Repar Tix HG

Structural, thixotropic, fibre reinforced cement mortar

Thixotropic, structural, fibre reinforced cement mortar with high intrinsic watertightness, and extraordinary physical and mechanical characteristics: adhesion to concrete, adhesion to steel, compression resistance, flexural strength, abrasion resistance. Perfect for remediation of structural works and articles in degraded concrete and very high performance coatings. Thanks to the very high adhesion to steel and concrete supports, it is also suitable for fixing threaded bars in holes made on concrete or rock conglomerates. Apply with brick trowel and plastering trowel.

CUSTOMS CODE: 3824 5090
COMPONENTS: Single-component
APPEARANCE: Powder
AVAILABLE COLORS: Gray
PACKAGING AND DIMENSIONS: Bag 25 kg - Pallet: 50 x (Bag 25 kg)

OBTAINED CERTIFICATIONS AND REGULATIONS

CE GP EN 998-1

CE R4 EN 1504-3

UNI PdR 88 Certificato n°CRS104

FEATURES AND BENEFITS

Rheoplastic, thixotropic, structural, composite cement mortar, based on special cements and selected siliceous aggregates, reinforced with a balanced mixture of READYMESH polypropylene fibres and calcium metasilicate microfibres, added with specific agents and a high content of silica fume. After hardening, it provides very high performance in terms of intrinsic watertightness, resistance to washing and hydrolysing, mechanical strength, abrasion and cavitation, anti-carbonation, chemical-physical stability, resistance to harsh atmospheric agents and to leaching water. It is fibreglass reinforced three-dimensionally, it provides high adherence and adhesion; and dimensionally stable (shrinkage-compensated). The product is mixed with water (approx. 16% of the weight of the bag).

FIELDS OF APPLICATION

Repairs and protective coatings of hydraulic works (pipelines, dams, tunnels etc.), marine structures and artefacts in critical situations: aggressive chemical-physical agents, leaching water, marine atmosphere, etc. For wet spritz beton operations it is advisable to use the Repar Tix HG SB mortar, which maintains the physical and mechanical characteristics of Repar Tix HG, but is specially formulated for the maximum performance of sprayer machines.

ALLOWED SUPPORTS

Concrete - Prefabricated concrete - Bricks - Mixed walls (bricks and stones) - Stone walls - Rock walls

PREPARATION OF SUPPORTS

Application surfaces should be clean, free of soiling, crumbling and non-adhering parts, dust, etc., conveniently saturated with water until they reach the condition "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. Bare the irons undergoing disruptive oxidation or deeply oxidized, removing the rust of the exposed irons (by sandblasting or abrasive brushes).

MODE OF USE

Pour about 2/3 of the mixing water into the mixer, add Repar Tix HG and the remaining water; continue to mix until a homogeneous lump-free mixture is obtained. The mixing water should be about 16% of the weight of the bag. The addition of Bond HG to the mixing water (about 0.5 litres per 25 kg bag of product) allows further improvements in terms of adherence, adhesion, watertightness, workability, moldability and deformability. For high coating thicknesses, static, monolithic requirements, etc., performed with Repar Tix HG, appropriate metal reinforcements (mesh, cages, etc.) should be used, anchored to the support with Syntech Profix, GROUT MICROJ, Repar Tix G2, or with the same Repar Tix HG.

APPLICATION METHODS

Brick trowel - Finishing trowel - Spatula - Sprayer

TOOL CLEANING

Water

KEY FEATURES

- Highlighted product
- Maximum diameter of aggregate: 1.5 mm
- Mix with water: 16 %
- Shelf-life: 12 months
- Use wearing protective gloves
- Max. recommended thickness: 40 mm
- Min. recommended thickness: 7 mm
- Pot-life: 30 min
- Temperature of use: +5 / +28 °C

TECHNICAL SPECIFICATIONS

UNI EN 12190
Compressive strength after 1 day **> 25 N/mm²**

UNI EN 12190
Compressive strength after 28 days **≥ 65 N/mm²**

UNI EN 196/1
Flexural strength at 1 day **5 N/mm²**

UNI EN 13295
Resistance to carbonatation **0.5 mm**

UNI PdR 88:2020
Total recycled content **≥ 5.3 %**

UNI EN 13687-1
Determination of thermal compatibility **≥ 2 N/mm²**

UNI 8147
Contrasted expansion with air curing for 1 day **> 0.01 %**

EN 13501-1
Reaction to fire **A1**

UNI EN 1542
Bonding force **≥ 2 N/mm²**

UNI EN 13057
Capillary absorption **0.30 kg•h^0.5/m²**

UNI EN 12190
Compressive strength after 7 days **> 50 N/mm²**

UNI EN 12190
Compressive strength after 90 days **≥ 70 N/mm²**

UNI EN 196/1
Flexural strength after 28 days **> 8.0 N/mm²**

UNI EN 13036-4
Skid resistance **61.0 mm**

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

EN 13142
Static elastic modulus **26000 N/mm²**

< 70 µg/m³

Water/binder ratio **< 0.37**

UNI EN 1015-6
Density **2220 kg/m³**

pH **> 12**

CONSUMPTION

Approximately 18,5 kg/m² of Repar Tix HG for every centimetre of thickness to be implemented (approximately 1850 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

Do not apply in case of direct exposure to sunlight or strong ventilation. Cure the protection and the prolonged moist hardening of surfaces laid.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.