



Temafloor 401

DESCRIPTION

A two-component solvent-free epoxy varnish.

PRODUCT FEATURES AND RECOMMENDED USES

- A low viscosity varnish used as binder in Temafloor 4000 troweling screed.

TECHNICAL DATA

Volume solids

approx. 100%

Specific gravity

1.1 kg / litre (mixture).

Mixing ratio

Temafloor 401 mixture	Temafloor 401: 2 parts by volume
	Temafloor 401 hardener: 1 part by volume
Screed film thickness 2–10 mm	1 part by volume Temafloor 401 mixture
	6–8 parts by volume of filler sand, e.g. grain size of 1.0–1.8 mm

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

Pot life (+23°C)

20–30 minutes on substrate, 10–15 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 16–24 hours
Fully cured 7 days

At lower temperature the curing process will last longer.

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.

Thinning instructions

Do not thin Temafloor 4000 troweling screed.

Reaction to fire

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

VOC

VOC 2004/42/EC (cat A/j) 500 g/l (2010)
Temafloor 401: max. VOC < 500 g/l

Can sizes

20,0 L, 200,0 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, 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. 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 401 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. Scatter sand of grain size Ø 0.5–1.2 mm on the fresh primer coat to ensure the screed adhesion and prohibit gliding of the screed.

Patching

Patch pot-holes and cracks with a mixture of unthinned Temafloor 401 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.

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.

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 unthinned Temafloor 401 varnish for the topcoat. 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.



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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.

CE	
Tikkurila Oyj Kuninkaalantie 1 FI-01300 VANTAA	
11	
TIK-8400-5001b	
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, 4, 4a, 6, 6b, 7, 7a, 11, 12, 14 (Class 2)
Release of corrosive substances	SR
Abrasion resistance	RWA 10 *)
Thermal resistance	NPD
Reaction to fire	B _{f1} -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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*) As 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.

	
0809	
Tikkurila Oyj Kuninkaalantie 1 FI-01300 Vantaa	
13	
0809-CPD-0773	
TIK-8400-5001a	
EN 1504-2:2004	
Product for protection and repair of concrete structures – Coating.	
Permeability to CO ₂	$s_D > 50 \text{ m}$
Impact resistance	Class I: $\geq 4 \text{ Nm}$
Capillary absorption and permeability to water	$w < 0,1 \text{ kg/m}^2 \cdot h^{0,5}$
Abrasion resistance	$< 3000 \text{ mg}$
Reaction to fire	B _f -s1
Adhesion strength by pull off test	$\geq 2,0 \text{ N/mm}^2$
Release of dangerous substances	NPD
Permeability to water vapour	Class I, $s_D < 5 \text{ m}$
Resistance to severe chemical attack	Class II