete EN 1542<br>[MPa]                                                                                             | ≥ 0,8                                 | 1,3        |
| Thermal compatibility<br>measured as adhesion (EN<br>1542) after 30 dry thermal<br>cycles EN 13687-4 [MPa]                        | ≥ 0,8                                 | > 0,8      |
| Thermal compatibility<br>measured as adhesion (EN<br>1542) after 30 thunder-shower<br>cycles EN 13687-2 [MPa]                     |                                       | > 0,8      |
| Thermal compatibility<br>measured as adhesion (EN<br>1542) after 50 freeze-thaw<br>cycles with de-icing salts EN<br>13687-1 [MPa] |                                       | > 0,8      |
| Waterproofing (capillary<br>absorp-tion coefficient, EN<br>13057) [Kg/m <sup>2</sup> ·h <sup>1/2</sup> ]                          | ≤ 0,5                                 | < 0,5      |
| Reaction to fire<br>EN 13501-1                                                                                                    | Euroclass                             | B – S1, D0 |

## 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 al-ready 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 marking obligations 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 construc-tion supervision in order to determine the materials suitabil-ity (in terms of certifications and performance) in relation to the use for which they are intended.

For further information and advice on safe handling, storage and disposal of chemical products, the user must refer to the most recent Safety Data Sheet, containing physical, ecological, toxicological and other data related to safety.

All technical data shown in this Technical Data Sheet are based on laboratory tests. Actual measurement data may vary due to circumstances beyond our control.

The information and requirements indicated in this Technical Data Sheet are based on our current knowledge and experi-ence and are to be considered, in any case, purely indica-tive. They cannot guarantee the final result of the applied product and they have to be confirmed by exhaustive prac-tical applications; therefore the user must test the suitability of the product for the intended application and its purpose. Users must always refer to the latest version of the local technical data sheet related to the product.

## TECHNICAL SPECIFICATIONS

SK41 - Smoothing of plaster and cement structures;  
SK65 - Cortical restoration and protection of degraded rein-forced concrete structures with exposed metal reinforce-ment

(SK 41) If there are old but compact plasters, remove old var-nishes and inconsistent parts that could affect the good anchor-ing with suitable pressure washing and, where necessary, with mechanical abrasions.

On new, cured, compact and clean, well-moistened plaster, fin-ishing with a two-handed metal spatula, for an average total thickness of 3 mm and a consumption of about 4.5 kg/m<sup>2</sup> of Betonfix RS smoothing mortar from Kimia SpA or similar prod-uct.

(SK 65) Accurate removal of degraded and inconsistent concrete by hammering until you see a compact substrate.

Remove concrete from metal reinforcements by means of a needle gun.

Positioning of new collaborative metal reinforcement in case of noticeable oxidation of existing irons with a strong reduction of the section and grout with special epoxy resins.

Hydro-sandblasting or sandblasting of concrete and metal reinforcement. Wet the area to be treated and remove any stagnant water at the time of casting.

For the treatment of the rods, use Betonfix KIMIFER mortar by Kimia S.p.A. or similar product. For the cortical restoration, use Betonfix FB mortar by Kimia S.p.A. or similar product. For the skimming coat use Betonfix RS by Kimia S.p.A. or a similar product. Apply the product in a double layer for an average total thickness of 3 mm and a consumption of about 4.5 kg/m<sup>2</sup>.

Then Kimicover BLINDO by Kimia S.p.A. will be used for any anti-carbonation protective coating, or similar product diluted with 10-15% of drinking water applied in a double coat by brush, roller or spray respecting a total consumption not lower than 0.5 kg / m<sup>2</sup>.

The ready-to-use, flexible, one-component, high-adhesion performance skimming mortar will be prepared and applied scrupulously following the indications given on the technical sheets supplied by the manufacturer and must have the following characteristics:

- Maximum granulometry EN 1015-1: 0,5 mm
- Compressive strength EN 12190 at 28 days: > 15 Mpa;
- Concrete adhesion (EN 1542) at 28 days: > 1,3 Mpa

The mortar will be CE marked according to the EN 1504-3 as R2 mortar.