



Forintech

FORINCRETE MF

4mm ~ 6mm Self-Leveling PU Screed System

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Forincrete® MF

4mm~6mm Self-Leveling PU Screed

Product Introduction

The Forincrete® MF floor system is a seamless, solvent-free, three-component polyurethane (PU) screed floor system. Created through the 3-dimensional crosslinking of polyurethane and concrete, it yields a robust structure used widely across food, beverage, and harsh industrial environments. It boasts high impact and wear resistance, along with resilience to chemical corrosion, heat, and humidity, maintaining a clean and hygienic surface.

Application Scenario

Forincrete® MF suitable for areas with medium to high traffic load and with moderate temperature shock working conditions, such as Raw material handling area, dry area, dry packing area, wet processing area without much oil contamination, unloading platform, cold room, pharmaceutical plant etc.

*Please consult Forintech solution team for other usage scenarios and solutions.



Certification

Internationally certified as food-grade product by HACCP, FDA, CE, USDA



Wear-resistant

Excellent wear and impact resistance compared to epoxy floors



Heavy load-bearing

The material itself has a stronger load capacity, making it suitable for supporting heavy forklifts and equipment



Anti-corrosion

Superior comprehensive anti-corrosion performance, ensuring long-lasting durability even in harsh environments



Thermal Stability

Resistant to thermal shock from -5°C to +100°C.

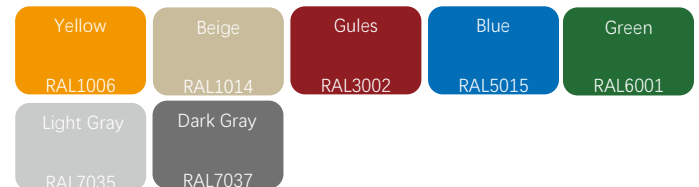


Steam Washing

Can be cleaned and sterilized using 4Mpa steam

Color

There are seven standard colors available (approximate):



Custom colors can be ordered based on MOQ.

Technical Parameters

The following data is measured under laboratory standard conditions and may have slight differences from actual data on-site.

Item	Parameter
Appearance	After stirring, the mixture is uniform and free of lumps.
Tensile Adhesion Strength (Standard)	5.5 N/mm ²
Tensile Adhesion Strength (Soak in water)	4.5 N/mm ²
Shore Hardness D	78.2
Impact resistance, (1000g steel ball)	No cracks or peeling
Abrasion Resistance (750g/500r)	0.018g
Compressive Resistance	71 MPa
Flexural Resistance	(24h) 13.3MPa (7d) 15.7MPa
Resistance to Acid (10%H ₂ SO ₄ , 48h)	No bubbles, No peeling, No discoloration.
Resistance to Base (30%NaOH, 48h)	No bubbles, No peeling, No discoloration.
Resistance to Salt (3%NaCl, 7D)	No bubbles, No peeling, No discoloration.
Mildew Resistance	0 (no fungal growth, best grade)

Standard

Forincrete® MF complies with the relevant requirements of GB/T22374 "Floor Coating Materials" standard.

Packaging

Forincrete® MF is a pre-packaged three-component system, with a single set weighing 18.38kg:

Component A: 2.68 kg/bucket;

Component B: 2.5 kg/bucket;

Component C: 13.2 kg/package.

Model Specification

System	Forincrete MF
Finish	matte finish
Thickness	4-6 mm
Manufacturer	Forintech

Preparatory work and application in accordance with manufacturer's instructions.

System Design

Forincrete MF1 Topcoat (5.2-10.0 kg)

Forincrete MF1 Base scratch (1.8-2.0kg)

Prepared Substrate

(C25 above, Tensile Adhesion Strength > 1.5MPa)

Products Included In this System

Basecoat	Forincrete MF1	Trowel apply
Topcoat	Forincrete MF1	Forincrete MF1 PU Screed Material

Method Statement

Operating Temperature

The ideal application temperature for Forincrete® MF is between 15-25°C. It is not recommended to apply MF when the temperature is below 5°C, as it will seriously affect its leveling ability and result in surface defects. When the temperature is below 10°C, it can also significantly affect the curing speed of the product. If it is necessary to apply MF under temperature conditions exceeding 30°C, sufficient preparation work is required.

Substrate Preparation

The ideal foundation condition for Forincrete® MF requires a concrete base strength of over 30MPa. However, C25 concrete flooring with high-standard finishing can still meet the construction requirements.

Grinding: Forincrete® MF requires grinding for base treatment with a coarser diamond blade. For very hard surfaces like wear-resistant floors, it is still recommended to use a shot blasting machine for sandblasting treatment.

