

Cemfloor FSC 531 Fibre

Self-Smoothing Base & Renovation Screed



Cemfloor FSC 531 Fibre is a pump applied, self-smoothing, fibre-reinforced base or renovation screed for floors which gives a strong base layer for receiving tiles or a thin topping screed. The product is formulated from special cements, aggregates and chemical admixtures.

Cemfloor FSC 531 Fibre is designed for the use in residential and commercial areas allowing a much earlier overlay compared to traditional sand/ cement, concrete or anhydrite screeds. It is ideal for the renovation of existing floors and floating floor constructions.

Key Features & Benefits

- For application depths between 5-50mm
- Supplied ready to use via Pump Truck
- Foot traffic after 2-4 hours
- Tile after 12 hours
- Final floor covering installed in as little as 48 Hours
- Excellent spreading and smoothing characteristics
- Fibre modified for added durability
- Low alkalinity
- Casein-free
- Low emissions

Uses

For levelling bonded, unbonded and floating substrates:

- Concrete
- Sand/ cement screeds
- Anhydrite screeds
- Wooden boards
- Under-floor heating/warming
- Insulation boards
- Existing tiles
- Bitumen

Suitable for covering with

- Tiles
- Timber laminate
- Vinyl/ Linoleum
- Carpet
- Laminate flooring
- Parquet flooring*

* May require extended time before covering

Constraints

- Not a wearing screed and must be covered.

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 531 Fibre.

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 (>50m) 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 531 Fibre 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.

Mixing

Cemfloor FSC 531 Fibre 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 220-235mm. Conversely, reduced water content increases viscosity.
- The temperature of the mix should ideally be between +15°C and +20°C.

Technical Data

Application Temperature	+10°C to +25°C
Minimum substrate strength	1N/mm ²
Minimum thickness (bonded)	5mm
Minimum thickness (underfloor heating)	>15mm over the heating pipes
Minimum thickness (over slip membrane, solid substrate)	20mm
Minimum thickness (floating floor i.e. insulation board)	25mm (with weberfloor 4945 fibre mesh)
Maximum thickness	50mm
Water demand	200 litres/ 1000kg (20%)
Compressive strength	C 25
Flexural strength	F 6
Shrinkage (28 days)	< 0.05%
Weber flow rate	220 – 235mm
Approx. material consumption	1.7kg/ m ² / mm
Hardening time (before foot traffic)	2-4 hours in normal conditions
Hardening time (before tiling)	12 hours in normal conditions
Pot life	20 min (after adding water)
Wear resistance (RWA Class) at 5mm and 48 hours before covering**	RWFC 450
Wear resistance (RWA Class) at 50mm and 5 days before covering*	RWFC 450

* Tested at 20C°and 50%RH

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 flat spatula or wobble bar should be used to assist the self-levelling process.

In addition to solid bonded substrates Cemfloor FSC 531 can be applied to a range of other substrates including flooring grade insulation boards, timber floors, underfloor heating and bitumen. For old and established bitumen only priming is required. However, for other substrates the minimum application thicknesses stated must be observed and weberfloor 4945 fibre mesh may be required.

For further information, please contact Cemfloor.

Overlay

Cemfloor FSC 531 Fibre 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 48 hours, depending on layer thickness and site conditions. Covering time testing has been carried out at 5mm in conditions of 23°C and 50% RH. In identical conditions, with 50mm 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.

In Partnership with

