

## Temafloor PU Flex

DESCRIPTION

A solvent-free, flexible, two-component polyurethane coating.

PRODUCT FEATURES AND RECOMMENDED USES

• Elongation at break 180% (7 d)

• Extremely low VOC-content

 Water impermeable coating for new and old concrete floors exposed to moderate mechanical and chemical stress

· Very good impact resistance

• Self-levelling, to be applied with serrated or steel trowel

• The M1 classification for low-emitting building materials has been granted by the

Finnish Building Information Foundation RTS

• Typical application e.g. air-conditioning rooms

#### **TECHNICAL DATA**

Volume solids Approx. 100%.

Specific gravity 1.4 kg / litre (mixture)

Mixing ratio By volume:

Base 4 parts by volume Temafloor PU Flex

Hardener 1 part by volume Temafloor PU Flex Hardener

By weight:

Base 4.8 parts by weight Temafloor PU Flex

Hardener 1 part by weight Temafloor PU Flex Hardener

Pot life (+23°C) 15 minutes on substrate, 10 minutes on the mixing container. Pour the whole mixture

onto the floor all at once.

Practical coverage Practical coverage depends on the porosity and evenness of the substrate and on the

application method.

Film thickness 1 mm coverage approx. 1 liter/m<sup>2</sup>

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

Foot traffic after 24 hours Fully cured after 7 days

At lower temperatures the curing process will last longer.

Cleaning of equipment Thinner 1061.

Finish High gloss.

Colors RAL 7035 and TVT 0229.

**Thinning instructions** Do not thin Temafloor PU Flex polyurethane coating.

Reaction to fire C<sub>FL</sub>-s1 according to standard EN 13501-1

**VOC** VOC 2004/42/EC (cat A/j) 500 g/l (2010)

Temafloor PU Flex max. VOC < 15 g/l

Can sizes 20,0 L



## **Temafloor PU Flex**

#### **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 Temafloor 400, Temafloor Primer, Temafloor 220W or Fontefloor EP Primer epoxy varnish thinned according to instructions in the respecitive products' PDS. Pour the primer 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. Subsequent treatment can be carried out after 2 hours using "wet-on-wet" technique. A porous priming coat will result in holes and air bubbles in the finished coating.

Scatter sand of grain size Ø0,1–0,6 mm on the fresh primer coat to ensure the screed adhesion.

**Patching** 

Patch pot-holes and cracks with a mixture of unthinned Temafloor 400 or Fontefloor EP Primer 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.

**Topcoating** 

Temafloor PU Color should not be applied on top of the above mentioned primers earlier than 16-24 hrs.

Non-broadcasted coat: Apply Temafloor PU Color on primer within 16-24 h after installation of the preceding coat. Abrade older than 24 h coat. If Temafloor PU Color should be applied on a broadcasted primer, abrasion is not needed.

Pour the mixture onto the floor and spread it with a trowel and level with a roller. Control that the layer thickness is correct by observing consumption and by measuring the film thickness.

Recommended layer thickness is 1.0 mm. Use a spiked roller to

finish the surface approx. 10–20 min after application. Spiked roller helps removing air bubbles from the coating.

Note! Add any remaining mixture to the next batch of the product, do not scrape it out of the container onto the floor.

**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 PU Flex**

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.



# **Temafloor PU Flex**

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 and 1f in the appendix ZA.

CE	
0809	
Tikkurila Oyj Kuninkaalantie 1 FI-01300 VANTAA	
16	
TIK-048V-5001	
EN 1504-2:2004	
Product for protection and repair of concrete structures – Coating.	
Permeability to CO2	sd > 50 m
Impact resistance	Class III: ≥ 20 Nm
Capillary absorption and permeability to water	$w < 0.1 \text{ kg/m}^2 \cdot h^{0.5}$
Abrasion resistance	< 3000 mg
Reaction to fire	C <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, sD < 5 m