

Temaflor 5000M

DESCRIPTION

M1 certified, solvent-free epoxy resin screed. The screed is prepared by adding sand to Temaflor 500M epoxy coating mixture.

PRODUCT FEATURES AND RECOMMENDED USES

- Excellent 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. Separate chemical resistance table available.
- Withstands +70°C dry heat and +60°C hot water. Does not resist abrupt, great or repeated changes of temperature.
- Self-levelling. Can be used for floors with a max. slope of 5%.
- For new and old concrete floors in car parks, garages, business premises, shopping centres, restaurants and cafe's. Also for floors exposed to heavy mechanical and chemical stress in industrial facilities, warehouses and repair shops; e.g. process or paper machine units, corridors and other floors subjected to high point loadings

TECHNICAL DATA

Volume solids

approx. 100%

Specific gravity

approx. 1,7 kg/ l (mixture of 1 part Temaflor 500M, 1 part sand 0,1-0,6 mm), depending on the grain size and amount of sand.

Mixing ratio

Screed film thickness 1.5-3 mm	1 part by vol. Temaflor 500M mixture 1 part by vol. sand grain size ø 0.1-0.6 mm
Screed film thickness 3-4 mm	1 part by vol. Temaflor 500M mixture 1 part by vol. sand grain size ø 0.1-0.6 mm 0.5 part by vol. sand grain size ø 1-2 mm

25 litres of Temaflor 500M filled with sand using the above mixing ratios gives approx. 32-46 litres of Temaflor 5000M epoxy screed ready for use. Reduce the amount of sand, if the temperature of screed, sand and ambient air is below +20°C.

Pot life (+23°C)

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

Practical coverage

For a flat substrate:
1.5 mm layer: 1.5 litre ready for use screed / m²
4 mm layer: 4 litres ready for use screed / m²
Practical coverage depends on the evenness of the substrate.

Drying time (+23°C)

Dust dry after 6 hours
Light traffic after 24 hours
Fully cured after 7 days
At lower temperature the curing process will last longer.

Cleaning of equipment

Thinner 006 1029 or 006 1031.

Finish

High gloss.

Colors

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

Thinning instructions

Do not thin Temaflor 5000M epoxy screed.

Reaction to fire

B_{FL}-s1 according to standard EN 13501-1.



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VOC

VOC 2004/42/EC (cat A/j) 500 g/l (2010)
Temafloor 5000M: max. VOC < 500 g/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, milling, 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 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 to get homogenous mixture) by using a low speed industrial hand drill with a paddle. Add filler to the mixture mixing carefully at the same time. Use dry, clean natural or quartz sand as a filler. Wet sand will result in air bubbles and decreased gloss in the finished screed. 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.
Application	Adjustable steel trowel followed by spiked roller.
Priming	Prime using 30–50% with water thinned Fontefloor EP Primer or 30-50 % with Thinner 1029 (or 1031) thinned Temafloor 200 Primer or Temafloor 400 epoxy varnish. Pour the mixture onto the floor, apply with a rubber trowel and level with a roller. 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 Fontefloor EP Primer or Temafloor 200 Primer epoxy varnish or Temafloor 500M epoxy coating and dry, clean sand. 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. Grind the patched areas before overcoating, if necessary. Note! Concrete surface should always be primed before patching.
Screed	The screed may be applied not earlier than 12 h (+23°C) and not later than 24 h after priming and patching. If the primed surface is not overcoated within 24 hrs, it should be abraded. Pour the screed mixture onto the floor and apply it with an adjustable trowel. When using a flat-bladed steel trowel, control that the thickness of layer is correct by observing screed consumption and by measuring the film thickness. Use spiked roller to finish the surface approx. 30 min after application. Spiked roller helps removing air bubbles from the coating. Note! Add the remaining mixture to the next batch of the screed, do not scrape it out of the container onto the floor.
Working joints, trimmings	When you apply screed on large areas, place working joints in line with pillars, expansion joints, gullies etc. Make working joints and trimmings by using a wide masking tape. Apply the screed on the masking tape and remove after levelling with a spiked roller. When continuing application, mask the edge of the already hardened layer of screed. Remove the tape after application and levelling with a spiked roller.



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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.

	
0809	
Tikkurila Oyj. Kuninkaalantie 1 FI-01300 VANTAA	
11	
TIK A022-2018	
EN 13813	
Synthetic resin screed.	
Impact resistance	IR4
Capillary absorption and permeability to water	< 0,1 kg/m ² · h ^{0,5}
Chemical resistance	CR 1,2,4,5,8,10,11,12,14 (class 2)
Abrasion resistance	RWA 10
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 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.

CE	
0809	
Tikkurila Oyj Kuninkaalantie 1 FI-01300 VANTAA	
13	
0809-CPD-0773	
TIK A021-2018	
EN 1504-2:2004	
Product for protection and repair of concrete structures – Coating.	
Permeability to CO ₂	sD > 50 m
Impact resistance	Class I: ≥ 4 Nm
Capillary absorption and permeability to water	w < 0,1 kg/m ² · h ^{0,5}
Abrasion resistance	< 3000 mg
Reaction to fire	B _{FL} -s1
Adhesion strength by pull off test	≥ 2,0 N/mm ²
Release of dangerous substances	NPD
Permeability to water vapour	class II, 5 m < sD < 50 m
Resistance to severe chemical attack	Class II