Fontefloor PU Cem 2

DESCRIPTION
A solvent-free, water-borne self-levelling hybrid polyurethane concrete coating which ensures the adhesion of the total coating system.

PRODUCT FEATURES AND RECOMMENDED USES
• Outstanding sealing properties. Fontefloor PU Cem 2 seals the concrete thus preventing bubbles appearing on the final coating.
• Excellent ability to fill in irregularities in the surface. Fontefloor PU Cem 2 ensures smooth finish of the coating by filling the holes and cracks.
• Can be used as a primer or as a self levelling coating.
• Used in food and beverage industry, warehouses, chemical industry and pharmaceutical industry.

TECHNICAL DATA

Volume solids
100%

Specific gravity
1.35 kg/l (mixture)

Mixing ratio
<table>
<thead>
<tr>
<th>Fontefloor PU Cem 2 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 12KG</td>
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</tr>
</tbody>
</table>

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

Practical coverage
For a flat substrate:
Approximately 2 kg/mm².
Practical coverage depends on the evenness of the substrate.

Drying time (+23°C)
Foot traffic after 8 hours
Recoatable after 12–48 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. Sunlight will affect on the shade and the gloss of the varnish in the long run.

Colors
Red, green, buff, grey and crème.

Thinning instructions
Do not thin Fontefloor PU Cem 2 hybrid polyurethane concrete coating.

VOC
VOC 2004/42/EC (cat A/j) 140 g/l (2010)
Fontefloor PU Cem 2: max. VOC < 140 g/l

Can sizes
3,0 L
Fontefloor PU Cem 2
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 application and 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. Pour the mixture onto the floor, apply with a long haired roller. 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.

If Fontefloor PU Cem 2 is used for priming, see instructions from technical data sheet of the topcoat.

Patching
Patch pot-holes and cracks with Fontefloor PU Cem 2. Sand the patched areas before overcoating, if necessary.

Topcoating
Overcoating should be done within 12–48 hours after priming. Pour the mixture onto the floor and apply with a trowel and level with a roller. To obtain a smoother surface and remove trowel marks, the surface must be spike rolled.

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 2

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.
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>Requirement</th>
<th>Specification</th>
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</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>
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<tr>
<td>Release of corrosive substances</td>
<td>SR</td>
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<tr>
<td>Abrasion resistance</td>
<td>≤AR1</td>
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<tr>
<td>Thermal resistance</td>
<td>NPD</td>
</tr>
<tr>
<td>Reaction to fire</td>
<td>Efl</td>
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<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>
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<tr>
<td>Sound insulation</td>
<td>NPD</td>
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</table>

1) Tested as part of a system together with Fontefloor PU Cem Primer and Fontefloor PU Cem Top.
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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, 1f and 1g in the appendix ZA.

<table>
<thead>
<tr>
<th>Requirement</th>
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<tbody>
<tr>
<td>Permeability to CO₂</td>
<td>s₀ &gt; 50 m</td>
<td>Impact resistance</td>
<td>Class I: ≥ 4 Nm</td>
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<tr>
<td>Capillary absorption and permeability to water</td>
<td>w &lt; 0,1 kg/m² ∙ h⁰.⁵</td>
<td>Abrasion resistance</td>
<td>&lt; 3000 mg</td>
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</tr>
<tr>
<td>Reaction to fire</td>
<td>Eₘ</td>
<td>Adhesion strength by pull off test</td>
<td>≥ 2,0 N/mm²</td>
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<tr>
<td>Release of dangerous substances</td>
<td>NPD</td>
<td>Permeability to water vapour</td>
<td>Class III, sD &gt; 50 m</td>
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<tr>
<td>Resistance to severe chemical attack</td>
<td>Class II</td>
<td></td>
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</tbody>
</table>

1) Tested as part of a system together with Fontefloor PU Cem Primer and Fontefloor PU Cem Top.