



# Temafloor 400

## DESCRIPTION

A two-component solvent-free epoxy varnish.

## PRODUCT FEATURES AND RECOMMENDED USES

- Used as a binder for Temafloor 4000 troweling screed and epoxy concrete
- Used also as a topcoat on top of Temafloor coatings and screeds
- Filled with sand also suitable for patching of concrete floors
- Suitable for dust binding and priming of new and old concrete floors under Temafloor coatings

## TECHNICAL DATA

### Volume solids

approx. 100%.

### Specific gravity

1.1 kg/l (mixture).

### Mixing ratio

|          |                   |               |
|----------|-------------------|---------------|
| Base     | 3 parts by volume | Temafloor 400 |
| Hardener | 1 part by volume  | 008 4408      |

### Pot life (+23°C)

Approx. 30 minutes after mixing, on substrate.

### Practical coverage

Coverage on concrete floors is on the average:

Primer 5–8 m<sup>2</sup>/l

Topcoat 6–10 m<sup>2</sup>/l

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

Recoat after 16–24 hours

Fully cured 7 days

### Thinners

Thinner 1029

### Cleaning of equipment

Thinner 1029.

### Finish

High gloss. Sunlight will affect on the shade and the gloss of the varnish in the long run.

### Reaction to fire

B<sub>FL</sub>-s1 according to standard EN 13501-1.

### VOC

VOC 2004/42/EC (cat A/j) 500 g/l (2010)

Temafloor 400: max. VOC < 500 g/l

### Can sizes

10,0 L, 20,0 L, 200,0 L, 1000,0 L

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## 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 about 30% thinned Temafloor 400 epoxy varnish. 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 a mixture of unthinned Temafloor 400 epoxy varnish 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 16–24 hrs after priming. If the primed surface is not overcoated within 24 hrs, it should be abraded. Use 20–30% thinned Temafloor 400 varnish as a topcoat. Pour the mixture onto the floor and apply it with a trowel and level with a roller. Suitable roller is e.g. felt or nylon roller which "distributes" the varnish well. Length of the fluff is approx. 5–14 mm.

Note! Add the remaining mixture to the next batch of the product, do not scrape it out of the container onto the floor.

## 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.**



## Temafloor 400

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.

# Temafloor 400

## 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.

|   |  |
|---|--|
|  |  |
| Tikkurila Oyj<br>Kuninkaalantie 1<br>FI-01300 VANTAA                              |  |
| 11  |  |
| TIK-8400-5005b  |  |
| EN 13813 SR-RWA10-B2,0-IR 4   |  |
| Synthetic resin screed.   |  |
| Impact resistance   | IR4  |
| Capillary absorption and permeability to water                                    | $w < 0,1 \text{ kg/m}^2 \cdot h^{0,5}$       |
| Chemical resistance   | CR 1, 2, 5, 6b, 7...8, 10...12, 14 (Class 2) |
| Release of corrosive substances   | SR   |
| Abrasion resistance   | RWA 10 *)                                    |
| Thermal resistance  | NPD  |
| Reaction to fire  | B <sub>f</sub> -s1                           |
| Adhesion strength by pull off test  | B 2.0  |
| Release of dangerous substances   | NPD  |
| Sound absorption  | NPD  |
| Sound insulation  | NPD  |

\*) As Temafloor 4000

# Temafloor 400

## 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.

|   |  |
|---|--|
|  |  |
| 0809  |  |
| Tikkurila Oyj<br>Kuninkaalantie 1<br>FI-01300 Vantaa                              |  |
| 13  |  |
| 0809-CPD-0773   |  |
| TIK-8400-5005a  |  |
| EN 1504-2:2004  |  |
| Product for protection and repair of concrete structures – Coating.               |  |
| Permeability to CO <sub>2</sub>   | $s_D > 50$ m                                   |
| Impact resistance   | Class I: $\geq 4$ Nm                           |
| Capillary absorption and permeability to water                                    | $w < 0,1$ kg/m <sup>2</sup> · h <sup>0,5</sup> |
| Abrasion resistance   | $< 3000$ mg                                    |
| Reaction to fire  | B <sub>fl</sub> -s1                            |
| Adhesion strength by pull off test  | $\geq 2,0$ N/mm <sup>2</sup>                   |
| Release of dangerous substances   | NPD  |
| Permeability to water vapour  | Class II, $5$ m $< s_D < 50$ m                 |
| Resistance to severe chemical attack  | Class II                                       |