

EPOXCEMENT TIXO

THREE-COMPONENT EPOXY-CEMENT COATING

IN COMPLIANCE WITH THE REQUIREMENTS OF THE 1504-2 EUROPEAN STANDARD:
Product for the protection against the risk of penetration 1.3, moisture control 2.2, resistivity increase 8.2

Features

- Solvent-free thixotropic coating.
- Excellent adhesion on all construction materials like: concrete, tuff, natural stone, bricks, cement blocks.
- Excellent adhesion on wet surfaces.
- Excellent barrier for water in counterthrust even under pressure.
- Provides a waterproof coating but permeable to water vapour.
- Applicable without problems both internally and externally.
- Overlayable with whatever system of epoxy, polyurethane, epoxypolyurethane resins with low, medium, high thickness.
- After having hardened, with the appropriate waterproof finish it resists to water counterthrust up to 10 bar.
- Application temperature from +5°C to +45°C with R.H. 85 % max on the support.
- Operating temperature from -35°C to +110°C in air and to +65°C underwater.

Field of use

- General use foundation layer for the protection of cement supports.
- Fastening primer for self-leveling cement coatings.
- Damaged concrete structures, floorings, walls, even if lacking the vapour barrier.
- Intermediate layer on humid supports which will be coated with resins.
- Smoothing compound for the regularization of concrete holes.
- Treatment of damp walls in order to obtain the anchor and isolation of plasters and finishes or as direct anti-damp treatment.
- Waterproofing coating, for walls and floors, concrete tanks intended for the containment of industrial water.
- Filling of gaps of all building materials such as masonry stones and bricks.
- Smoothing of balconies floor as waterproof and antifrost layer, before laying the tiles.

Application

Support preparation

Support preparation is fundamental, thus the surface to be treated must be free of any pollutant, dry, coherent and must have a tear resistance of at least 1,5 MPa. In any case it is necessary, depending on the type of surface, to make a preparation of the flooring by sand-blasting, milling, shot peening, smoothing or sanding.

Free and stagnant water coming from the foundation, from previous washing processes or from meteorological events must be removed or dried.

Product preparation

Three-component product to be mixed thoroughly at the moment of employment with a low rate drill, in the following way:

1. Mix component B with component A for some minutes until an homogeneous mass without lumps and with a uniform colour is obtained
2. Add component C while stirring and mix until complete homogenization.

Depending on the types of use and the problems to be solved, the product can be used as such, thinned with water in various ways, or mixed with 0.06-0.25 mm quartz.

The dilution and addition of fillers must be carried out after complete mixing of the two components, homogenizing with the same stirrer.

Application

EPOXCEMENT TIXO must be applied by brush, trowel, airless spray gun.

If the airless spray gun is chosen, use 45/60:1 pumping pistons with 0,025-0,029 inches tungsten carbide nozzles and pressures around 250 bar using the product thinned with 5-10 % water.

Regular surfaces: in the case of regular and normally moist surfaces it is generally sufficient to apply a coat of product thinned with 8-10 % water with a consumption of 500 g/m².

Uneven surfaces: in the case of uneven surfaces the consumption can be proportionately increased up to 1500 g/m² decreasing proportionally the dilution water.

Surfaces subject to high humidity and counterthrust: apply at least two coats of **EPOXCEMENT TIXO** with a consumption of 500 g/m² per coat and verify the surface has completely dried. If it is not dry apply another coat.

Masonry: after the execution of the vertical barrier with **EPOXCEMENT TIXO**, the reconstruction of the plasters must occur after the application of a grout obtained by mixing **RIPRESA SPECIALE** / Portland cement 32.5 R 1:2 by volume.

Gluing of discontinuous floorings: it must always take place through two-component epoxy or epoxyurethane adhesives.

No treatment with **EPOXCEMENT TIXO** must be overlaid before 48 hours under ideal conditions (20°C, 60% R.H.) or in any case not before having demonstrated the complete drying with a hygrometer.

If the substrate or environmental conditions are worse, it is recommended to apply two or more layers of product and to wait even up to 6 days before any further finishing with coatings, always verifying the complete drying of the substrate.

The cured and dried **EPOXCEMENT TIXO** coat can be overlaid directly with any kind of epoxy coating.

Tools cleaning

The tools must be cleaned with water after use.

Technical data

Colour	Neutral or white	-
Density		EN ISO 2811-1
Neutral	1,66 ± 0,05 kg/l	
White	1,60 ± 0,05 kg/l	

Viscosity at 20°C <i>Neutral</i> <i>White</i>	12000 ± 2000 mPa·s 15000 ± 3000 mPa·s	EN ISO 2555
Pot life at 22°C	40 minutes	EN ISO 9514
Mixing ratio <i>Parts by weight of comp. A</i> <i>Parts by weight of comp. B</i> <i>Parts by weight of comp. C</i>	100 31 135	
Theretical consumption	500 g/m ²	-
Theretical thickness	200 µm	-
Bond strength by pull-off	> 3,0 MPa	EN 1542
Resistance to hydrostatic pressure 250 kPa	No water passage	UNI 8298-8
Compatibility on wet concrete	> 3,5 MPa	EN 13578
CO ₂ permeability	s _D > 50 m	EN 1062-6
Water vapour permeability	s _D < 5 m	EN ISO 7783-2
Liquid water permeability	w < 0,1 kg/m ² x h ^{0.5}	EN 1062-3

Curing

At 22°C, 50 % R.H. - Touch dry - Insensitive to rain - Complete curing	40 minutes 9 hours 15 days
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Storage

The product in the original sealed packaging, stored in a dry and sheltered place at a temperature comprised between +5°C and +35°C, is preserved for 12 months. Cold damages the product.

Safety

In the application of this product it is advisable to use goggles, rubber gloves and all the PPE required by the laws on the use of chemical substances.

For all the additional information consult the material safety data sheet of the product.

		
PERFORMACES IN COMPLIANCE WITH CERTIFICATION CE EN 1504-2		
Product type 3300		DoP 138
Characteristics	Product performance	Test Method
CO ₂ permeability	$s_D > 50 \text{ m}$	EN 1062-6
Water vapour permeability	Class I	EN ISO 7783-2
Liquid water permeability	$< 0,1 \text{ kg/m}^2 \times \text{h}^{0,5}$	EN ISO 1062-3
Bond strength by pull-off	$> 2,0 \text{ N/mm}^2$	EN 1542
Crack bridging	NPD	EN 1062-7
Impact resistance	NPD	EN ISO 6272-1
Temperature shock	NPD	EN 13687-5
Abrasion resistance	NPD	EN ISO 5470-1
Resistance to severe chemical attack	NPD	EN 13529
Hazardous substances	The hardened product does not release hazardous substances	
Reaction to fire	F	EN 13501-1
Linear shrinkage	NPD	EN 12617-1
Coefficient of thermal expansion	NPD	EN 1770
Cross-cut test	NPD	EN ISO 2409
Thermal compatibility	NPD	EN 13687-1
Resistance to liquids	NPD	EN ISO 2812-1
Slip/skid resistance	NPD	EN 13036-4
Exposition to artificial atmospheric agents	NPD	EN 1062-11
Electrical resistance	NPD	EN 1081
Compressive strength	NPD	EN 12190
Compatibility on wet concrete	No blistering, no cracking, no flaking	EN 13578

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