

Shrink proof selfleveling mortar to anchor machinery, for anchoring bolts on metal structures and to ensure rigid connections of structural joints. CE marked in compliance with the EN 1504-6.

Description

Betonfix AL is a ready-to-use, self-levelling, non-shrink mortar with high mechanical resistance for both short and long curing. The product has excellent adhesion properties to the substrate, high resistance to sulphates and is free from chlorides or metal particles. Betonfix AL is in 1504-6 CE marked in compliance with the UNI 8147 standard.



Uses

Betonfix AL is used to fix chain tighteners on metal structures, to install prefabricated reinforced concrete elements, to anchor machineries and to underpin. In layers that are more than 10 cm thick, mix Betonfix AL with approx. 30% of the washed inert siliceous material with minimum granulometry of 6 mm.

Application

Betonfix AL is ready-to-use on the addition of drinking water for each pack, according to the consistency required.

The substrate to be treated must be perfectly clean, free from grease, oil and separating agents in general; roughen the concrete surface with a bush-hammer.

Soak the substrate eliminating any pools of water when casting. Mix Betonfix AL for about 5 minutes with a cement-mixer or, for small quantities, with a mechanical stirring device and an agitator. Always add 3/4 of the water required first, then pour the product and the remaining water continuously until you obtain the consistency required. Too much water will separate the components and cause the product to lose its mechanical and chemical characteristics. Once a smooth and free of any lumps mix forms, pour the mortar on one side to let air out from the opposite one. For large slabs use a slipping method by employing metal reinforcements, suspended pumps and funnels, making holes in the slab for the outlet of air. In layers that are more than 10 cm thick, mix Betonfix AL with approx. 30% of the washed inert siliceous material with minimum granulometry greater than 6 mm.

Characteristics	Value
Appearance	Powder
Colour	grey
Apparent specific weight UNI 9446	1,40±0,1 g/cm ³
Mixing water	15-17% on weight
Hazard classification 1999/45/CE e 67/548/CEE	Irritant
Maximum inert material size UNI EN 1015-1	2 mm
Apparent volumetric mass of wet mortar UNI EN 1015-6	2250 ± 50 Kg/m ³
Consistency UNI 7044/72	> 200 %
Pot life UNI EN 1015-9	200 ± 30 mins
Setting time (start) UNI EN 196-3	340 ± 30 mins
Setting time (end) UNI EN 196-3	480 ± 30 mins
Minimum application temperature	+5 °C
pH of mixture	12 ± 0,5
Contrasted expansion UNI 8147	0,06 %

Characteristics	Value
Exudation UNI 8988	Absent

Characteristics	Limits EN 1504-6 "Anchoring of the steel reinforcement"	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	> from the 0% of the value after 7 days	At 1 day > 38 At 7 days > 61 At 28 days > 71
Flexural strength [MPa] UNI EN 12190	Not demanded	At 1 day > 5 At 7 days > 5,6 At 28 days > 7
Modulus of elasticity at compression [Gpa] UNI 6556	Not demanded	28
Adhesion on reinforced concrete [MPa] EN 1542	Not demanded	> 2
Reaction to fire EN 13501-1	Euroclass	A1
Chloride ions content	≤ 0,05%	OK

Consumption

19 Kg/m² for each centimetre of thickness.

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.

Warning

Product for professional use. Do not remix by adding water to the product when it has already started to set.

Do not add concrete, additives or other Betonfix mortars. 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.

Take all necessary precautions to ensure correct curing of the casting. Do not use at temperatures of under +5 °C. Wet with water for the first 48 hours, or cover with plastic sheets or damp jute bags. Do not use anti-evaporation agents in case other coatings are to be performed.

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 (use the Qrcode to download the latest version of this document).

Eco-sustainability

This product supports the designers in the realization of the certified works LEED®, 'The Leadership in Energy and Environmental Design', in compliance with the U.S. Green Building Council.



For further informations about the credits kindly contact the Technical Department, email: ufficiotecnico@kimia.it.

LEED® is a green building certification program that recognizes best-in-class building strategies and practices.

