

Certified Quality System since FEBRUARY 1993

From Project to Jobsite

Finishing system for concrete floors

Tecnopav EP 410

Ral (see colour palette)

PROTECTIVE SELF-LEVELLING COATING FOR CONCRETE PHYSICAL RESISTANT

CYCLE CE approved – Certificate n. 1305 - CPD - 0808 EN 1504-2 prospect ZA.1f

General

Epoxy-ammino three-components self levelling mortar, charged with fillers quartz sand and pigments, formulated as self-levelling coating for concrete floors, solvent free, hardening at room temperatures.

Characteristics

Easy application, excellent self-levelling properties

Optimal adhesion

Excellent chemical resistance Excellent abrasion resistance

Easy maintenance

Hygienic

use

For indoor applications in private, commercial, public and industrial buildings, for the realisation of a self-levelling decorative and wear resistant floors. Application thickness from 2 to 3 mm, depending on the required finishing and type of substrate.

Application

Tools: can be poured out and spread by floor squeegee or dented trowel. The spiked roller is required.

Applied on: Tecnofix EP primer. Type of primer depends on the type of substrate

Temperature of application: 10 ÷ 35 °C and relative humidity max. 60% Clean tools with: MEK, acetone or other solvents for epoxy

METHOD OF USE

PREPARATION OF THE SUBSTRATE

Prior the application of the protective coatings, it is necessary to verify the condition of the cementitious substrate: it must be clean and oil free, without fats, delaminating particles and free from cracks and discontinuities. The preparation of the substrate should be done choosing the proper following procedures:

- Elimination with proper equipment of the superficial dust when the substrate seems in good condition. Vacuuming and/or washing with pressured water is always recommended.
- Repair or level with cement based mortars or resin based materials, when the substrate has cracks or anomalies. In any case, apply the coating only on de-dusted and sound substrates;
- Sandblast or shotblast with steel abrasive grit is needed in case of not-cohesive parts. Avoid the application on substrates contaminated with oil and/or greases.

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CHOICE OF PRIMER

The use of a primer as base-coat is necessary to consolidate the substrate and to improve the adhesion of any consecutive protective coating. Depending on the type of substrate it is recommended to use the following primers :

- TECNOFIX EP 51 with smooth and well compacted substrates, suited also in case of presence of superficial humidity.
- <u>TECNOFIX EP 110</u> with smooth and well compacted substrates, but perfectly dry (max. 3% superficial humidity)
- **TECNOFIX EP 170** for irregular, but cohesive substrates, suited also in case of presence of superficial humidity.
- **TECNOFIX EH 100** for irregular and wet, but cohesive substrates.

(see also the relative datasheets)

APPLICATION

Make sure the room is well ventilated and follow the recommendations stated in the Material Safety Data Sheet on the use of PPE (Personal Protective Equipment).

After the drying of the primer (touch dry), continue with the application of **Techopav EP 410**, as follows:

- Pour component B in component A and mix for 2-3 minutes, or till complete homogenisation of the mix, using a suited drill with whip at low speed.
- Add slowly and under continues stirring the C component, and mix till there are no lumps and the paste is homogeneous.
- Pour the paste over the floor and disperse uniformly by dented trowel or floor squeegee over the primed surface. With a packaging of 30 kg, it is possible to realise 5-6 m^{2.}
- Use immediately and for a longer period, a spiked roller over the fresh coating in order to release all the entrapped air. Repeat the application till there are no air bubbles left.
- Wait till drying of the complete layer before application of a finishing coat (like a topcoat based on polyurethane).

IMPORTANT: when the temperature of the ambient and the substrate are less than 20 °C, it is necessary to heat separately the 2 components of the product to a maximum temperature of 30 °C (eventually en bain-marie) in order to maintain the low viscosity and the better applicability. It is also possible to reduce the quantity of the C component, adding 5 kg sand instead of 7.5 kg, to the A+B mix.

DO NOT APPLY AT TEMPERATURE LOWER THAN 15°C.

APPLICATION CONDITIONS

Temperature of substrate : +15 °C / +35 °C

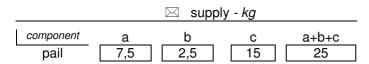
Humidity of substrate : < 3%

Ambient temperature : +15 °C / +35 °C Relative humidity : max 60%

Dew point : the substrate and the product must be at a temperature of minimum 3 ℃

above the dew-point to reduce the risk of condensation

PACKAGING



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STORAGE

Store the original and unopened packaging at a temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Product can be kept 12 months from the production date.

TECHNICAL CHARACTERISTICS

APPLICATIVE CHARACTERISTICS at	Test method	Unit of	Typical values	
20 <u>+</u> 2℃		measurement		
Mixing ratio in weight	-	A : B : C	7,5 : 2,5 : 7,5	
Specific weight A+B+C	EN ISO 2811-1	kg/l	~ 1,70 <u>+</u> 0,05	
Advised thickness	-	mm	3 ÷ 5	
Solid residue in total in weight	-	%	≈ 100	
Consumption	-	kg/mm/m ²	<u>+</u> 1,7	
Pot life	EN ISO 9514	minutes	75 <u>+</u> 10	
Workability time	EN ISO 9514	minutes	45 <u>+</u> 5	
Touch dry	I – 54 (internal)	hours	8 <u>+</u> 2	
Completely hardened	-	days	7	
PERFORMANCE	Test method	Unit of	Typical values	Limit values
CHARACTERISITICS		measurement		according EN 1504-2
Adhesion direct pulling on concrete	EN 1542	N/mm ²	> 4	<u>></u> 2
(with Tecnofix EP 110 and Tecnofix EP 51)		Type of failure	A = failure in concrete	(with traffic)
Adhesion direct pulling on concrete	EN 1542	N/mm ²	> 3	> 2
(with Tecnofix EP 170)	214 10 12	Type of failure	A = failure in	(with traffic)
		. , , , , , , , , , , , , , , , , , , ,	concrete	,
Capillary waterabsorption and permeability	EN 1062-3	Kg/m2xh0,5	0,0004	<0,1
Abrasion resistance (H22, 1000 cycles, load 1000g)	EN ISO 5470-1	mg	791	<3000
				≥ 4 (class I)
Wear resistance	EN ISO 6272-1	Nm	>10 (class II)	≥ 10 (class II)
				≥ 20 (class III)
Resistance to thermal shock	EN13687-5	N/mm ²	A=failure concrete	With traffic
			>4	≥ 2

OTHER TECHNICAL CHARACTERISTICS

TEST	UNIT OF MEASUREMENT	TYPICAL VALUES
Linear thermal expansion coefficient	°C ⁻¹	~ 5,8 x 10 ⁻⁵
Glass transition temperature	℃	<u>></u> 40
Flexural strength	N/mm ²	<u>></u> 20
Compressive strength	N/mm ²	<u>></u> 30
Modulus of elasticity in compression	N/mm ²	> 3000

The above date are based on our actual and most experienced practical and laboratory knowledge and the results are collected from application of the product in different situations. Tecnochem Italiana does not assume any responsibility regarding inadequate or negative performance as a result of improper use of the product of for defects deriving from factors or elements other than the quality of the product including improper storage. The technical characteristics and performance mentioned in this datasheet are updated periodically. The revision dates and number of revision of the datasheets are listed in the table below. Eventual variations are traceable on our website www.tecnochem.it where the most updated datasheets can be retrieved.

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