



Mapecfloor PU Flex



Self-leveling elastic polyurethane coating



AREA OF USE

Mapecfloor PU Flex is a self-leveling polyurethane coating designed for outdoor use on surfaces with low traffic.

Normal areas of use include balconies, terraces, etc.

Mapecfloor PU Flex is normally applied on concrete and other cement-based substrates.

TECHNICAL CHARACTERISTICS

Mapecfloor PU Flex is a two-component solvent free, crack bridging and elastic polyurethane coating.

Mapecfloor PU Flex has a glossy and attractive surface which is waterproof and easy to clean.

Mapecfloor PU Flex is delivered in grey color, has excellent stability against yellowing and has no need for a protective topcoat.

Mapecfloor PU Flex is resistant against most common chemicals, food and beverages, but exposure can in some cases give stains without influencing the product properties.

Mapecfloor PU Flex complies with the principles defined in EN 1504-9 standard ("Products and systems for protecting and repairing concrete structures.

Definitions, requirements, quality control and conformity assessment. General principles for the use and application of systems"), and the requirements of EN 1504-2 ("Protection systems for concrete surfaces") for class: products for protecting surfaces - coating (C) - PI, MC, PR and IR.

Mapecfloor PU Flex complies with EN 13813.

APPLICATION PROCEDURE

Preparation of the substrate:

The concrete must be sound, clean, dust-free and have a smooth permanent surface. Normal cleaning methods such as milling, grinding or shot blasting can be used. The substrate's surface temperature should be at least +10°C and at least 3°C above the applicable dew point during product application.

Preparation of the product:

Components A and B should have a temperature of +15°C or more when mixed together. Mix component A first, using a slow drill whisk, then add component B and mix well for at least 3 minutes until it reaches a homogeneous consistency.

The product must not be thinned!

Mapefloor PU Flex: Two-component self-leveling elastic polyurethane coating.
The product complies with specification in EN 13813 and EN 1504-2
Coating (C) principles: PI, IR, PR and MC

TECHNICAL DATA (typical values)

PRODUCT DETAILS		Component A	Component B
Color:		colored	transparent
Appearance:		thick liquid	liquid
Density (g/cm ³):		1.61	1.15
Brookfield viscosity at +23°C (mPa•s):		approx. 10 000	approx. 950
APPLICATION DATA			
Mixing ratio:	80:20 component A: component B		
Color of mixture:	colored		
Consistency of the mixture:	dense fluid		
Density of the mixture (kg/m ³):	1490		
Brookfield viscosity of the mixture (mPa•s):	approx. 3 800		
Application temperature range without accelerator:	+10 - 30°C		
Application temperature range with accelerator:	+5 - 25°C		
Potlife (EN 9514):	45 minutes		
FINAL PROPERTIES (7 days at + 23°C and 50 % R.H)			
Step on time:	24 hours		
Final setting time:	7 days		
Elongation at break:	approx. 100 %		
Shore A (ISO 868:2003):	70 (1s)		
Performance characteristics for product or system	Test methods	Requirements according to EN 13813 for synthetic resin screeds	Product or system performance
Wear resistance:	EN 13892-4	< AR1	AR0.5*
Bond strength:	EN 13892-8:2004	>2.0 N/mm ²	> 3.3 N/mm ²
Impact resistance:	EN 6272-1	> IR4	> IR4
Reaction to fire:	EN 13501-1	Declared value	E _{fl}

* Correlation to Taber (EN ISO 5470-1)

Performance characteristics for product or system	Test methods	Requirements according to EN 1504-2	Product or system performance
Abrasion resistance:	EN ISO 5470-1	< 3000 mg H22/1000 cycles/load 1000 g	< 250 mg
Permeability to CO₂:	EN 1062-6	Permeability to CO ₂ SD > 50 m	Sd > 50 m
Water vapor permeability:	EN ISO 7783	Class I: Sd < 5 m Class II: 5 m < Sd < 50 m Class III: Sd > 50 m	Class II
Capillary absorption and permeability to water:	EN 1062-3	w < 0.1 kg/m ² *h ^{0.5}	w < 0.01 kg/m ² *h ^{0.5}
Impact resistance:	EN 6272-1	Class I: ≥ 4 Nm Class II: ≥ 10 Nm Class III: ≥ 20 Nm	Class I
Pull-off test Reference substrate: MC (0.40) as specified in EN 1766, curing time 7 days:	EN 1542	Average (N/mm ²) Crack-bridging or flexible systems with no traffic: ≥ 0.8 (0.5) with traffic: ≥ 1.5 (1.0) Rigid systems with no traffic: ≥ 1.0 (0.7) with traffic: ≥ 2.0 (1.0)	> 3.3 N/mm ²

Application of the product :

Please Note: *Mapefloor PU Flex should not be applied in case of direct sun or when the temperature increases – Wait until the temperature drops. Not reacted product must be protected from water or moisture. Be especially observant that the substrate is dry and that only dry aggregates are used as spreading material.*

Single layer smooth floors on concrete - thickness > 1,5 mm

a. Primers

The pretreated surface must be primed with **Mapeprimer M** before applying **Mapefloor PU Flex**. The primer should ideally be applied with steel trowel or plastic spreader, and should then be post rolled after 10 - 15 min so that all pores are filled and that the surface appear to be sealed without any dry areas. If **Mapefloor PU Flex** should be applied (at 20°C) later than 48 hours after applying **Mapeprimer M** then the “wet” primer should be sprinkled with dry quartz eg. 0,4 - 0,8 mm to ensure adhesion.

b. Coating

Mapefloor PU Flex should be applied with a trowel on the dry surface of **Mapeprimer M**. Normal thickness is at least 1.5 mm. A spiked roller can be used to eliminate any air bubbles in the coating.

The fresh surface can be sprinkled with plastic chips to get decorative effect as well as increasing the skid resistance.

Coating with accelerator: If **Mapefloor PU Flex** should be used at lower temperatures, or when a faster curing is needed, then one unit of **Mapefloor PU AKS** can be added and well mixed into the already prepared **Mapefloor PU Flex**. Do not divide units of **Mapefloor PU AKS** – use one in each set.

CLEANING

Tools and equipment must be washed immediately after use using a thinner or some other cleaning agent suited for polyurethane. **Please Note: Technical alcohol may not be used!** Once set, the product may only be removed mechanically.

CONSUMPTION

For smooth single layer application: approx. 2.2 - 3 kg/m² for a coating with thickness 1.5 - 2 mm.

PACKAGING

15 kg packs: Component A = 12 kg and component B = 3 kg

STORAGE

Properties for use are not changed for a period of 24 months for component A and 6 months for component B when stored between + 5 and + 30 °C in unopened original packaging.

**SAFETY INSTRUCTIONS FOR
PREPARATION AND USE**

dangeInstructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.no

PRODUCT ONLY FOR PROFESSIONAL USE.

NOTE

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.no

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**All relevant references
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