

# EPU 040 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**

### Description

**040 TIXO** is a three-component solvent free thixotropic coating. Specially made to prepare cement screeds, and wet ones as well. It can also be used on vertical surfaces.

### Features

- Solvent-free thixotropic coating
- Excellent adhesion on all construction materials like: concrete, 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 both internally and externally
- Overlayable with whatever system of epoxy, polyurethane, epoxy polyurethane resins with low, medium, high thickness
- After having hardened, with the appropriate waterproof finish it resists to water counterthrust up to 10 bar
- Applicable from +5°C to +45°C with relative humidity <85%

### Fields of application

**040 TIXO** can be installed both outdoors and indoors, has excellent bonding on all construction materials. Suitable for garages, food industries, chemical industries, mechanical engineering industries. Smoothing of floors as waterproof and antifrost layer, before laing the tiles. Damaged concrete structures, flooring, walls, even if lacking the vapour barrier.

### Application guidelines

**040 TIXO** can be applied with roller, trowel or squeegee.

#### a) Substrate Preparation

Surface must be clean, sound and dry. Remove dust, laitance, grease, curing compounds, Preparation bond inhibiting impregnations, waxes and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to the application. Concrete - Should be cleaned and prepared to achieve a laitance-free and contaminant-free, open textured surface by shot blasting or equivalent mechanical means (CSP-3 to CSP-4 as per ICRI guidelines). Sweep and vacuum any remaining dirt and dust with a wet/dry vacuum. Removing residual dust will help ensure a tenacious bond between the primer and substrate. Whenever "shot-blasting" is utilized, be careful to leave concrete with a uniform texture. "Over-blasting" will result in reduced coverage rates of the primer and/or subsequent topcoats. The "shotblast" pattern may show through the last coat, known as "tracking". The compressive strength of the concrete substrate should be at least 3,500 psi (24 MPa) at 28 days and at least 215 psi (1.5 MPa) in tension at the time of application.

#### b) Preparation of the product

For bulk packaging, when not mixing full units, each component must be pre-mixed separately to ensure product uniformity.

Premix each component separately. Empty Component B in the correct mix ratio into Component A, then add Component C and add about 5-8% water. Mix the combined components for at least 3 minutes using a low speed drill (300 - 450 rpm) and Exomixer or Jiffy type paddle suited to the volume of the mixing container to minimize entrapped air. Be careful not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the coating. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing.

It is important to remember that this coating has a limited pot life, thus mix only the quantity that can be used within its pot life. Do not leave the mix in the container too long because it will shorten its pot life.

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 (5-10%), or mixed with quartz. Thw dilution an addition of fillers must be carried out after complete mixing components.

#### c) Application

**040 TIXO** can be used in basic form, in water dispersion (max 10%) or added with fine quarts at ratio of 1:0,5 according to the kind of substrate.

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 case of regular and normally moist surfaces it is generally sufficient to apply a coat of product thinned with 8-10% water with consumption of 500 g / m<sup>2</sup>.

Uneven surfaces: in case of uneven surfaces the consumption can be proportionately increased up to 1500 g / m<sup>2</sup>, decreasing proportionally the dilution water.

Surfaces subject to high humidity and counterthrust: apply at least two coats of **EPU 040 TIXO**, with a consumption of 500 g / m<sup>2</sup> 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 **EPU 040 TIXO**, the reconstruction of the plasters must occur after the application of a grout obtain by mixing component C (1:2 by volume).

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

No treatment with **EPU 040 TIXO** must be overlaid before 48 hours (20°C, 60% R.H.) or in any case not before having demonstrated the complete drying with a hygrometer.

If the substrate or enviromental 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 cures and dried **EPU 040 TIXO** coat can be overlaid directly with any kind of coating.

When adding quartz sand to the A+B+C mix, keep the proportion of 2:1 ration. For example, on 5,3kg A=B+C mix, add 2,5kg of 0,1-0,3 quartz sand.

## Handling and storage

**040 TIXO** can be stored for 12 months in its original packaging in a dry place at a temperature between +5°C and +35°C.

Wear protective equipment (gloves/safety glasses/clothing) to prevent contact with skin and eyes. Keep container closed in a cool dry place. Wash skin thoroughly with soap and water after use. Use with adequate, general and local, exhaust ventilation. In absence of adequate ventilation, use a properly fitted NIOSH respirator. Remove contaminated clothing. Launder before reuse.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA		
COLOR	WHITE	STANDARDS
POT LIFE AT 22°C	40 MINUTES	EN ISO 9514
DENSITY	1,60 +/- 0,05 kg/l	UNI EN ISO 2811-1
MIXING RATIO A/B/C	100 / 31 / 135	-
VISCOSITY AT 20°C	15000 +/- 3000 mPa·s	UNI EN ISO 2555
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 <sub>2</sub> PERMEABILITY	S <sub>D</sub> > 50 m	EN 1062-6
WATER VAPOUR PERMEABILITY	S <sub>D</sub> < 5 m	EN ISO 7783-2
CURE RATE Touch dry / Complete curing	40 minutes / 14 days	77°F / 25°C

<b>CE</b>		
<b>PERFORMACES IN COMPLIANCE TO CERTIFICATION CE EN 1504-2</b>		
<b>Product type 3300</b>		<b>DoP 138</b>
<b>Characteristics</b>	<b>Product performance</b>	<b>Test Method</b>
CO <sub>2</sub> permeability	S <sub>D</sub> > 50 m	EN 1062-6
Water vapour permeability	Class I	EN ISO 7783-2
Crack bridging	NPD	EN 1062-7
Abrasion resistance	NPD	EN ISO 5470-1
Hazardous substances	The hardened product does not release hazardous substances	
Reaction to fire	F	EN 13501-1
Linear shrinkage	NPD	EN 12617-1
Liquid water permeability	w < 0,1 kg/m <sup>2</sup> x h <sup>1/2</sup>	EN 1062-3
Compressive strength	NPD	EN 12190
Slip/Skid resistance	NPD	EN 13036-4
Resistance to liquids	NPD	EN ISO 2812-1
Bond strength by pull off	>2,0 N/mm <sup>2</sup>	EN 1542
Impact resistance	NPD	EN ISO 6272-1
Sound insulation	NPD	EN ISO 140-6
Sound absorption	NPD	EN 12354-6
Thermal resistance	NPD	EN 12664
Resistance to severe chemical attack	NPD	EN 13529

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