Temafloor 5000M

DESCRIPTION

M1 certified, solvent-free epoxy resin screed. The screed is prepared by adding sand to Temafloor 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 +70ºC dry heat and +60ºC 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 Temafloor 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. Temafloor 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. Temafloor 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 Temafloor 500M filled with sand using the above mixing ratios gives approx. 32-46 litres of Temafloor 5000M epoxy screed ready for use. Reduce the amount of sand, if the temperature of screed, sand and ambient air is below +20ºC.

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 Temafloor 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

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, milling 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 +15ºC 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. Add filler to the mixture mixing carefully at the same time. Use dry, clean natural or quarz 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 (+23ºC) 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.

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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.

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

0809

Tikkurila Oyj.
Kuninkaalantie 1
FI-01300 VANTAA

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TIK A022-2018

EN 13813

Synthetic resin screed.

Impact resistance	IR4
Capillary absorption and permeability to water	< 0,1 kg/m² · $h^{0,5}$
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 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 A021-2018	
EN 1504-2:2004	
Product for protection and repair of concrete structures – Coating.	
Permeability to CO2	s_D > 50 m
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 < sD < 50 m
Resistance to severe chemical attack	Class II