

Betonfix R52

Cement-based mortar for skimming coats on concrete and masonry supports, plasters. Maximum granulometry 0,7 mm.



Scheda Tecnica rev.01_05/2025

DESCRIPTION

Betonfix R52 is a ready-to-use single-component mortar consisting of hydraulic binders, selected inert materials with a maximum granulometry of 0.7 mm and additives to provide the ideal water repellence and adhesion to the substrate. Betonfix R52 has excellent freeze-thaw resistance.

ADVANTAGES

Versatile: its maximum grain (0,7 mm) is specifically designed for irregular substrates.

USES

Skimming coats of interiors and exteriors; for levelling of gravel clumps and porosity of new, restored or older concrete structures (after blasting to ensure that surfaces are clean, consistent, free of paint, form-release agent residues and substances which may affect the adhesion of leveling).

WORKS

- Skimming of plasters and cementitious structures (SA41);
- Cortical restoration and protection of degraded rein-forced concrete structures with exposed metal rein-forcement (SA65)

CERTIFICATIONS

The product is CE marked according to the EN 998-1 as GP mortar and according to EN 1504-3 as R1 mortar.



APPLICATION

	Manual application		Mixing water: 5-6 lt/ 25Kg Variable according to the desired workability
	Max thickness per coat: 2,1-3 mm for horizontal application 2,1-3 mm for vertical application 2,1-3 mm for overhead application		

Betonfix R52 must be applied on clean, solid surfaces, free of paint or any other substance which might affect adhesion to the substrate. Ensure that any form-release agent trace has been completely removed before applying the product (hydrosanding is recommended).

Betonfix R52 is ready-to-use on the addition of potable wa-ter per each pack, according to the consumption indicated in the present TDS.

Mix carefully with a low-spped mechanical stirrer (200-300 rev/min) until a smooth mixture forms. The substrate must be wet presenting SSD conditions, and when laying there should be no exceeding water.

Betonfix R52 must be applied with a trowel.

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.

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

It is important not to remix the product when it has already started to set: it will lose all its chemical-physical properties. Do not use Betonfix R52 for continuous coatings such as plasterwork.

CONSUMPTION

1,4 Kg/m²/mm.

PACKAGING

25 kg multilayer polythene bag

STORAGE

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

CHARACTERISTICS	TYPICAL VALUE
Appearance	Powder
Color	White
Apparent specific weight UNI 9446	$1,7 \pm 0,05 \text{ g/cm}^3$
Hazard classification 1999/45/CE and 67/548/CEE	Irritant
Max dimension of the aggregate EN 1015-1	0,7 mm
Bulk of fresh mortar EN 1015-6	$1700 \pm 50 \text{ Kg/m}^3$
Consistency of the mixture UNI 7044/72	55 - 65 %
Min temperature of application	+5 °C
Ph of the mixture	$12 \pm 0,5$

HARDENED MORTAR PROPERTIES (MIXING WATER 23%)	AVERAGE VALUE
Compressive strength in 28 days EN 12190	> 20 mpa
Flexural strength in 28 days EN 12190	> 6 mpa

CHARACTERISTICS (MIXING WATER 23%)	LIMITS EN 1504-3 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]	$\geq 0,8$	$\geq 0,8$
Concrete adhesion (EN 1542) after dry cyclin EN 13687-4 [MPa]	When relevant for durability based on environmental exposure conditions, maximum average width $\leq 0.05 \text{ mm}$ with no gap $\geq 0.1 \text{ mm}$	NPD
Concrete adhesion (EN 1542) after thunder-shower cycling EN 13687-2 [MPa]		
Concrete adhesion (EN 1542) after free-w-tow cycling EN 13687-1 [MPa]		
Waterproofing (capillary absorption coefficient, EN 13057) [$\text{Kg/m}^2 \cdot \text{h}^{1/2}$]	No to be specified	< 0,5
Dangerous substances	Value declared	Check MSDS
Reaction to fire	Class declared by the manufacturer	F

CHARACTERISTICS (MIXING WATER 23%)	LIMITS EN 998-1	TYPICAL VALUE
Dry bulk density EN 1015-10	Declared value	1535 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
Reaction to fire EN 13501-1	Class declared by the manufacturer	F
Adhesion to the concrete substrate EN 1015-12 [MPa]	Declared value and failure mode (FP)	> 0,8 N/mm ² (A/B)
Capillar water absorption EN 1015-18	From WO to W2	W1
Water vapour permeability coefficient (μ) EN 1015-19	$\leq$ Declared value	< 35
Thermal conductivity EN 1745 [W/m K]	Table value	0,54
Durability	Declared value	NPD
Dangerous substances	Value declared	Check MSDS

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 variation that do not affect in any way the technical performance of the products supplied. In the case of application on recently made plasters, wait at least 3 weeks before applying the Betonfix R52. Do not remix the product by adding water once it has started to set. Used as a leveling compound, Betonfix R52 must be applied with maximum thicknesses of 2-3 mm per pass. Betonfix R52 is made with hydraulic binders and as such all precautions for a correct curing must be carried out. Avoid applying the product at temperatures below +5 °C. The equipment used must be washed with water before the product hardens.

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 rein-forced 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 R52 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 R52 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: 0,7 mm
- Compressive strength EN 12190 at 28 days: ≥ 20 Mpa;
- Concrete adhesion (EN 1542) at 28 days: $> 0,8$

Mpa

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