

Temafloor AC501

DESCRIPTION

A two-component, solvent-free low viscosity acrylic binder.

PRODUCT FEATURES AND RECOMMENDED USES

- Used as a binder for Temafloor AC acrylic grinding screed
- Suitable to be used as a self-levelling coating and as a binder of a coloured screed
- Mixed with sand also suitable for patching of concrete floors
- Cures fast also in low temperatures
- Recommended for the floors of commercial buildings, storages, laboratories, institutional kitchens and food processing industries

TECHNICAL DATA

Volume solids

approx. 100%

Specific gravity

0.97 kg /l (ready made mixture)

Mixing ratio

| Temperature (°C)* | The amount of hardener (percentage of weight of the binder) | Pot life (min) | Drying time (min) |
|-------------------|---|----------------|-------------------|
| +5 | 5 | ab. 17 | ab. 55 |
| +10 | 4 | ab. 20 | ab. 50 |
| +15 | 3 | ab. 20 | ab. 50 |
| +20 | 3 | ab. 15 | ab. 35 |
| +25 | 2 | ab. 20 | ab. 40 |
| +30 | 2 | ab. 17 | ab. 35 |

* Temperature of the binder, air and the floor.

Grinding screeds 4–6 mm:

Temafloor AC501 22 w-%

Coloured sand Ø 0,3–0,8 mm 15 w-%

Coloured sand Ø 0,6–1,2 mm 63 w-%

Possible hardeners

BP-50-FT, Perkadox®CH-50 or PEROXAN BP-Pulver 50 W.

Practical coverage

For a flat substrate:

2 mm layer: 2 litres ready to use screed / m²

6 mm layer: 6 litres ready to use screed / m²

Practical coverage depends on the evenness of the substrate.

Cleaning of equipment

Thinner 006 1400.

Finish

Semi-gloss. Sunlight will affect on the shade and the gloss of the varnish in the long run.

Colors

The colour of the screed is determined by the sand used

Thinning instructions

Do not thin.

VOC

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

Temafloor AC 501: max. VOC < 500 g/l.

Can sizes

20,0 L, 200,0 L

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APPLICATION INSTRUCTIONS

| | |
|-------------------------------|---|
| Surface preparation | <p>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.</p> <p>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.</p> |
| Application conditions | <p>The relative humidity of the concrete should not exceed 97%. The temperature of the ambient air, surface or coating should not fall below +5°C during application or drying. Relative humidity of air should not exceed 80%.</p> |
| Mixing components | <p>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.</p> |
| Priming | <p>Prime using Temafloor AC102 Primer. Pour the primer mixture onto the floor and apply by the trowel or roller 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 30 min.</p> <p>Scatter sand of grain size Ø 0.4–0.8 mm on the fresh primer coat to ensure the screed adhesion and prohibit gliding of the screed.</p> |
| Patching | <p>Patch pot-holes and cracks with a mixture of unthinned Temafloor AC501 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.</p> <p>The floor can be levelled by using Temafloor AC501 and sand of grain size 0,1-0,3 mm.</p> <p>Note! Concrete surface should always be primed before patching.</p> |
| Screed | <p>Pour the mixture onto the floor. Apply by an adjustable trowel to the desired thickness. Trowel the screeded surface by hands or use broadcasting technique.</p> |
| Topcoating | <p>Topcoating can be carried out after the screed has cured. Topcoating can be carried out with Temafloor AC601 Clear topcoat. Pour the varnish mixture onto the floor, spread with a rubber trowel and level with a roller.</p> <p>Note! Add the remaining mixture to the next batch of the product, do not scrape it out of the container onto the floor.</p> |

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.



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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 AC501

EN 13813

The European harmonized product standard 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.

| | |
|--|---|
| CE | |
| Tikkurila Oyj Kuninkaalantie 1 FI-01300 VANTAA | |
| 13 | |
| TIK-1600-5002b | |
| EN 13813 SR-B2,0-IR 4 | |
| Synthetic resin screed. | |
| Impact resistance | IR4 |
| Capillary absorption and permeability to water | $w < 0,1 \text{ kg/m}^2 \cdot \text{h}^{0,5}$ |
| Chemical resistance | Class 1 |
| Release of corrosive substances | SR |
| Abrasion resistance | AR 0,5 |
| Thermal resistance | NPD |
| Reaction to fire | E _{fl} (NPD) |
| Adhesion strength by pull off test | B 2,0 |
| Release of dangerous substances | NPD |
| Sound absorption | NPD |
| Sound insulation | NPD |

Tested as part of a system together with Temafloor AC102 Primer and Temafloor AC601 Clear.

Temafloor AC501

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, 1f and 1g in the appendix ZA.

| | |
|---|--|
| CE | |
| 0809 | |
| Tikkurila Oyj Kuninkaalantie 1 FI-01300 Vantaa | |
| 13 | |
| 0809-CPD-0773 | |
| TIK-1600-5002a | |
| EN 1504-2:2004 | |
| Product for protection and repair of concrete structures – Coating. | |
| Permeability to CO ₂ | $s_D > 50 \text{ m}$ |
| Impact resistance | Class I: $\geq 4 \text{ Nm}$ |
| Capillary absorption and permeability to water | $w < 0,1 \text{ kg/m}^2 \cdot h^{0,5}$ |
| Abrasion resistance | $< 3000 \text{ mg}$ |
| Reaction to fire | E _{fl} -s1 (NPD) |
| Adhesion strength by pull off test | $\geq 2,0 \text{ N/mm}^2$ |
| Release of dangerous substances | NPD |
| Permeability to water vapour | Class III, $s_D > 50 \text{ m}$ |
| Resistance to severe chemical attack | Class I |

Tested as part of a system together with Temafloor AC102 Primer and Temafloor AC601 Clear.