Temafloor P300

DESCRIPTION

A two-component, solvent-free epoxy coating for indoor use.

PRODUCT FEATURES AND RECOMMENDED USES

- Good resistance to abrasion.
- Withstands water, oils, greases, chemicals and diluted solutions of non-oxidizing acids, alkali and salt solutions. Resists only temporary splashes of oxidizing acids and bleaching chemicals. A separate chemical resistance table available.
- Withstands +70ºC dry heat and +60ºC in immersion. Does not resist abrupt, great or repeated changes of temperature.
- Self-levelling coating.
- Temafloor Flex hardener makes the coating surface flexible and thus more resistant to cracking of concrete.
- Also RAL EFFECT metallic colour shades are available.
- For new and old concrete floors exposed to heavy mechanical and chemical stress in industrial and storage facilities, repair shops; e.g. process or paper machine units and corridors. Also for car parks, garages, business premises, shopping centres, restaurants and cafe`s.

TECHNICAL DATA

Volume solids

approx. 100%

Specific gravity

1.4 kg / l (mixture).

Mixing ratio

Base	4 parts by volume	Temafloor P300
Hardener	1 part by volume	Temafloor P300 Hardener
or		
Base	2 parts by volume	Temafloor P300
Hardener	1 part by volume	Temafloor Flex Hardener

By weight

Base	6,1 parts by weight	Temafloor P300
Hardener	1 part by weight	Temafloor P300 Hardener

Note! Mixing ratio by weight was calculated base on average density of the components.

Pot life (+23°C)

20–30 minutes on substrate, approx. 15 minutes in the mixing container.

Practical coverage

Coverage on concrete floors is on the average:
Film thickness 0.3 mm coverage approx. 3 m²/litre
Film thickness 0.5 mm coverage approx. 2 m²/litre
Practical coverage depends on the porosity and evenness of the substrate and on the application method.

Drying time (+23°C)

Dust dry after 6 hours
Light trucking after 16 hours
Fully cured after 7 days
At lower temperature the curing process will last longer.

Thinners

Thinner 1029, Thinner 1031

Cleaning of equipment

Thinner 1029 or 1031.

Colors

RAL, NCS, BS and SYMPHONY colour cards. Temaspeed Premium tinting. Also metallic shades are available.

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Thinning instructions	Do not thin Temafloor P300 epoxy coating.
Reaction to fire	B_{FL}-s1 according to standard EN 13501-1.
VOC	VOC 2004/42/EC (cat A/j) 500 g/l (2010) Temafloor P300: max. VOC < 500 g/l
Can sizes	3,0 L, 10,0 L, 20,0 L, 200,0 L, 1000,0 L

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APPLICATION INSTRUCTIONS

Surface preparation

Always remove all grease, oil, and other impurities with Maalipesu detergent before grinding. Remove laitance or old peeling paint layers by power grinding or vacuum grit blasting. Choose the method best suited for the premises. Clean out pot holes removing all loose or brittle material. Open cracks with e.g. an abrasive tool. After mechanical pre-treatment remove all loose material and dust carefully with a vacuum cleaner.
The substrate must have a tensile strength above 1.5 MPa. For application on cementitious leveling screed: check compatibility with the leveling screed manufacturer.

Application conditions

The relative humidity of the concrete should not exceed 97%.
Residual moisture content of the concrete should be below 4 weight-%.
The temperature of the ambient air, surface or coating should not fall below +15ºC during application or drying.
Relative humidity of air should not exceed 80%.

Mixing components

First stir base and hardener separately. Mix the correct proportions of base and hardener thoroughly (approx. 2 minutes to get homogenous mixture) by using a low speed industrial hand drill with a paddle. Insufficient mixing or incorrect mixing ratio will result in uneven drying of the surface, weaken the properties of the coating and risk the success of the application.

Priming

Prime using Temafloor 200 Primer, Temafloor 400 or Temafloor 220W Primer. Follow the thinning instructions available in the PDS of the chosen primer. Pour the mixture onto the floor and apply as much as is needed to impregnate the concrete surface. If necessary, repeat priming according to the PDS of the used primer. A porous priming coat will result in holes and air bubbles in the finished coating.

Patching

Patch pot-holes and cracks with Colofill putty or a solvent-free epoxy primer, e.g. Temafloor 400, dry clean sand or Temafloor Thickener. Mixing ratio e.g. 1 part by volume of epoxy mixture and 1–2 parts by volume of sand of grain size 0.1–0.6 mm.Make sure the patched areas are flat before priming. Sand if needed.

Note! Concrete surface should always be primed before patching.

Topcoating

Topcoating should be done within 4-72 hrs after priming (depending on the used primer) with unthinned Temafloor P300. If the primed surface is not topcoated within the given timeframe of the used primer, it should be abraded. Pour the mixture onto the floor, apply it with a trowel and level with a roller.

Control that the thickness of layer is correct by observing coating consumption and by measuring the film thickness. Recommended film thickness is 0.3–0.5 mm. If necessary, use spiked roller to finish the surface approx. 10–20 min after application. Spiked roller levels the coating and helps removing air bubbles from the coating.

Temafloor P300 metallic shades can be applied with a trowel, roller or airless spray. Recommended film thickness is 0.5–1.0 mm. See Design floors concept for application instructions and inspiration. Note! Add the remaining mixture to the next batch of the product, do not scrape it out of the container onto the floor.

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HEALTH AND SAFETY

Containers are provided with safety labels, which should be observed. Further information about hazardous influences and protection are detailed in individual health and safety data sheets.
A health and safety data sheet is available on request from Tikkurila Oyj.

For industrial and professional use only.

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EN 13813

The European harmonized productstandard EN 13813:2002 defines the requirements for Screed materials and floor screeds, including synthetic resin screeds.

This product is tested and CE-labelled in accordance with the tables ZA.1.5 and ZA.3.3 in the appendix ZA.3.

CE	
Tikkurila Oyj Kuninkaalantie 1 FI-01300 VANTAA	
11	
TIK-0167-5001b	
EN 13813 SR-RWA1-B2,0-IR4	
Synthetic resin screed.	
Impact resistance	IR4
Capillary absorption and permeability to water	$w < 0,1\ kg/m^2 \cdot h^{0,5}$
Chemical resistance	CR 1, 2, 4…5, 8, 11…14, 15a (Class 2)
Release of corrosive substances	SR
Abrasion resistance	RWA 1
Thermal resistance	NPD
Reaction to fire	B_{fl}-s1
Adhesion strength by pull off test	B 2.0
Release of dangerous substances	NPD
Sound absorption	NPD
Sound insulation	NPD

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EN 1504-2:2004

The European harmonized productstandard EN 1504-2:2004 defines the requirements for surface protection systems for concrete.

This product is tested and CE-labelled in accordance with the tables 1d, 1f and 1g in the appendix ZA.

CE	
0809	
Tikkurila Oyj Kuninkaalantie 1 FI-01300 Vantaa	
13	
0809-CPD-0773	
TIK-0167-5001a	
EN 1504-2:2004	
Product for protection and repair of concrete structures – Coating.	
Permeability to CO2	NPD
Impact resistance	Class I: ≥ 4 Nm
Capillary absorption and permeability to water	w < 0,1 kg/m² · $h^{0,5}$
Abrasion resistance	< 3000 mg
Reaction to fire	B_{fl}-s1
Adhesion strength by pull off test	≥ 2,0 N/mm²
Release of dangerous substances	NPD
Permeability to water vapour	Class II, 5 m < s_D < 50 m
Resistance to severe chemical attack	Class II