Fontefloor PU Cem Top

DESCRIPTION
A solvent-free, water-borne hybrid polyurethane concrete topcoat.

PRODUCT FEATURES AND RECOMMENDED USES
- Resists mechanical wear, thus extending the service life of the coated surface
- Gives a matt gloss surface and seals the surface
- Used in top of Fontefloor PU Cem systems

TECHNICAL DATA
Volume solids
100%

Specific gravity
1.5 kg / l (mixture)

Mixing ratio
<table>
<thead>
<tr>
<th>Fontefloor PU Cem Top mixture</th>
<th>Fontefloor PU Cem 2 A 2.5KG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fontefloor PU Cem B 2.6KG</td>
<td></td>
</tr>
<tr>
<td>Fontefloor PU Cem C 4.2KG</td>
<td></td>
</tr>
</tbody>
</table>

Pot life (+23°C)
At +20°C: approx. 15 minutes

Practical coverage
For a flat substrate:
0.6–0.8 kg/m² depending on the system used.

Practical coverage depends on the evenness of the substrate.

Drying time (+23°C)
Foot traffic after 8 hours
Light trucking after 24 hours
Fully cured after 7 days

At lower temperature the curing process will last longer.

Cleaning of equipment
Cleaning of equipment with Thinner 1061. Equipment should be cleaned immediately after use before the coating has dried.

Finish
Matt.

Colors
Red, green, buff, grey and crème.

Thinning instructions
Do not thin Fontefloor PU Cem Top.

VOC
VOC 2004/42/EC (cat A/j) 140 g/l (2010)
Fontefloor PU Cem Top: max. VOC < 140 g/l

Can sizes
3,0 L
Fontefloor PU Cem Top
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.

Cementitious levelling screed
Check compatibility with the levelling screed manufacturer.

Polymer modified screed
Check compatibility with the polymer modified screed manufacturer.

Application conditions
The relative humidity of the concrete should not exceed 97%. The temperature of the ambient air, surface or coating should be between +12°C–+25°C during either application or drying. Relative humidity of air should not exceed 80%.

Mixing components
Mix the correct proportions of the parts A and B thoroughly approx. 30 s by using a hand drill with a paddle, concrete mixer or power mixer. Add part C to the mixture and mix approx. 3 min until the mixture is homogenous. Ensure that the mixture is homogenous and use it immediately after mixing.

Insufficient mixing or incorrect mixing ratio will result in uneven drying of the surface, weaken the properties of the screed and risk the success of the application.

Priming
Prime with unthinned Fontefloor PU Cem Primer or Fontfloor PU Cem 2. Pour the mixture onto the floor, apply with a long haired roller or steel trowel. Scatter sand of grain size 0.4–0.8 mm at approx. 150 g/m² on the fresh primer coat to ensure the screed adhesion and prohibit gliding of the screed.

Patching
Patch pot-holes and cracks with Fontefloor PU Cem 2 or Temafloor 400 epoxy varnish and dry, clean sand. Mixing ratio e.g. 1 part by volume of epoxy or Fontefloor PU Cem 2 mixture and 1–2 parts by volume of sand of grain size Ø 0.1–0.6 mm. Sand the patched areas before overcoating, if necessary.

Topcoating
Topcoating can be carried out after Fontefloor PU Cem system has cured. Pour the mixture on the floor and spread with long haired roller. Spiked roller helps removing air bubbles from the coating.

Storage
Under cover and free of the ground, in dry conditions above +5°C and below +25°C. This is particularly important for the part C. Protect from frost even during transport.

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.
Fontefloor PU Cem Top

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.
Fontefloor PU Cem Top

EN 13813:2002

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.

<table>
<thead>
<tr>
<th>Property</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact resistance</td>
<td>IR4</td>
</tr>
<tr>
<td>Capillary absorption and permeability to water</td>
<td>NPD</td>
</tr>
<tr>
<td>Chemical resistance</td>
<td>NPD</td>
</tr>
<tr>
<td>Release of corrosive substances</td>
<td>SR</td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>≤AR1</td>
</tr>
<tr>
<td>Thermal resistance</td>
<td>NPD</td>
</tr>
<tr>
<td>Reaction to fire</td>
<td>E_fi</td>
</tr>
<tr>
<td>Adhesion strength by pull off test</td>
<td>≥B2,0</td>
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<tr>
<td>Release of dangerous substances</td>
<td>NPD</td>
</tr>
<tr>
<td>Sound absorption</td>
<td>NPD</td>
</tr>
<tr>
<td>Sound insulation</td>
<td>NPD</td>
</tr>
</tbody>
</table>

1) Tested as part of a system together with Fontefloor PU Cem 2 and Fontefloor PU Cem 5.
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.

Fontefloor PU Cem Top

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.

<table>
<thead>
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<th>Property</th>
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<tbody>
<tr>
<td>Permeability to CO2</td>
<td>$s_D &gt; 50$ m</td>
</tr>
<tr>
<td>Impact resistance</td>
<td>Class I: $\geq 4$ Nm</td>
</tr>
<tr>
<td>Capillary absorption and permeability to water</td>
<td>$w &lt; 0.1$ kg/m² · h$^{0.5}$</td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>$&lt; 3000$ mg</td>
</tr>
<tr>
<td>Reaction to fire</td>
<td>$E_{fl}$</td>
</tr>
<tr>
<td>Adhesion strength by pull off test</td>
<td>$\geq 2.0$ N/mm²</td>
</tr>
<tr>
<td>Release of dangerous substances</td>
<td>NPD</td>
</tr>
<tr>
<td>Permeability to water vapour</td>
<td>Class III, $s_D &gt; 50$ m</td>
</tr>
<tr>
<td>Resistance to severe chemical attack</td>
<td>Class II</td>
</tr>
</tbody>
</table>

1) Tested as part of a system together with Fontefloor PU Cem 2 and Fontefloor PU Cem 5.