



# Temafloor 500M

## DESCRIPTION

A two-component, solvent-free epoxy coating for indoor use. M1 certified.

## PRODUCT FEATURES AND RECOMMENDED USES

- The M1 classification for low-emitting building materials has been granted by the Finnish Building Information Foundation RTS.
- 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 +70°C dry heat and +60°C in immersion. Does not resist abrupt, great or repeated changes of temperature.
- Self-levelling coating.
- For new and old concrete floors in car parks, garages, business premises, shopping centres, restaurants and cafes.
- Also suitable for floorings exposed to heavy mechanical and chemical stress in industrial and storage facilities, repair shops; e.g. process or paper machine units and corridors.

## TECHNICAL DATA

### Volume solids

approx. 100%

### Specific gravity

1.4 kg / l (mixture).

### Mixing ratio

Base	3 parts by volume	Temafloor 500M
Hardener	1 part by volume	Temafloor 500M Hardener

By weight

Base	4,6 parts by weight	Temafloor 500M
Hardener	1 part by weight	Temafloor 500M 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 m<sup>2</sup>/litre  
film thickness 0.5 mm coverage approx. 2 m<sup>2</sup>/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 24 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.

### Finish

High gloss.

### Colors

RAL, NCS, BS and SYMPHONY colour cards. Temaspeed Premium tinting.



## Temafloor 500M

<b>Thinning instructions</b>	Do not thin Temafloor 500M epoxy coating.
<b>Reaction to fire</b>	B <sub>FL</sub> -s1 according to standard EN 13501-1.
<b>VOC</b>	VOC 2004/42/EC (cat A/j) 500 g/l (2010) Temafloor 500M: max. VOC < 500 g/l
<b>Can sizes</b>	20,0 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 +15°C 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) by using a low speed hand drill with a paddle. The amount of mixture depends on the area to be coated and on the pot life of the mixture. 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, Temafloor 220W Primer, Fontefloor EP 100 or Fontefloor EP-FD 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 may be carried out with Temafloor 500M within 4-72 hrs (depending on the used primer) after priming and patching. If the primed surface is not topcoated within 24 hrs, 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. Use spiked roller to finish the surface approx. 10–20 min after application. Spiked roller helps removing air bubbles from the coating. 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 500M

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 500M

## 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.

	
0809	
Tikkurila Oyj Kuninkaalantie 1 FI-01300 VANTAA	
11	
TIK-A019-2018	
EN 13813	
Synthetic resin screed.	
Impact resistance	IR4
Capillary absorption and permeability to water	$w < 0,1 \text{ kg/m}^2 \cdot \text{h}^{0,5}$
Chemical resistance	CR 1,2,4,5,8,10,11,12,14 (class 2)
Release of corrosive substances	NPD
Abrasion resistance	NPD
Reaction to fire	B <sub>FL</sub> -s1
Adhesion strength by pull off test	B 2.0
Release of dangerous substances	NPD
Sound absorption	NPD
Sound insulation	NPD

# Temafloor 500M

## 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 Kuninkaalantie 1 FI-01300 VANTAA	
13	
0809-CPD-0773	
TIK-A018-2018	
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