

Temafloor PU Flex

DESCRIPTION

A solvent-free, flexible, two-component polyurethane coating for indoor use.

PRODUCT FEATURES AND RECOMMENDED USES

- Elongation at break 180% (7 d).
- Extremely low VOC-content.
- Waterproof coating, but still permeable to water vapour (Class I, Sd <5 m).
- 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.
- For new and old concrete floors exposed to moderate mechanical and chemical stress, 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	4,7 parts by weight	Temafloor PU Flex
Hardener	1 part by weight	Temafloor PU Flex Hardener

Note! Mixing ratio by weight was calculated base on average density of the components.

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/m²

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.

Thinners

Thinner 1061

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_{FL}-s1 according to standard EN 13501-1



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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

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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 of the concrete 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 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 220W Primer, Fontefloor EP 100 or Fontefloor EP-FD Primer thinned according to instructions in the respective product's 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. A porous priming coat will result in holes and air bubbles in the finished coating. The overcoating time for the chosen primer is specified in its PDS. If the overcoating time has passed, it is necessary to sand the primer coat matte. Alternatively, to extend the overcoating time, it is recommended to scatter sand of grain size Ø 0.1-0.6 mm on the fresh primer coat. The amount of sand used should be 0.5-1.0 kg/m² depending on the thickness of the primer coat. The resulted coat should be coarse, and no loose sand or untreated areas bigger than the size of a thumb are acceptable.
Patching	Patch pot-holes and cracks with Colofill putty or a solvent-free epoxy primer, e.g. Temafloor 400, dry clean sand or Temafloor Thickener. Mixing ratio e.g. 1 part by volume of epoxy mixture and 1–2 parts by volume of sand of grain size 0.1–0.6 mm. Make sure the patched areas are flat before priming. Sand if needed. Note! Concrete surface should always be primed before patching.
Topcoating	Temafloor PU Flex should not be applied on top of the above mentioned primers earlier than 16 hrs. 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.



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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.

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 1504-2:2004

The European harmonized product standard 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.

	
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 CO ₂	sD > 50 m
Impact resistance	Class III: ≥ 20 Nm
Capillary absorption and permeability to water	w < 0,1 kg/m ² · h ^{0,5}
Abrasion resistance	< 3000 mg
Reaction to fire	C _{fl} -s1
Adhesion strength by pull off test	≥ 2,0 N/mm ²
Release of dangerous substances	NPD
Permeability to water vapour	Class I, sD < 5 m