Temafloor PU Flex Color

DESCRIPTION

A solvent-free, flexible, two-component polyurethane coating used in Tikkurila Cozy Floor System.

PRODUCT FEATURES AND RECOMMENDED USES

- The M1 classification for low-emitting building materials has been granted by the Finnish Building Information Foundation RTS. M1 classification enhances good indoor air quality. Due to its extremely low VOC content Temafloor PU Flex Color ensures healthy environment in hospitals, schools and day care centers
- Elongation at break 200%
- Self-levelling coating is easy and fast to assemble, and easy to renovate when compared to conventional flooring solutions
- The wide range of available colours gives almost free hands to the designer
- No shrinking or cracking of the coating surface
- Water impermeable coating for new and old concrete floors exposed to moderate mechanical stress

TECHNICAL DATA

Volume solids	Approx. 100%.
Specific gravity	1.4 kg / liter (mixture)
Mixing ratio	Base 3 parts by volume Temafloor PU Flex Color Hardener 1 part by volume Temafloor PU Flex Color Hardener
Possible hardeners	Temafloor PU Flex Color 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 2 mm coverage approx. 2 liters/m2
Drying time (+23°C)	Dust dry after 2 hours Overcoatable after 24 hours Fully cured after 7 days At lower temperatures the curing process will last longer.
Cleaning of equipment	Thinner 1061
Colors	RAL, NCS, SSG, BS, MONICOLOR NOVA and SYMPHONY color cards. TEMASPEED tinting.
Thinning instructions	Do not thin Temafloor PU Flex Color polyurethane coating.
VOC	VOC 2004/42/EC (cat A/j) 500 g/l (2010) Temafloor PU Flex Color: max. VOC < 500 g/l
Can sizes	20,0 L

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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.

Cementitious levelling screed: 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 +15ºC during application or drying. Relative humidity of air should not exceed 70%. Note that high relative humidity of air may decrease the gloss of the coating.

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.

Application

Serrated or adjustable steel trowel.

Priming

Prime using Fontefloor EP Primer epoxy varnish thinned 30–50% 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 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.

Topcoating

Application may be done within 16–24 hrs after priming and patching. If the primed surface is not overcoated within 24 hrs, it should be abraded. Always remove the loose material before overcoating.

Pour the mixture onto the floor and apply it with a trowel. Recommended film thickenss is 2 mm.

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

Temafloor PU Flex Color should always be overcoated with Fontefloor PU Matt or Fontedur FL Matt.

Storage

Hardener should be stored in temperatures at around 20 C. The hardener starts to crystallize when exposed to temperatures below 20 C. Crystallization due to cold is reversible and the hardener can be melted and used without any impaired properties. For more information contact the producer.

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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 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 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	
18	
TIK-A020-2018	
EN 1504-2:2004	
Product for protection and repair of concrete structures – Coating.	
Permeability to CO2	s_D > 50 m
Impact resistance	Class III: ≥ 20 Nm
Capillary absorption and permeability to water	w < 0,1 kg/m² · $h^{0,5}$
Abrasion resistance	< 3000 mg
Reaction to fire	E_{FL}-s1*
Adhesion strength by pull off test	≥ 2,0 N/mm²
Release of dangerous substances	NPD
Permeability to water vapour	Class II: 5 m ≤ s_D ≤ 50 m

* For Tikkurila Cozy floor system the reaction to fire class is B_{FL}-s1