Repar Tix Bic

Thixotropic, rheoplastic, structural, two-component fibre reinforced mortar

Structural cementitious mortar, two-component, composite, with compensated shrinkage, fiber-reinforced, based on high-strength cements, super-pozzolanic fillers, water-dispersed polymeric resins, migratory corrosion inhibitors, anti-shrinkage additives, plasticizers, stabilizers and anticorrosion agents, selected aggregates, READYMESH microfibers in glass, with a high zirconium content, and multifilament polypropylene.

CUSTOMS CODE: 3824 5090
COMPONENTS: Two-components
APPEARANCE: Powder + Liquid
AVAILABLE COLORS: Gray
PACKAGING AND DIMENSIONS: Bag 25 kg [A] - Plastic can 5 kg [B] - Kit: 1 Bag 25 kg [A] + 1 Plastic can 5 kg [B]

OBTAINED CERTIFICATIONS AND REGULATIONS

CE GP EN 998-1 | CE R3 EN 1504-3 | PCC EN 1504 | CAM UNI PdR 88

FEATURES AND BENEFITS

After mixing the two components, Repar Tix Bic is perfectly workable with manual methods or with spraying machines. The applied and hardened material will have very high adhesion, durability, impermeable to water, with good vapor permeability, high physical-mechanical resistance (class R3 according to UNI EN 1504/3). The product also has a particularly low elastic modulus and contains migratory corrosion inhibitors in its B component. The thixotropic characteristics of the product allow excellent adhesion and easy spreadability on vertical surfaces, on the lower parts of beams, shelves or slabs, often even on structures indirectly subjected to light vibrations or dynamic stresses during application. It solves the problems of complex reconstructions or restorations, even on difficult-to-grip substrates and for a wide range of applied thicknesses: from a minimum of 3 mm (to be spread with a blade and finished with a trowel) to a maximum of 100 mm. and beyond, naturally in succession of layers of 25-30 mm / each. (for large thicknesses on large surfaces it is always advisable to provide a contrasting net on connectors fixed to the support). It does not require wetting or anti-evaporation protection after application. The superpozzolanic reaction of the peculiar reactive fillers contained in component A, the three-dimensional micro-armor provided by a balanced mix of READYMESH fibers, together with the special polymers and migratory corrosion inhibitors contained in component B, guarantee the hardened product very strong adhesion to the substrate, dimensional stability and maximum durability to environmental aggressions (from carbonation, acid rain, chlorides, sulphates).

FIELDS OF APPLICATION

For any type of repair or restoration on deteriorated concrete and masonry. Restoration, structural recovery, reconstruction of the concrete cover, construction of reliable and durable coatings of civil, hydraulic, industrial, concrete and masonry building works, even in particularly aggressive exposure environments (XC2, XC3, XC4, XD1, XD2, XD3, XS2, XS3, XA1, XA2, XA3, XF2, XF4)

ALLOWED SUPPORTS

Concrete - Prefabricated concrete - Fiber-cement - Mixed walls (bricks and stones) - Stone walls

PREPARATION OF SUPPORTS

Application surfaces should be clean, free of dirt, crumbling and non-adhering parts, dust etc., and saturated with water "saturated with dry surface".. An adequate roughening of the surfaces by scarifying, sandblasting etc. is always necessary in order to obtain the maximum adhesion values to the substrate. The optimal values are obtained with high pressure hydro-scarification. Uncover the irons undergoing disruptive oxidation or deeply oxidized, removing the rust of the exposed irons (by sandblasting or abrasive brushes)

MODE OF USE

Pour component B (liquid) into a container (bucket or other), gradually add and mix in component A (powder), continue to mix until the mixture is totally lump-free. The optimal consistency of the product and the consequent physical-mechanical performances declared in this technical data sheet can be reached using 4.5 kg of COMPONENT B for each 25 kg bag. The excess quantity of COMPONENT B (0.5 kg) is particularly useful for priming the substrate, or for wetting the trowel in the final smoothing operation, or in hot and arid environmental conditions where the mixed product is kept at rest in the bucket it may require some light addition of liquid to regain its optimal consistency, thus avoiding uncontrolled water additions. Provide reconstruction thicknesses in the range 3 to 30 mm; for greater thicknesses add 3-6 mm gravel (add up to 30% by weight of the initial compound). High coating thicknesses, static monolithic requirements, etc., it may be necessary to resort to appropriate reinforcements (electrowelded mesh etc.) anchored to the support with Syntech Profix or GROUT MICROJ or Repar Tix G2.

APPLICATION METHODS

Finishing trowel - Shotcrete machine - Plastering machine - Spatula - Brick trowel

TOOL CLEANING

Water

KEY FEATURES

- Max. recommended thickness: 3 cm
- Min. recommended thickness: 3 mm
- Shelf-life: 12 months
- Maximum diameter of aggregate: 1.5 mm
- Pot-life: 60 min
- Temperature of use: +5 / +35 °C

TECHNICAL SPECIFICATIONS

EN 12190
Compressive strength after 1 day **> 18 N/mm²**

EN 12190
Compressive strength after 28 days **> 50 N/mm²**

EN 12190
Flexural strength after 7 days **7.5 N/mm²**

UNI EN 1015-6
Density **2125 kg/m³**

UNI EN 1015-17
Chloride content **0.01 %**

Darcy impermeability **1 x 10 E-10 cm/s**

EN 13142
Static elastic modulus **16000 N/mm²**

EN 13501-1
Reaction to fire **B-s2 d0**

UNI EN 1015-18
Capillary absorption **0.34 kg•h^0.5/m²**

EN 12190
Compressive strength after 7 days **> 40 N/mm²**

EN 12190
Flexural strength at 1 day **> 4 N/mm²**

EN 12190
Flexural strength after 28 days **9 N/mm²**

UNI EN 1015-19
Coefficient of permeability **22.1 μ**

UNI PdR 88:2020
Total recycled content **≥ 4.7 %**

UNI EN 1542
Bonding force **2.3 N/mm²**

UNI EN 13295
Average carbonation depth **3.7 mm**

pH **> 12**

CONSUMPTION

Approximately 20 kg/m² of Repar Tix Bic for every centimetre of thickness to be implemented (approximately 2000 kg per cubic metre).

STORAGE AND CONSERVATION

Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Inadequate storage of the product may result in a loss of rheological performance. Protect from humidity.

PHOTO GALLERY



ADDITIONAL CONTENT

WARNINGS AND PRECAUTIONS

Thermal range of application and conservation: +5 / +35 °C, does not apply in case of direct exposure to sunlight. Cure the protection and the moist hardening of exposed surfaces.The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge.
Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

Azichem Srl does not assume any liability arising from inadequate characteristics related to improper use of the product or connected to defects arising from factors or elements unrelated to the quality of the product, including improper storage.
Those wishing to utilise the product are required to determine prior to use whether or not the same is suitable for the intended use, assuming all consequent responsibility.

The technical and characteristic details contained in this data sheet shall be updated periodically. For consultation in real time, please visit the website: www.azichem.com. The date of revision is indicated in the space to the side. The current edition cancels out and replaces any previous version.

Please note that the user is required to read the latest Safety Data Sheet for this product, containing chemical-physical and toxicological data, risk phrases and other information regarding the safe transport, use and disposal of the product and its packaging. For consultation, please visit: www.azichem.com.
It is forbidden to dispose of the product and/or packaging in the environment.