

**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	

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 / m<sup>2</sup>
5 mm layer: 5 litres ready for use screed / m<sup>2</sup>

Practical coverage depends on the evenness of the substrate.

**Drying time (+23°C)** Dust dry after 6 hours

Light trucking afte 24 hours Recoatable 16–24 hours Fully cured 7 days

At lower temperature the curing process will last longer.

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<sub>FI</sub> -s1 according to standard EN 13501-1.

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



### **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 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.

#### **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 +15°C 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. 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  $\emptyset$  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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# **Temafloor 401**

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.



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.

	<b>E</b>			
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 kg/m² · h <sup>0,5</sup>			
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 <sub>fl</sub> -s1			
Adhesion strength by pull off test	B 2,0			
Release of dangerous substances	NPD			
Sound absorption	NPD			
Sound insulation	NPD			

f) 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.

CE			
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 CO2	sp > 50 m		
Impact resistance	Class I: ≥ 4 Nm		
Capillary absorption and permeability to water	$w < 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$		
Abrasion resistance	< 3000 mg		
Reaction to fire	B <sub>fl</sub> -s1		
Adhesion strength by pull off test	≥ 2,0 N/mm²		
Release of dangerous substances	NPD		
Permeability to water vapour	Class I, s <sub>D</sub> < 5 m		
Resistance to severe chemical attack	Class II		