

Betonfix 200 TH

ST5-0421



Anti-shrinkage slurry with pseudoplastic behavior for high strength anchoring and injections



DESCRIPTION

Betonfix 200 TH is a high resistance anti-shrinkage hydraulic slurry with high mechanical resistance for both short and long curing. **Betonfix 200 TH** does not contain chlorides, ferrous particles or corrosive agents which could cause damage to the reinforcements and the metal equipment. CE marked as anchoring of reinforcement steel in compliance with the EN 1504-6.

ADVANTAGES

- Performances: anti-shrinkage slurry, high resistance even at short curing.
- Excellent adhesion: ideal for connectors anchoring and reinforcement bars even on non-solid supports.

USES




Betonfix 200 TH is used to anchor **Kimisteel** and **Kimitech** connectors, to block tie rods and metal reinforcement, both on masonry or rock support, to grout steel bars or metal connectors horizontally or overhead, to anchor tie rods and bolts in tunnels.

The product can easily be injected by means of **MM/TL guns** or adequate alternative machines.

WORKS

- Anchoring of reinforcement rods with cement-based mortar (**SA1**)

APPLICATION

	Manual application		Mixing water: 6,8 lt/ 20Kg
	Mechanical devices application		

Betonfix 200 TH is ready-to-use on the addition of potable water as shown in the table.

Drill the substrate, remove dust by means of compressed air, wet properly, inject mortar to fill the hole starting from the bottom.

Do not apply the product in case environmental temperatures are lower than 2°C.

CONSUMPTION

1,4 Kg/dmc.

PACKAGING

20 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.

Features	Typical value
Appearance	Powder
Colour	Grey
Apparent specific weight UNI 9446	1,40 ± 0,5 g/cm ³
Regulation 1272/2008 (PLC), subsequently amendments and adjustments.	Irritant
Maximum inert material size EN 1015-1	200 μ
Apparent volumetric mass of wet mortar EN 1015-6	1910 ± 50 Kg/m ³
Apparent volumetric mass of seasoned mortar EN 1015-6	1940 ± 50 Kg/m ³
Consistency UNI 7044/72	> 180 %

Minimum application temperature	+5 °C
pH of mixture	12 ± 0.5
Exudation UNI 8988	Absent
Setting time (beginning)	180 mins
Setting time (end)	300 mins

Characteristics	Limits EN 1504-6 "Anchoring of the reinforcement steel"	Typical value
Resistance to the pull-out of the steel bars. Moving with a loaded of 75 KN [mm] EN 1881	≤ 0,6	Ok
Compression strength [MPa] EN 12190	> 80% of the value after 7 days	In 1 day > 25 In 7 days > 55 In 28 days > 65
Flexural strength [MPa] EN 12190	Not demanded	In 1 day > 1,5 In 7 days > 5,5 In 28 days > 6
Modulus of elasticity at compression [Gpa] UNI 6556	Not demanded	23
Adhesion to reinforced concrete [Mpa] EN 1542	Not demanded	> 2
Chloride ions content	≤ 0,05%	Ok
Reaction to fire	Euroclass	A1

WARNING

Product 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.

Do not mix with other binders (concrete, lime, gypsum).

Before using, check bags have not been damaged, and do not use the product if there are any lumps. Use the entire contents once the bag has been opened. Do not remix by adding water to the product when it has already started to set. Take all necessary precautions to ensure correct curing of the casting. Wet with water for the first 48 hours, or cover with plastic sheets or damp jute bags.

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

SK1 – Anchoring of reinforcement rods with cement mortar

Anchoring of reinforcement rods with cement mortar after drilling with suitable equipment, cleaning with compressed air jets, insertion into the holes made of metal reinforcements and anchoring by injection of Betonfix 200 TH mortar by Kimia S.p.A. or similar product (respect a consumption of 1.4 kg per liter of structure to be filled).

The hydraulic binder will be prepared and applied scrupulously following the indications given on the technical sheets provided by the Manufacturer and must have the following characteristics:

- Compressive strength in 1 day > 25 Mpa; in 7 days > 55 Mpa; in 28 days > 65 Mpa.
- Flexural strength in 1 day > 1,5 Mpa; in 7 days > 5,5 Mpa; in 28 days > 6 Mpa.
- Secant elastic compressive modulus UNI 6556: 23000 ± 1000 Mpa;
- Concrete adhesion EN 1542 > 2 Mpa.

The product will be CE marked according to the EN 1504-6.