Grooving: Multiple grooving needs to be cut close to the wall edge, with a depth of 6-9mm, a width of 5-8mm. The central area needs to be cut in both horizontal and vertical directions, with a spacing of about 2 meters.

Mixing

Before mixing, shake Part A well and then pour Part A and Part B into the bucket at the same time. Use a low-speed mixer to mix for about 5 seconds. It is recommended to use an electric mixer with adjustable speed and high torque at low speed. Then slowly pour in Part C bagged aggregate and mix at high speed for 1.5-2 minutes until completely uniform. Solvent or other diluting agents should not be added during mixing, and adding water is strictly prohibited.

Note: Component C is a necessary component and must be added during stirring.

Mixing Ratio

Mixing all the raw materials from the complete set of factory packages.

Application

Before scraping the primer, Forincrete® MF requires pouring the material into the groove and scraping it flat.

Scratch Layer: Use a flat trowel or a 1mm serrated trowel to apply the coating according to the predetermined amount. During application, make sure to scrape it close to the ground and ensure the continuity of the coating to avoid any missed spots.

For concrete surfaces with low strength and flatness, it is recommended to apply two layers of scratch coat to achieve better sealing and flatness, which can improve the surface coating appearance.

Surface Layer: use a serrated rake or a 5mm serrated trowel for one-time spreading, with sufficient manpower to avoid joints. If the area is large, suitable isolation with decorative paper can be used in advance at the joint.

During the construction of surface coating, avoid direct sunlight and high temperatures, as they can affect the defoaming performance of the coating material and cause many air bubbles.

Expansion Joint: The existing expansion joints on the concrete floor should be marked before construction, and then cut again after the coating is completed, and filled with suitable elastic polyurethane joint sealant.

Cleaning

Clean the tools immediately after application using solvents. Absorb any spilled materials with dry sand or other absorbent materials and wipe clean with a cloth.

Theoretical Consumption(4mm)

Scratch Layer: applied 1.8-2.0 kg/m² with 1mm serrated trowel

Surface Layer: applied 6.0-6.5kg/m² with 5mm serrated trowel

Any unreasonable addition or reduction in the material application may affect the interface quality, sealing performance, bonding performance, coating thickness, etc. Therefore, the product consumption should follow the

recommended usage and adjust according to the actual situation on-site to achieve ideal performance.

Application Time

	20°C	30°C
Pot Life	25 min	15 min
Minimal Interval for next coating	>8 hr	6 hr

Curing Time

Temperature	Surface Dry	Light Traffic	Full Cure
+20°C/2mm	~14-16h	~24-36h	~7d

Storage & Shelf Life

Stored properly in original, unopened, and undamaged sealed packaging, in dry conditions at temperatures between +5 °C ~+30 °C.

Part A & Part B: 12 months from the date of production

Part C: 3 months from the date of production

Part A must be protected from frost.

Part B must be protected from frost.

Part C must be protected from Humidity.

Safety

The solvent used to clean the tools is flammable. Keep away from open flames and other sources of ignition, and smoking is prohibited at the site. When not in use, seal the container and store it away from heat sources and flames.

Application Limitation

During construction, attention should be paid to environmental conditions.

■ The application of PU screed flooring should not be carried out when the base temperature is below 5°C. In high-temperature weather exceeding 35°C, the curing time of the coating will be greatly shortened, and it is not recommended to carry out the application of PU screed flooring.

■ When the relative humidity of the air is >85% or the base temperature is lower than the dew point temperature +3°C, it may cause condensation on the surface of the coating, resulting in oiliness or color difference.

■ The moisture content of the concrete floor should be less than 12%. An excessively high moisture content in the base may cause the coating to peel off.

■ It is not recommended to apply the coating on a weak base or a base that needs reinforcement before application. Irregular cracks need to be treated in advance, such as cutting and expanding the joints and inserting corrugated sheets and then reinforcing them with fiberglass cloth. However, if the ground cracks continue to shrink and expand, the PU screed may still tear and crack accordingly.

Precaution

Part A: If in frequent or prolonged contact with the skin, it may cause short-term skin irritation in the affected area. Avoid contact with eyes, otherwise, it may cause a momentary mild stinging sensation.

Part B: Harmful if inhaled. May cause irritation to the eyes, respiratory system, and skin. Inhalation and skin contact may cause allergic reactions.

Part C: If accidentally gets into the eyes, immediately flush it with plenty of water. It may cause skin irritation and avoid inhaling dust as prolonged exposure to dust can be harmful to health.

Disclaimer

The technical information and Application precautions provided in the TDS are based on current scientific knowledge and are applicable to conventional situations. We do not guarantee the applicability, accuracy, and reliability of the product under special or extreme conditions. The user is responsible for the use of the product for special purposes.

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