

# Fontefloor PU Cem 6-9

## DESCRIPTION

A solvent-free, water-borne hybrid polyurethane concrete mortar flooring for extreme service conditions.

## PRODUCT FEATURES AND RECOMMENDED USES

- Combination of high chemical, mechanical and fluctuating thermal resistance. Fontefloor PU Cem is a seamless heavy duty flooring system resisting wide range of chemicals, abrasion and thermal shocks. The product is an ideal solution for extreme service conditions
- Excellent resistance to hot water and permanent water loading. Fontefloor PU Cem 6-9 withstands repeated spillage of hot and cold liquids up to +120°C. Therefore the product is most suitable for e.g. food and beverage industry
- Non-absorptive & impermeable. Fontefloor PU Cem 6-9 does not absorb or penetrate any liquids or dirt, thus making it easy to clean. The product is a perfect choice for surfaces with high demand of hygiene
- Resists constant temperatures from -20°C to +90°C depending on layer thickness
- Designed to be used in food industry, especially when chemical resistance and resistance to organic acids is required

## TECHNICAL DATA

### Volume solids

100%

### Specific gravity

2.10 kg / l (mixture)

### Mixing ratio

Fontefloor PU Cem 6-9 mixture	Fontefloor PU Cem 6-9 A 2.5KG
	Fontefloor PU Cem B 2.6KG
	Fontefloor PU Cem C 12KG
	Fontefloor PU Cem D 10KG

### Pot life (+23°C)

At +20°C: approx. 15 minutes

### Practical coverage

For a flat substrate:

6 mm: approximately 13–14kg/m<sup>2</sup>

9 mm: approximately 19–20kg/m<sup>2</sup>

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 mortar 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 6-9.

### VOC

VOC 2004/42/EC (cat A/j) 140 g/l (2010)

Fontefloor PU Cem 6-9: max. VOC < 140 g/l

### Can sizes

3,0 L

# Fontefloor PU Cem 6-9

## APPLICATION INSTRUCTIONS

<b>Surface preparation</b>	<p>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.</p> <p>The substrate must have a tensile strength above 1.5 MPa. For application on cementitious leveling screed: check compatibility with the leveling screed manufacturer.</p>
<b>Application conditions</b>	<p>The relative humidity of the concrete should not exceed 97%. Residual moisture content 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 80%.</p>
<b>Mixing components</b>	<p>Mix the correct proportions of parts A and B thoroughly approx. 30 s by using a hand drill with a paddle, concrete mixer or power mixer. Add parts C and D to the mixture and mix approximately 3 minutes until the mixture is homogenous. Ensure that the mixture is homogenous and use it immediately after mixing.</p> <p>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.</p>
<b>Priming</b>	<p>Prime with unthinned Fontefloor PU Primer or Fontefloor PU Cem 2. Pour the mixture onto the floor, apply with a long haired roller or steel trowel. Scatter sand of grain size 1.0–1.8 mm at approx. 150 g/m<sup>2</sup> on the fresh primer coat to ensure the screed adhesion and prohibit gliding of the screed.</p>
<b>Patching</b>	<p>Patch pot-holes and cracks with Fontefloor unthinned PU Cem 2 or Temafloor 400 epoxy varnish and dry, clean sand. Mixing ratio e.g. 1 part by volume of epoxy or PU Cem 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.</p>
<b>Topcoating</b>	<p>Overcoating should be done within 12–48 hours after priming. Pour the mixture onto the floor and apply with a pin rake or trowel to desired thickness.</p>
<b>Storage</b>	<p>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.</p>

<b>HEALTH AND SAFETY</b>	<p>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.</p> <p>A health and safety data sheet is available on request from Tikkurila Oyj.</p>
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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.

# Fontefloor PU Cem 6-9

## 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.

CE	
Tikkurila Oyj Kuninkaalantie 1 FI-01300 VANTAA	
17	
TIK-6629-5001b	
EN 13813:2002	
Synthetic resin screed.	
Impact resistance	IR4
Capillary absorption and permeability to water	NPD
Chemical resistance	NPD
Release of corrosive substances	SR
Abrasion resistance	≤AR1
Thermal resistance	NPD
Reaction to fire	E <sub>fl</sub>
Adhesion strength by pull off test	≥B2,0
Release of dangerous substances	NPD
Sound absorption	NPD
Sound insulation	NPD

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

# Fontefloor PU Cem 6-9

## 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	
1119	
Tikkurila Oyj Kuninkaalantie 1 FI-01300 VANTAA	
17	
TIK-6629-5001a	
EN 1504-2:2004	
Product for protection and repair of concrete structures – Coating.	
Permeability to CO <sub>2</sub>	$s_D > 50 \text{ m}$
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	$E_{fl}$
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 II

1) Tested as a part of a system with Fontefloor PU Cem 2