

# Temafloor PU Flex

**DESCRIPTION** A

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

PRODUCT FEATURES AND RECOMMENDED USES

• Elongation at break 180% (7 d)

· No shrinking or cracking of the coating surface

· 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 Base 4 parts by volume Temafloor PU Flex

Hardener 1 part by volume 008 4015

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

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

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

Temafloor PU Flex: max. VOC < 500 g/l

Can sizes 20,0 L



# **Temafloor PU Flex**

### **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 +15°C during application or drying. Relative humidity of air should not exceed 70%.

#### 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 or Temafloor 220W epoxy varnish thinned 30–50% with Thinner 1029 or Fontefloor EP Primer epoxy varnish thinned about 20–50% with water. 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**

Overcoating should be done within 16–24 hrs after priming. 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. Use spiked roller to finish the surface approx. 10 min after application. Spiked roller helps removing air bubbles from the coating.

Note! Add the remaining mixture to the next batch of the coating, 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.



3(4)



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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.



# **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	sp > 50 m
Impact resistance	Class III: ≥ 20 Nm
Capillary absorption and permeability to water	w < 0,1 kg/m² · h0,5
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