Temafloor P300

DESCRIPTION
A two-component, solvent-free epoxy coating.

PRODUCT FEATURES AND RECOMMENDED USES
- Good resistance to abrasion
- Withstands water, oils, greases, chemicals and dilute 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 paint 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 008 4514
- or
- Paint 2 parts by volume Temafloor P300 FLEX hardener 1 part by volume 930 5002

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. With Temafloor FLEX hardener the curing times are a little longer than with standard hardener.

Cleaning of equipment
Thinner 1029 or 1031.

Finish
Full gloss.

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

Thinning instructions
Do not thin Temafloor P 300 epoxy coating.

Reaction to fire
BFL-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
**Temafloor P300**

**APPLICATION INSTRUCTIONS**

**Surface preparation**

New concrete: Remove laitance by power grinding, vacuum grit blasting or hydrochloric acid etching. Choose the method best suited for the premises. After grinding remove dust carefully with a vacuum cleaner. Hydrochloric acid etching is carried out with diluted hydrochloric acid (1 part concentrated hydrochloric acid, 4 parts water). Rinse with plenty of water. Dry the floor.

Old concrete: Remove all grease, oil, chemicals and other impurities by Maalipesu detergent. Remove old peeling paint layer by grinding or vacuum grit blasting. Choose the method best suited for the premises. Clean out pot-holes removing all loose friable material. Open cracks with e.g. an abrasive tool. Remove loose material and dust.

If cementitious screed is used, check compatibility with the levelling screed manufacturer.

**Application conditions**

The relative humidity of the concrete should not exceed 97%. The temperature of the ambient air, surface or coating should not fall below +15°C during application or drying. Relative humidity of air should not exceed 80%.

Note! There is a natural tendency of this coating to chalk, discolor or yellow unevenly. It is recommended to use polyurethane topcoat when there are high aesthetical requirements on color appearance.

**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, Temafloor 400 or Temafloor 220W epoxy varnish thinned 20–50% with Thinner 1029 or Fontefloor EP Primer epoxy varnish thinned 20–50% with water. Pour the varnish mixture onto the floor and apply as much as is needed to impregnate the concrete surface. If necessary, repeat priming to get a non-porous surface. A porous priming coat will result in holes and air bubbles in the finished coating. Subsequent treatment can be carried out after 2 hours using "wet-on-wet" technique.

**Patching**

Patch pot-holes and cracks with Colofill putty or a mixture of unthinned Temafloor 200 Primer epoxy varnish or Temafloor P 300 epoxy coating and dry, clean sand. Mixing ratio e.g. 1 part by volume of varnish mixture and 1–2 parts by volume of sand of grain size 0.1–0.6 mm. Sand the patched areas before overcoating, if necessary.

Note! Concrete surface should always be primed before patching.

**Topcoating**

Overcoating should be done within 6–24 hrs after priming with unthinned Temafloor P300. If the primed surface is not overcoated within 24 hrs, it should be abraded. Pour the mixture onto the floor and 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. It is recommended to apply two thin layers with minimum DFT 0.3 mm. Use spiked roller to finish the surface approx. 10–20 min after application. Spiked roller helps removing air bubbles from the coating.

Temafloor P300 metallic shades can be applied with a brush, roller or airless spray. Using a roller with different colour shades produces a vivid surface with a metallic shine effect. Recommended film thickness is 0.5–1.0 mm.
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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.

The above information is not intended to be exhaustive or complete. The information is based on laboratory tests and practical experience, and it is given to the best of our knowledge. The quality of the product is ensured by our operational system, based on the requirements of ISO 9001 and ISO 14001. As manufacturer we cannot control the conditions under which the product is being used or the many factors that have an effect on the use and application of the product. We disclaim liability for any damages caused by using the product against our instructions or for inappropriate purposes. We reserve the right to change the given information unilaterally without notice.

The product is intended for professional use only and shall only be used by professionals who have sufficient knowledge and expertise on the proper use of the product. The information above is advisory only. To the extent permitted by applicable law, we shall not approve of any liability for the conditions under which the product is being used or for the use or application of the product.

In case you intend to use the product for any other purpose than that recommended in this document without first getting our written confirmation on the suitability for the intended use, such use takes place at your own risk.
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EN 13813

The European harmonized product standard 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.

<table>
<thead>
<tr>
<th>EN 13813 SR-RWA1-B2.0-IR4</th>
<th>Synthetic resin screed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact resistance</td>
<td>IR4</td>
</tr>
<tr>
<td>Capillary absorption and permeability to water</td>
<td>$w &lt; 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$</td>
</tr>
<tr>
<td>Chemical resistance</td>
<td>CR 1, 2, 4..., 5, 8, 11..., 14, 15a (Class 2)</td>
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<tr>
<td>Release of corrosive substances</td>
<td>SR</td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>RWA 1</td>
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<tr>
<td>Thermal resistance</td>
<td>NPD</td>
</tr>
<tr>
<td>Reaction to fire</td>
<td>B$_f$-s1</td>
</tr>
<tr>
<td>Adhesion strength by pull off test</td>
<td>B 2.0</td>
</tr>
<tr>
<td>Release of dangerous substances</td>
<td>NPD</td>
</tr>
<tr>
<td>Sound absorption</td>
<td>NPD</td>
</tr>
<tr>
<td>Sound insulation</td>
<td>NPD</td>
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</tbody>
</table>
The European harmonized product standard 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.

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Permeability to CO2</td>
<td>NPD</td>
</tr>
<tr>
<td>Impact resistance</td>
<td>Class I: ≥ 4 Nm</td>
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<tr>
<td>Capillary absorption and permeability to water</td>
<td>w &lt; 0,1 kg/m² · h^0.5</td>
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<tr>
<td>Abrasion resistance</td>
<td>&lt; 3000 mg</td>
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<tr>
<td>Reaction to fire</td>
<td>B_f-s1</td>
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<tr>
<td>Adhesion strength by pull off test</td>
<td>≥ 2,0 N/mm²</td>
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<tr>
<td>Release of dangerous substances</td>
<td>NPD</td>
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<tr>
<td>Permeability to water vapour</td>
<td>Class II, 5 m &lt; s_D &lt; 50 m</td>
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<tr>
<td>Resistance to severe chemical attack</td>
<td>Class II</td>
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