

weber.floor 4031

Smoothing mortar

High-load and high flow cement-based self-levelling smoothing mortar for thicknesses 1 - 10 mm

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 all common floor coverings and for coverings with high demands for flatness. For use indoors.

Description

weber.floor 4031 is a factory-mixed, cement-based, polymer-modified and self-levelling smoothing mortar.

Composition

Special gypsums, special cements, mineral aggregates, vinyl acetate copolymer, plasticizers, additives

Main features

- **EMICODE EC 1 PLUS**: very low emission of volatile substances
- CE marking: CT – C30 – F7 (EN 13813)
- RAL-UZ 113 / environmental friendly thanks to low emission (Blue Angel)
- very high flow performance
- resistant under chair castors (in accordance with EN 12529) when used in a layer thickness ≥ 1 mm under flooring materials
- for floor coverings with high demands for flatness
- low shrinkage and tension
- early ready for overlay with flooring materials
- suitable for heated floor constructions

- high yield
- suitable for shear-resistant parquet bonding, when used in a layer thickness ≥ 2 mm under flooring materials
- can applied mechanically when delivered in the cardboard weber biene

Technical values

Water demand:	> 24% - < 26%
Compressive strength (28 days):	> 30 N/mm ²
Flexural strength (28 days):	> 7 N/mm ²
Pot life:	> 15 - < 20 minutes at +20°C and 65% relative humidity rate
Application temperature (air):	$\leq +10^{\circ}\text{C}$ - $\geq +30^{\circ}\text{C}$
Application temperature (substrate):	+10°C - +25°C
Reaction to fire:	class A 2 fl s1 (EN 13501-1)
Layer thickness:	1 - 10 mm
Consistency (slump/flow rate):	250 -270 mm (with flow ring: \varnothing 68 mm/height 35 mm)
Open to foot traffic:	≥ 2 - ≤ 4 hours
Open to light load:	approx. 4 hours
CE marking:	CT - C30 - F7 (EN 13813)

Quality control

weber.floor 4031 is subject to a regular quality control by self-monitoring according to EN 13813.

General notes

- Assess the levelling requirements beforehand.
 - High temperatures shorten, lower temperatures extend the pot life.
 - For application on floating constructions and heated screeds, all walls and upstands (pillars, columns etc.) within the floor should be separated 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.
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Special notes

- Limits of use: do not use outdoors, on timber planks, chipboards and floating constructions (on separating membranes and on insulation boards).
 - Do not add any foreign substances during mixing and application.
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Substrates

Concrete, cement screeds, calcium sulphate screeds, magnesia screeds, stonewood screeds mastic asphalt and ceramic tiles are allowed substrates.

Substrate preparation

- The substrate must be solid, load-bearing, dry, and free of dust and all adhesion-impairing contaminants.
- Use the specific primer in accordance with the prevailing substrate: either the acrylic primer weber.floor 4716, the dispersion-based bonding promoter weber.floor 4705 mixed with the levelling mortar weber.floor 4045 or the 2-comp. solvent-free epoxy resin primer weber.floor 4710 or 4712 (EC 1); oven-dried silica sand should be scattered on the epoxy primers for purpose of adhesion with subsequent products. Observe the technical data sheets.
- Concrete and bonded cement screeds: use the primer weber.floor 4716 diluted with water in a ratio of 1 : 3. Apply with a soft broom.
- Calcium sulphate screeds: use the primer weber.floor 4716 diluted with water in a ratio of 1 : 1. Apply with a soft broom.
- Magnesia screeds: use the 2-comp. solvent-free epoxy resin primer weber.floor 4710 or 4712 (EC1). Apply crosswise with a roller and scatter the oven-dried silica sand weber.floor 4936 (0.3 - 0.8 mm), whilst the resin coat is fresh.
- Unsufficiently or not sanded-off poured asphalt: use the 2-comp. solvent-free epoxy resin primer weber.floor 4710 or 4712 (EC 1). Apply crosswise with a roller and scatter the oven-dried silica sand weber.floor 4936 (0.3 - 0.8 mm), whilst the resin coat is fresh.
- Well sanded-off poured asphalt: use the primer weber.floor 4716 diluted with water in a ratio of 1 : 1. Apply with a soft broom.
- Old ceramic tiles: they must be clean and grinded with rough sandpaper or by mechanical means; either apply the primer weber.floor 4716 diluted with water in a ratio of 1 : 1 (application with soft broom) or a scratch layer of weber.floor 4705 mixed with weber.floor 4045 in a ratio of 1 : 1 (application with flat trowel).
- In case of capillary rising damp or water vapor pressure through the substrate, apply 2 coats of epoxy resin as vapour-barrier, e.g. weber.floor 4710 or 4712 (EC 1) directly onto the concrete substrate with scattering of silica sand weber.floor 4936 (0.3 - 0.8 mm) over the fresh second coat.
- Level out deeper unevennesses (> 10 mm) with e.g. the trowel-grade levelling and patching mortar weber.floor 4045 (1 - 50 mm), using a flat trowel.
- 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 which is authorized by Weber.
- For optimal application the whole length of 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 (250 - 270 mm) on the flow table. The mortar must not show any bleeding.
- Manual application: mix with approx. 6.0 - 6.5 liters of water per 25 kg bag for 1 - 2 minutes until lump-free, using a slow-speed electric drill and an appropriate stirrer (e.g. weber.sys Rührpaddel no. 3).
- 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 10 - 12 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 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 within 24 hours after installation.

Readiness for covering

- All common flooring materials (textile, PVC, LVT, vinyl, linoleum, rubber, ceramic tiles, natural stones etc.) can be installed after approx. 24 hours at +20°C and 65 % relative humidity rate.
- In case of levelling thicknesses > 5 mm: after 3 days for parquet and laminate

Practical information

Water demand: max. 6.0 - 6.5 liters / 25 kg

Tools: Mixing and pumping machine m-tec Duomix 2000 or electric drill + stirrer weber.sys Rührpad-
del no. 3, slump test tools (tin, ring and table), notched blade scraper weber ABS Schwedenraketel
(30 cm width for angles and small surfaces and 60 cm width for larger surfaces), flat trowel

Storage: The product can be stored at least 18 months (bag) and 3 months (weber biene cardboard)
in its original unopened packaging, if kept dry and protected from moisture.

Consumption

per mm layer thickness: approx. 1.6 kg/m²

Packagings

Type	Sales unit	Number / euro-pallet
Plastified bag	25 kg	42 bags
weber biene cardboard	800 kg	1

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