Cemfloor
FSC 516 Rapid

Rapid Drying, Self Smoothing Flooring Compound

Cemfloor FSC 516 Rapid is a pump applied, rapid drying, self smoothing 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 516 Rapid is designed for use in residential and commercial areas. Rapid drying technology allows our quickest 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
- Rapid drying
- Foot traffic after 1-3 hours
- Final floor covering installed in as little as 6 hours
- Excellent spreading and smoothing characteristics
- Low alkalinity
- Casein-free
- Low emissions

Uses

For levelling solid bonded substrates

- Concrete
- Sand/ cement screeds
- Anhydrite screeds
- Can also be used as a levelling compound for any base or renovation screeds

Suitable for covering with

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

* May require extended time before covering

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 weberfloor 4716 primer prior to installing the Cemfloor FSC 516 Rapid.

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 4160 can begin.

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

Priming improves the smoothing compound's adhesion to the substrate and prevents the formation of air bubbles and de-watering of the smoothing compound. Priming also improves the flow properties of the smoothing compound. Dry and very porous substrates (cast-in-situ concrete floors) may need to be treated twice. If the smoothing compound 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 30
Flexural strength	F 7
Shrinkage (28 days)	< 0.06%
Flow Rate	240 – 255mm
Approx. material consumption	1.7kg/ m2 / mm
Hardening time (before foot traffic)	2-4 hours in normal conditions
Pot Life	20 min (after adding water)
Wear resistance (RWA Class) at 2mm and 6 hours before covering**	RWFC 550
Wear resistance (RWA Class) at 30mm and 16 hours before covering**	RWFC 550

** Tested in accordance with EN 13892-7

Mixing

Cemfloor FSC 516 Rapid is mixed with clean water using an automatic mixer approved by Weber.

- 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 bays of 6 to 8 metres depending on pump capacity and application thickness.

weberfloor 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 516 Rapid is compatible with most common floor finishes and adhesives.
It should not be painted or used without a floor finish.

Covering Time

The smoothing compound can receive foot traffic after a drying time of 1 – 3 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 6 hours, depending on layer thickness and site conditions. Covering time testing has been carried out at 2mm in conditions of 23°C and 50% RH. In identical conditions, with 30mm thickness, drying times will be extended to 16 hours. 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 and covering 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

Please see latest material safety datasheet via our website for information.

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