

weber.floor 4005

Smoothing mortar

Flow-grade cement-based smoothing mortar for thicknesses 1 - 20 mm (CT-C25-F5)

Uses	Benefits
• for new buildings and renovation works • ideal for large floor surfaces • for layer thickness of 1 – 20 mm	• fits mechanical application very well • cost-effective • self-levelling

Fields of application

As bonded self-levelling mortar for a wide range of floor substrates via manual or mechanical application in residential and commercial buildings.

For new and old facilities.

It forms a sound, even, smooth and load-bearing substrate for textile & elastic floor coverings, ceramic tiles, multi-layer parquet and laminate.

For use indoors.

Description

weber.floor 4005 is a factory-mixed, cement-based, polymer-modified and self-levelling smoothing mortar.

Main features

- **EMICODE EC 1 PLUS:** very low emission of volatile organic compounds (VOC)
- CE marking: CT – C25 – F5 (EN 13813)
- pumpable, ergonomic application thanks to machine technique
- early open to foot traffic
- suitable for heated floor constructions
- resistant under chair castors (in accordance with EN 12529) when used in a layer thickness ≥ 2 mm under floorings
- low shrinkage and tension
- self-aerating: no need of spiked roller

Technical values

Water demand (%)	approx. 18% - 20%
Water demand	4.5 - 5.0 liters / 25 kg
Compressive strength (28 days)	> 25 N/mm ²
Flexural strength (28 days)	> 5 N/mm ²
Pot life	15 - 20 minutes at +20°C and 65% relative humidity rate
Application temperature (air)	+10°C - +30°C
Application temperature (substrate)	+10°C - +25°C
Reaction to fire	class A 2 fl s1 (EN 13501-1)
Layer thickness	1 - 20 mm
Consistency (slump/flow rate)	240 -260 mm (with flow ring: Ø 68 mm/height 35 mm)
Open to foot traffic	approx. 2 - 4 hours
Open to light load	approx. 24 hours
CE marking	CT – C25 – F5 (EN 13813)

Quality control

weber.floor 4005 is subject to a regular quality control by self-monitoring according to EN 13813.

General notes (Reihenfolge)

- Comply with the prevailing standards and/or national guidelines relating to levelling works of floors. If not issued, and if necessary, request technical advice
- Assess the levelling requirements beforehand.
- All characteristics mentioned in this data sheet are based on a temperature of +20°C without draught and a relative humidity rate of 65%.
- High temperatures shorten, lower temperatures extend the pot life.
- For application on floating constructions and heated screeds, all walls and upstands (pillars, columns etc.) should be separated from the wall construction with a 8-mm thick insulation foam strip; it must reach downwards from the substrate up to the upper edge of the final covering.
- The final surface must receive a covering, and is not allowed to be left without.
- In case of doubt regarding application, substrate or special structural features, request technical advice.
- Do not add any foreign substances during mixing and application.

Substrates

Concrete, cement screeds and calcium sulphate screeds are allowed substrates.

Substrate preparation

- The substrate must be solid, load-bearing, dry, and free of dust and all adhesion-impairing contaminants.
- The substrate must always be prepared by appropriate mechanical means, e.g. grinding or shot-peening etc., in order to reach a pull-off strength $\geq 1.0 \text{ N/mm}^2$.
- Observe the **Weber** application tip “Methods for the preparation of floor surfaces”.
- Level out deeper unevennesses ($> 20 \text{ mm}$) with e.g. the trowel-grade levelling and patching mortar **weber.floor 4045** (1 - 50 mm), using a flat trowel.
- Use the system-compliant primer in accordance with the prevailing substrate: either the acrylic **bonding primer weber.floor 4716** or the 2-comp. solvent-free epoxy resin **primer weber.floor 4710 or 4712** (EC 1 - very low emission); oven-dried silica sand should be scattered on the epoxy primers for the purpose of adhesion with subsequent products. Observe the technical data sheets.
- In case of capillary rising damp or water vapor pressure through the substrate, apply 2 coats of epoxy resin primer as vapour-barrier, e.g. **weber.floor 4710 or 4712** directly onto the concrete substrate with a scattering of silica sand **weber.floor 4936** (0.3 - 0.8 mm) over the fresh second coat.
- The substrate preparation must be adapted to the specific job site conditions.

Mixing

- Mechanical application: use the mixing and pumping machine m-tec Duomix 2000 or **weber.floor FMP 40**.
- For optimal application, the whole length of the hoses should be at least 40 meters.
- A steady consistency is a pre-requisite for the final properties of the smoothing mortar. Monitor the consistency regularly via slump test. Take mixed material in the 1.3-liter flow tin, pour it into the flow ring and measure the slump (240 - 260 mm) on the flow table. The mortar must not show any bleeding.
- Manual application: mix with approx. 4.5 - 5.0 liters of water per 25 kg bag for 1 - 2 minutes until lump-free, using an appropriate electric drill and a stirrer. Observe a maturing time of approx. 1 minute and mix again shortly.
- Excessive water content reduces the mechanical strengths, and increases the risk of cracks and shrinkage.

Application

- When the material is pumped, limited working sections must be determined, in order to ensure the full workability of the product (mixing, levelling and smoothing) within its pot life. Therefore, the width of each working section should not exceed 8 - 10 meters.
- If the specified width is exceeded, use the self-bonding foam strip **weber.floor 4965** in order to form bays and stop ends.
- Smooth the fresh mortar without delay either with a flat trowel or a notched blade scraper, for ex. **weber ABS Schwedenraker** in 30 cm width (for angles and small surfaces) and in 60 cm width (for larger surfaces) or with a flat trowel at a shallow angle.
- Clean mixing equipment and tools with water (fresh product). Hardened material can only be removed mechanically.

Aftercare

- Protect freshly installed surfaces from draughts, and the direct effects of sunlight and heat.
- Ventilation is necessary as soon as the product is open to foot traffic; avoid draughts.
- The job site temperature must be at least +10°C (better +15°C) during and 7 days after application.
- Do not use de-humidifiers during the first 2 days.
- Grinding work must be carried out as soon as possible after installation.

Readiness for covering

- In case of levelling thickness up to 4 mm all common flooring materials (ceramic tiles, textile and elastic floorings) can be installed after 24 hours at +20°C.
- In case of levelling thickness > 4 mm multi-layer parquet and laminate can be installed after 48 hours.

Practical information

Water demand:

4.5 - 5.0 liters / 25 kg

Tools:

Mixing and pumping machine m-**weber.floor** FMP 40 or m-tec Duomix 2000 or electric drill + stirrer, slump test tools (tin, ring and table), flat trowel or notched blade scraper **weber ABS Schwedenraker** (30 cm width for angles and small surfaces and 60 cm width for larger surfaces).

Storage:

The product can be stored at least 18 months (plastified bag) and at least 9 months (paper bag) in its original unopened packaging, if kept indoors dry and protected from moisture.

Technical Data Sheet



Consumption

per mm layer thickness: approx. 1.7 kg/m²

Packagings

Type	Sales unit	Number / euro-pallet
Plastified bag	25 kg	42 bags
Paper bag	25 kg	42 bags

The information in this technical data sheet is based on our current knowledge and experience at the time of printing. However, they do not guarantee in the legal sense.