Cemfloor
FSC Smooth

Self-Smoothing Thin Topping Compound

Cemfloor FSC Smooth is a pump applied, self smoothing thin topping compound for floors which gives a strong surface layer for early floor covering. The product is formulated from special cements, aggregates and chemical admixtures.

Cemfloor FSC Smooth is designed for use in residential and commercial areas allowing a much earlier overlay compared to traditional sand/ cement, concrete or anhydrite screeds. It provides a smooth and strong finish ideal for receiving a range of final floor coverings.

Key Features & Benefits

- For application depths between 2-30mm
- Supplied ready to use via Pump Truck
- Foot traffic after 2-4 hours
- Final floor covering installed in as little as 48 Hrs
- Excellent spreading and smoothing characteristics
- Low alkalinity
- Casein-free
- Low emissions

Uses

For levelling solid bonded substrate

- Concrete
- Sand/ cement screeds
- Anhydrite screeds

Suitable for covering with

- Vinyl / Linoleum
- Carpet
- Laminate flooring
- Parquet flooring
- Tiles

Constraints

- Not to be left without a suitable floor covering.
- Not to be used where some movement is expected (e.g. underfloor heating).

Preparation

The surface strength of the substrate must be greater than 1N/mm2.

It is essential the substrate is suitably prepared and primed with weber floor 4716 primer prior to installing Cemfloor FSC Smooth.

The substrate should be clean, free from dust, grease and other impurities that might prevent adhesion.

Walls and any upstands (pillars, columns etc) should be isolated with 10 x 100mm foam.

Large irregularities in the substrate (>30m) should be filled in with an application of weber floor base rapid 4360, this should be allowed to harden and then primed before application of Cemfloor FSC Smooth can begin.

Holes and leaks in the substrate should be sealed. The substrate should be vacuum cleaned, prepared and primed with weber floor 4716 primer according to the instructions on the data sheet.

Priming improves the screed's adhesion to the substrate and prevents the formation of air bubbles and dewatering of the screed. Priming also improves the flow properties of the screed. Dry and very porous substrates (cast-in-situ concrete floors) may need to be treated twice. If the screed is applied in more than one layer, each layer must be primed.

Technical Data

Application Temperature	+10°C to +25°C
Minimum substrate strength	1N/mm2
Minimum thickness	2mm
Maximum thickness	30mm
Water demand	200 litres/ 1000kg (20%)
Compressive strength	C 25
Flexural strength	F 6
Shrinkage (28 days)	< 0.05%
Flow Rate	240 – 255mm
Approx. material consumption	1.7kg/ m2 / mm
Hardening time (before foot traffic)	2-4 hours in normal conditions
Hardening time (before final covering)*	48hrs at 3mm thickness and 5 days at 30mm thickness
Pot Life	20 min (after adding water)
Wear resistance (RWA Class)	RWFC 450

* Tested at 20C°and 50%RH

Mixing

Cemfloor FSC Smooth is mixed and pumped using a Cemfloor Approved pump truck

- The material is mixed with 20% water, which corresponds to 200 litres per 1 tonne of dry product.
- It is important to add only the specified amount of water as excess water will reduce strength, increase shrinkage and encourage segregation.
- Whilst mixing, the water content should be checked continuously by the flow ring test to ensure that the material is correctly mixed and free from separation and lumps of powder.
- The flow rate should be between 240-255mm. Conversely, reduced water content increases viscosity.
- The temperature of the mix should ideally be between +15°C and +20°C.

Application

Light ventilation in the working area is necessary but windows and door openings must be closed sufficiently to avoid draughts during and for 3 days after application.

During application, and for at least 1 week afterwards, the substrate and ambient temperature should not fall below +10°C or rise above +25°C. The relative humidity of the substrate must be <95%.

To achieve the best finish, the floor area should be divided into suitably sized bays depending on pumping speed and application thickness.

weber floor 4965 barrier foam should be used to form bays and stop ends. Pumping is carried out in sections so that a new section is pumped as quickly as possible and to maintain a wet edge. A wide serrated spatula or spike roller should be used to assist the self-levelling process.

Overlay

Cemfloor FSC Smooth is compatible with most common floor finishes and adhesives.
It should not be painted or used without a floor finish.

Covering Time

The screed can receive foot traffic after a drying time of 2 - 4 hours at an ambient temperature of +20°C.
If necessary, the surface can be ground after 2 days following application.
Floor covering can be installed in as little as 48hrs, depending on layer thickness and site conditions.
Covering time testing has been carried out at 3mm in conditions of 20C° and 50% RH. In identical conditions, with 30mm thickness, drying times will be extended to 5 days. Site conditions such as temperature and humidity will have an impact on covering times and should be taken into account.
High humidity of the substrate and poor drying conditions prolong the setting time.

Storage & Shelf Life

When stored unopened in a cool, dry place at temperatures above 5°C, shelf life is 12 months from date of manufacture. Poor storage conditions may have an adverse impact on the levelling properties.

Health & Safety

- Keep out of the reach of children.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical help.
- After contact with skin, wash immediately with plenty of soap and water.
- Wear suitable protective clothing, gloves and eye/ face protection.
- For further information, please request the Material Safety Data Sheet for this product.