

# Repar Tix GS

Rheoplastic, structural thixotropic cement mortar for extensive thicknesses



A structural and shrinkage-compensated thixotropic cementitious mortar with a maximum aggregate grain size of 5 mm, consisting of high-strength cements, super-pozzolanic fillers, stabilising additives and high-tenacity polypropylene microfibres. The coarse grain of the aggregate and the excellent workability of the mortar render Repar Tix GS particularly suited to very thick volumetric structural restorations (with a depth of up to 50 mm per single coat applied) on reinforced concrete and masonry, even in environments with aggressive exposure (marine, industrial). It can be applied vertically or to the intrados of reinforced concrete structures, even of significant thickness, always in collaboration with the reinforcing rods, either manually or by spray, without the need for formwork and with wet curing for the first 48-72 hours.

**CUSTOMS CODE:** 3824 5090

**COMPONENTS:** Single-component

**APPEARANCE:** Powder

**AVAILABLE COLORS:** Gray

**PACKAGING AND DIMENSIONS:** Bag 25 kg - Pallet: 50 x (Bag 25 kg)

## FEATURES AND BENEFITS

Repar Tix GS, the thixotropic structural mortar for significant thicknesses, can benefit from the addition of 0.25% of Fluid SRA, a special additive able to reduce both plastic and hydraulic shrinkage. Fluid SRA protects the curing of the mortar and, mixed with Repar Tix GS, can be considered as a technologically-advanced system able to reduce the rapid evaporation of water from mortar and promote the development of hydration reactions. Thanks to the interaction with certain cement components, Fluid SRA reduces final shrinkage by 20 to 50% compared with the standard values of Repar Tix GS prepared with the addition of water alone.

## FIELDS OF APPLICATION

For restorations, repairs, structural reclamations, reconstruction of concrete coverings, and the construction of reliable and durable coatings for construction, civil, hydraulic, industrial, concrete and masonry works in the event of extensive-thickness restorations.

## ALLOWED SUPPORTS

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

## PREPARATION OF SUPPORTS

The applicative surfaces must be clean, free from contamination or any loose or detached parts, dust, and so on, suitably watered down until it is "saturated with a 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). It is recommended to apply Consilex San consolidating realkalising agent to exposed surfaces in advance, prior to their restoration.

## MODE OF USE

Add two-thirds of the total mixing water (about 2.5 litres per bag) to the concrete mixer then gradually add the product and the remaining water until obtaining the desired mixture with a homogeneous consistency free from lumps. Ensure exposed surfaces are protected and wet-cured. Adding Bond HG to the mixing water (about 0.5-0.7 kg per bag of product) offers significant improvements in terms of adhesion, adherence, waterproofing, workability, malleability and deformation capacity.

## APPLICATION METHODS

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

## TOOL CLEANING

Water

## KEY FEATURES

- ☒ Max. recommended thickness: 50 mm
- ☒ Min. recommended thickness: 15 mm
- ☒ Nonflammable
- ☒ Shelf-life: 12 months
- ☒ Use wearing protective gloves
- ☒ Maximum diameter of aggregate: 5 mm
- ☒ Mix with water: 14 %
- ☒ Pot-life: 60 min
- ☒ Temperature of use: +5 / +35 °C
- ☒ UV-resistant

## TECHNICAL SPECIFICATIONS

UNI EN 12190

Compressive strength after 1 day > **16 MPa**

UNI EN 12190

Compressive strength after 28 days > **50 MPa**

UNI EN 196

Flexural strength after 7 days > **7.0 MPa**

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

EN 13142

Static elastic modulus **29.000 N/mm<sup>2</sup>**

Water/binder ratio **0.38**

UNI EN 13057

Capillary absorption **0.50 kg•h<sup>0.5</sup>/m<sup>2</sup>**

UNI EN 12190

Compressive strength after 7 days > **40 MPa**

UNI EN 196

Flexural strength at 1 day > **3.5 MPa**

UNI EN 196

Flexural strength after 28 days > **8.0 MPa**

UNI EN 1015-12

Bonding force > **2.0 N/mm<sup>2</sup>**

Density **2200 g/l**

pH > **12.5**

## CONSUMPTION

Approximately 19 kg/m<sup>2</sup> of Repar Tix GS for every centimetre of thickness to be implemented (approximately 1900 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.



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## PHOTO GALLERY



## ADDITIONAL CONTENT



## WARNINGS AND PRECAUTIONS

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.

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