ST6-1109

# CE-marked R3 (EN 1504-3) thixotropic fast-setting structural repair mortar

#### Description

Betonfix TX is a fast-setting, thixotropic, ready-touse shrinkage compensated mortar, enriched with



inhibitors. The product does not contain metal particles and is chloride-free. Betonfix TX provides excellent adhesion to the substrate. Betonfix TX must be used for patch layers of not more than 3 cm: for greater thicknesses, use Betonfix TX GG, Betonfix FB, Betonfix RCA or Betonfix CR. Betonfix TX 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 R3 structural mortar along the EN 1504-3 ("Structural and non structural repair").

#### Uses

Betonfix TX is used to restore deteriorated reinforced concrete structures such as balconies, cornices, pillars, beams, roadworks and railways.

It is also used for fast restoration of deteriorated concrete parts such as fl oorings, pipework edges, etc. Its fine texture and quick hardening enable easy application, fast finishing and rapid re-use of the structure.

#### **Application**

Carefully remove the deteriorated and flaky concrete using a hammer until the substrate is compact.

Where metal reinforcements are visible, remove any adjoining concrete with a needle gun, water sand the entire surface and protect the metal reinforcements with Betonfix KIMIFER, applied by brush.

Betonfix TX must be mixed with drinking water. Prepare the quantity of Betonfix TX that will be used within 15 minutes after mixing. The substrate must be wet carefully, eliminating any pools of water. Soak the substrate with a brushed coat of Betonfix KIMIFER and, while still wet, apply the mortar with a trowel.

Once work is completed, keep the repaired surface damp. It is important not to remix the product when it has already started to set: it will lose all its chemical and physical properties. Do not use Betonfix TX for continuous coatings such as plasterwork or finishes.

### **Packaging**

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

### Coverage

18 Kg/m<sup>2</sup>/cm

## Storage

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

Characteristics	Value	
Appereance	Powder	
Colour	grey	
Apparent specific weight UNI 9446	$1,28 \pm 0,1 \text{ g/cm}^3$	
Hazard classification 1999/45/CE e 67/548/CEE	Irritant	
Maximum inert material size UNI EN 1015-1	1,25 mm	
Apparent volumetric mass of wet mortar UNI EN 1015-6	2100 ± 50 Kg/m <sup>3</sup>	
Consistency UNI 7044/72	10-30 %	
Pot life UNI EN 1015-9	15 ± 5 mins	
Minimum application temperature	+5 °C	
pH of mixture	12 ± 0,5	
Setting time UNI EN 196-3	30 ± 10 mins	
Setting time UNI EN 196-3	50 ± 10 mins	
Exudation UNI 8988	Absent	
Fire reaction class	F	
Dangerous substances	Conforming to DM 10/05/2004	

Caratteristica	Limiti EN 1504-3 per malte R3	Value
Compression strength 28 days UNI EN 12190 [MPa]	≥ 25	> 25
Modulus of elasticity secant on compression EN 13412 [GPa]	≥ 15	> 15
Chloride content EN 1015-17 [%]	≤ 0,05	< 0,05
Concrete adhesion (UNI EN 1542) [MPa]	≥ 1,5	> 1,5
Concrete adhesion (UNI EN 1542) after dry-thermal ageing EN 13687-4 [MPa]	≥ 1,5	> 1,5
Concrete adhesion (UNI EN 1542) after thunder-shower cycles EN 13687-2 [MPa]	≥ 1,5	> 1,5
Concrete adhesion (UNI EN 1542) after frost-thaw cycles EN 13687-1 [MPa]	≥ 1,5	> 1,5
Resistance to accelerated carbonation, UNI EN 13295	< than control value UNI EN 1766	ОК
Waterproofing (capillary absorption coefficient, UNI EN 13057) [Kg/m²·h¹/²]	≤ 0,5	< 0,5

#### Warning

Product intended 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  $+5\,^{\circ}\mathrm{C}$ . Wet with water for the fi rst 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.