



Betonfix R30

ST11-0221

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



DESCRIPTION

Betonfix R30 is a ready to use skim coating mortar available in grey and white, containing aggregates with maximum 0,5 mm granulometry and chemical additives, making it highly waterproof and adhesive to the substrate. Maximum total thickness to be applied is 5 mm.

It is CE marked according to the EN 1504-3 and the EN 998-1.

ADVANTAGES

- Versatile in different kind of use; available in grey or white; versatile in different kind of use.
- Durable and resistant to severe weather conditions, proved in early 80s works;
- Excellent workability and easy to apply (manually or mechanically).

USES

Skim coating of internal and external plasters; plastic coatings with adequate roughness (and properly fixed to the support). Skimming coat in case of gravel clumps and porosity of new and old concrete structures (after sand-blasting to ensure that the surfaces are clean, consistent, free of detaching paint, residues of disarming and substances that may affect adhesion to the skim coat).

WORKS

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

APPLICATION

| | | | |
|--|--|---|--|
|  | Manual application |  | Mixing water: 5-6 lt/ 25Kg Variable according to the desired workability |
|  | 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 R30 must be applied on clean, solid surfaces, free of paint or any other substance which might affect adhesion to the substrate. Ensure that all parting compound residues have been completely removed before applying (hydrosanding is recommended).

Betonfix R30 is ready-to-use on the addition of 5-6 litres of potable water per 25 kg pack, according to the consistency required. Mix carefully with a low-speed mechanical stirrer (200-300 rpm) until a smooth mixture forms. The substrate must be wet until SSD conditions are achieved. **Betonfix R30** must be applied with a spreader for a maximum thickness of 2 mm for each coating. The final coat may be smoothed with a sponge float or a metal spreader for a very smooth finish. Do not apply when it is about to rain, in direct sunlight or in strong winds. For levelling of damaged facades, contact our Technical Support Service for assistance. When smoothing thermal insulation panels, **Betonfix R30** must be reinforced with a suitable glass fibre mesh of minimum basic weight from 160 g/m² with anti-alkaline product.

CONSUMPTION

1,4 Kg/m²/mm.

PACKAGING

25 kg bag

STORAGE

Protect from humidity. Store the product in a dry, sheltered place. Stored in these conditions and in unopened contain-

ners, the product remains stable for 12 months.

| Characteristics | Value |
|--|------------------------------|
| Apperance | Powder |
| Colour | grey and white |
| Apparent specific weight UNI 9446 | 1,17 ± 0,1 g/cm ³ |
| Hazard classification 1999/45/CE e 67/548/CEE | Irritant |
| Maximum inert material size EN 1015-1 | 0,5 mm |
| Apparent volumetric mass of wet mortar EN 1015-6 | 1700 ± 50 Kg/m ³ |
| Consistency UNI 7044/72 | 55-65 % |
| Pot life EN 1015-9 | 120 ± 30 mins |
| Minimum application temperature | +5 °C |
| pH of mixture | 12 ± 0,5 |

| Characteristics of the cured product (mixing water 23%) | Value |
|---|------------------------|
| Compressive strength 28 days EN 12190 | > 20 MPa |
| Flexural strength 28 days EN 12190 | > 6 MPa |
| Adherence to substrate EN 12190 | 1,06 N/mm ² |

| Characteristics (mixing water 23%) | Limits for R1 mortars | Value |
|---|---|------------|
| Compression strength 28 days EN 12190 [MPa] | ≥ 10 | > 10 |
| Chloride content [%] | Not relevant for non reinforced concrete | NPD |
| Concrete adhesion EN 1542 [MPa] | ≥ 0,8 | 1,3 |
| Concrete adhesion (EN 1542) after dry cyclin EN 13687-4 [MPa] | When relevant for durability based on environmental exposure conditions, maximum average width ≤ 0.05 mm with no gap ≥ 0.1 mm | NPD |
| Concrete adhesion (EN 1542) after thunder-shower cycling EN 13687-2 [MPa] | | |
| Concrete adhesion (EN 1542) after freew-tow cycling EN 13687-1 [MPa] | | |
| Waterproofing (capillary absorption coefficient, EN 13057) [Kg/m ² ·h ^{1/2}] | ≤ 0,5 | < 0,5 |
| Dangerous substances | Value declared | Check MSDS |
| Reaction to fire EN 13501-1 | Class declared by the manufacturer | F |

| Characteristics (mixing water 23%) | EN 998-1 limits | Value |
|---|---|--------------------------|
| Dry bulk EN 1015-10 | Declared value | 1515 Kg/m ³ |
| Compressive strength EN 1015-11 [MPa] | CS I (from 0,4 to 2,5) CS II (from 1,5 to 5,0) CS III (from 3,5 to 7,5) CS IV (≥6) | CS IV (≥6) |
| Adhesion to concrete substrate EN 1015-12 [MPa] | Declared value and break point (FP) | > 0,8 (A/B) - FP: A/B |
| Capillary water absorption EN 1015-18 | Declared value | W1 |
| Permeability to water vapour coefficient (μ) EN 1015-19 | Declared Value | < 35 |

| Characteristics (mixing water 23%) | EN 998-1 limits | Value |
|--------------------------------------|---------------------|-----------|
| Thermal conductivity EN 1745 [W/m K] | Table value (P=50%) | 0,53 |
| Reaction to fire EN 13501-1 | Declared value | F |
| Durability | Declared value | NPD |
| Hazardous substances | Declared value | Check SDS |

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. Betonfix R30 is a cement-based product and so all precautions should be observed to ensure correct curing. The product should not be applied at temperatures below +5 °C.

Wash equipment with water before the product sets. Wait at least 3 weeks before applying Betonfix R30 to new plasterwork.

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 experience and are to be considered, in any case, purely indicative. They cannot guarantee the final result of the applied product and they have to be confirmed by exhaustive practical 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 reinforced concrete structures with exposed metal reinforcement

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

On new, cured, compact and clean, well-moistened plaster, finishing with a two-handed metal spatula, for an average total thickness of 3 mm and a consumption of about 4.5 kg/m² of Betonfix R30 by Kimia SpA or similar product.

(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 exceeding water before applying the mortars.

For the treatment of rebars, 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 Betonfix R30 by Kimia S.p.A. or an equivalent product will be used. Apply in two coat the product on wet support (SSD conditions) for a total thickness of 3 mm and respecting approximately a consumption of 4,5 kg/m².

Kimicover BLINDO by Kimia S.p.A., or similar product, will be used for any anti-carbonation protective coating. 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 / m².

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: ≥ 20 Mpa;
- Concrete adhesion (EN 1542) at 28 days: $> 0,8$ Mpa

The mortar is CE marked according to the EN 1504-3 and the EN 998-1.