Description

Betonfix RS is a highly adhesive, finishing mortar containing hydraulic binders, selected inert materials and chemical additives, making it highly waterproof and adhesive to the substrate.

Betonfix RS meets the principles set out in EN 1504-9 ("Products and systems for the protection and repair of concrete structures: definitions, requirements, quality control and conformity assessment. General principles for the use of products and systems") and is marked as an R2 non-structural mortar along the EN 1504-3 ("Structural and non structural repair").

The product can be applied vertically or horizontally with a thickness up to 5 mm. Betonfix RS contains inert materials with maximum 0.5 mm granulometry; thus it can be applied and smoothed easily even on very thin surfaces. Betonfix RS is easy to apply because it is readyto- use on the addition of water. It corrects any mixing error especially for partial mixtures. Betonfix RS is highly impermeable to both water and carbon dioxide, and it has high resistance to sulphates and excellent frost-thaw resistance.

Uses

- Finishing and protecting coat for reinforced concrete structures which have previously; been restored with Betonfi x non-shrink mortars;
- Levelling of gravel clumps and porosity of new and old concrete structures;
- Restoration of old facades;
- Bonding and fi nishing insulation panels for the external thermal insulation system;
- Smoothing small thicknesses and waterproofing swimming-pools, tubs, canals and reservoirs made of reinforced concrete.

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 5-6 litres of drinking water per 25 kg 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 kg/m² (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 kg/m²). 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 fi rst 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 x 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 Service for assistance.

Characteristics	Value
Appereance	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
Maximum inert material size UNI EN 1015-1 [mm]	0,5
Apparent volumetric mass of wet mortar UNI EN 1015-6 [Kg/m³]	1680 ± 50
Consistency UNI 7044/72 [%]	50-70 %
Pot life UNI EN 1015-9 [mins]	15 ± 5 mins
Temperatura minima di Application [°C]	5
pH of mixture	12 ± 0,5
Exudation UNI 8988	Absent
Fire reaction class	F
Dangerous substances	Conforming to DM 10/05/2004

Characteristics	Limits for R2 mortars	Value
Compression strength 28 days UNI EN 12190 [MPa]	≥ 20	> 20
Chloride content [%]	≤ 0,05	< 0,05
Chloride content EN 1015-17 [%]	≥ 0,8	> 0,8
Concrete adhesion UNI EN 1542 [MPa]	≥ 0,8	> 0,8
Concrete adhesion (UNI EN 1542) dopo cicli a secco EN 13687-4 [MPa]	≥ 0,8	> 0,8
Concrete adhesion (UNI EN 1542) dopo cicli temporaleschi EN 13687-2 [MPa]	≥ 0,8	> 0,8
Resistance to accelerated carbonation, UNI EN 13295	< than control value UNI EN 1766	OK
Waterproofing (capillary absorption coefficient, UNI EN 13057) [Kg/m²·h^{1/2}]	≤ 0,5	< 0,5

Packaging

25 kg multilayer polythene bag. 1,500 kg pallets.

Coverage

1,47 Kg/m²/mm

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.

Warning

Product intended for professional use. 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 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.