Temafloor 4000

DESCRIPTION

A solvent-free Temafloor 4000 troweling screed is prepared by adding sand to Temafloor 400 epoxy varnish mixture.

PRODUCT FEATURES AND RECOMMENDED USES

- Due to good impact resistance suitable for e.g. loading platforms, repair shops and market floors.
- Recommended also for floors subjected to steam and heat; e.g. in institutional kitchens and dairies.
- Withstands heavy wear. Resistance to chemicals is given case by case.
- Withstands +110ºC dry heat and +60ºC in immersion.
- For new and old concrete floors exposed to heavy mechanical and moderate chemical stress in production facilities, e.g. in wood, chemical and food industries.

TECHNICAL DATA

Volume solids

approx. 100 %.

Specific gravity

Approximately 1.8–2.1 kg / l (mixture), depending on the grain size and the amount of sand.

Mixing ratio

Temafloor 400 mixture	3 parts by volume Temafloor 400
	1 part by volume Temafloor 400 Hardener

Screed film thickness 3–6 mm	1 part by volume Temafloor 400 mixture
	3–4 parts by volume of filler sand, e.g. grain size of 0,5–1,2 mm

Note. If 1L Temafloor 400 mixture is blended with 3-4L sand, the volume of final screed mixture will be approximately 3-4L

Note. The amount of the filler and the grain size depends on the object.

Pot life (+23°C)

30–45 minutes on substrate, 15–30 minutes in the mixing container.

Practical coverage

For a flat substrate:
1 mm layer: 1 litre ready for use screed/m²
5 mm layer: 5 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 trucking after 24 hours
Recoatable after 16–24 hours
Fully cured after 7 days

At lower temperature the curing process will last longer.

Cleaning of equipment

Thinner 006 1029.

Finish

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

Colors

The colour of the screed is determined by the sand used.

Thinning instructions

Do not thin TEMAFLOOR 4000 grinding screed.

Reaction to fire

C_{FL}-s1according to standard EN 13501-1.

Temafloor 4000

VOC	VOC 2004/42/EC (cat A/j) 500 g/l (2010) Temafloor 4000: max. VOC < 500 g/l

Temafloor 4000

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 +15ºC 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. 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

By adjustable trowel, serrated trowel, float, levelling trowel and screed box.

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. Scatter sand of grain size 0.5–1.2 mm on the fresh primer coat to ensure the screed adhesion and prohibit gliding of the screed.

Screed

Pour the screed mixture onto the floor. If a thin layer is required, apply by an adjustable trowel to the desired screed thickness. Thick layers are applied by a screed box or by a straight-edge and suitable laths to gauge the required thickness. Trowel the screeded surface by hands or use a suitable lightweight troweling machine. To get a non-porous surface overcoat the screed after 16–24 hrs with Temafloor 210 or 400 epoxy varnish.

Topcoating

Overcoating should be done within 16–24 hrs after priming using unthinned Temafloor 400 epoxy varnish. 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.

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 4000

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

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Kuninkaalantie 1
FI-01300 VANTAA

11

TIK-8400-5012b

EN 13813 SR-RWA10-B2,0-IR 4

Synthetic resin screed.

Impact resistance	IR4
Capillary absorption and permeability to water	$w < 0,1\ kg/m^2 \cdot h^{0,5}$
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	C_{fl}-s1
Adhesion strength by pull off test	B 2.0
Release of dangerous substances	NPD
Sound absorption	NPD
Sound insulation	NPD

Temafloor 4000

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-8400-5012a	
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	C_{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 < s_D < 50 m
Resistance to severe chemical attack	Class II