

weber.floor 4310

Normal-setting floor levelling compound for renovation and timber floors

Fibre-reinforced and flow cement-based floor levelling compound for thicknesses 2 - 50 mm

Fields of application

As self-levelling mortar and thin-layer screed for a wide range of floor substrates via manual or mechanical application. For use as heated or non-heated thin-layer screed. As bonded system on many substrates (e.g. concrete, screeds, ceramic tiles, timber substrates) and on underfloor heating elements (warm water tubes, electric and capillary tubes).

Also as unbonded system on separating membrane (natron kraft paper or PE-foil) and on underfloor heating elements (heat conducting metal plates)

Furthermore as floating system on insulation boards and on acoustic membranes.

Ideal for levelling works of large surfaces as well as for quick refurbishment and renovation of old floors (concrete, screeds, ceramic tiles, timber substrates). It forms a sound, even, smooth and load-bearing substrate for all common flooring materials. For indoors.

Description

weber.floor 4310 is a factory-mixed, cement-based, polymer-modified, self-drying, fiber-reinforced and flow levelling underlay for floors.

Main features

- **EMICODE EC 1^{PLUS}**: very low emission of volatile substances
- CE marking: CT – C20 - F7 (EN 13813)
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- multi-use on most substrates

- suitable for all types of constructions: as bonded, unbonded and floating system, in different layer thickness
- very good flow performance
- normal-drying
- resistant under chair castors (in accordance with EN 12529), when used in a layer thickness ≥ 2 mm under flooring materials
- fiber-reinforced
- suited for machine application and pumping
- low (reduced) tension when hardening

Technical values

Water demand:	approx. 18% - 20%
Compressive strength (28 days):	$> 20 \text{ N/mm}^2$
Flexural strength (28 days):	$> 7 \text{ N/mm}^2$
Pot life:	$> 15 - < 20$ minutes at $+20^\circ\text{C}$ and 65% relative humidity rate
Application temperature (air):	$\geq +10^\circ\text{C} - \leq +30^\circ\text{C}$
Application temperature (substrate):	$+10^\circ\text{C} - +25^\circ\text{C}$
Reaction to fire:	class A 2 fl s1 (EN 13501-1)
Layer thickness:	2 - 50 mm as bonded system; ≥ 10 mm on timber floors and ceramic tiles; ≥ 20 mm on separating membranes; ≥ 25 mm on insulation boards
Consistency (slump/flow rate):	220 - 240 mm (with flow ring: $\varnothing 68$ mm/height 35 mm)
Open to foot traffic:	$\geq 2 - \leq 4$ hours
Open to light load:	approx. 24 hours
CE marking:	CT - C20 - F7 (EN 13813)

Quality control

weber.floor 4310 is subject to a regular quality control by self-monitoring according to EN 13813.

General notes

- Assess the levelling requirements beforehand.
- For application on floating constructions and heated screeds, all walls and up-stands (pillars, columns etc.) within the floor should be separated with an 8-mm thick insulation foam strip; it must reach downwards from the substrate up to the upper edge of the final covering.
- **Plan movement joints for surfaces > 40 m²; in case of side lengths > 6 m, the optimal ratio between length and width should be 2 : 1.**
- Arrange dummy joints for special structural features, heating circuits and special room geometry, i.e. wall entry points, doorways, wall recesses. Take over existing movement joints.
- The final surface must receive a covering, and is not allowed to be left without.
- If used as heating screed, request technical advice for tailored-made (special) solutions.
- Do not add any foreign substances during mixing and application.

Special notes

- Limits of use: only use indoors.
- In case of floating constructions, the compressibility of the insulation boards must not exceed 3 mm.

Substrates

As bonded construction

- New concrete: layer 2 - 50 mm
- Old concrete and cement screeds: layer 10 - 50 mm
- Old anhydrite, magnesia or stonewood screeds: layer 4 - 50 mm

- Timber floors (wooden boards, timber planks and chipboards): layer $\geq 10 - 50$ mm
- Old ceramic tiles: layer 10 - 50 mm
- Warm water tubes: layer 10 - 30 mm (minimal covering over pipes ≥ 10 mm)
- Electric and capillary tubes: layer 10 - 30 mm (minimal covering over pipes ≥ 10 mm)

As unbonded construction

- Separating membranes (natron kraft paper or PE foil)
- Heat conducting metal plates: layer $\geq 25 - 50$ mm (minimal covering over pipes ≥ 25 mm)

As floating construction

- Insulation boards: layer $\geq 25 - 50$ mm
- Acoustic and decoupling membrane weber.floor 4955 and acoustic membrane weber.floor acoustic: layer $\geq 25 - 50$ mm

Substrate preparation

- The substrate must be load-bearing, dry, solid, and free of dust and all adhesion-impairing contaminants.
- Prior to installation on timber floors, fasten loose boards with screws or nails, and close all openings and holes > 2 mm with a silicone sealant, for ex. weber.fug 880 or an acrylic sealant, for ex. weber.fug 888.
- Use the specific primer in accordance with the prevailing substrate: either the acrylic bonding primer weber.floor 4716 diluted with water or the 2-comp. solvent-free epoxy resins weber.floor 4710 or weber.floor 4712 (EC 1); oven-dried silica sand should be scattered on the epoxy primers. Observe the technical data sheets.
- In case of rising damp or vapour pressure from the substrate, apply 2 coats of epoxy resin as vapour-barrier, e.g. weber.floor 4712 (EC 1) directly onto the concrete substrate with silica sand spreading over the fresh second coat.
- The substrate preparation must be adapted to the specific job site conditions.

Working instructions Mixing

- Mechanical application: use the mixing pump m-tec Duomix 2000, which is approved 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 levelling compound. Monitor the consistency regularly via slump test. Take mixed material in the 1.3 liter tin, pour it into the flow ring and measure the slump (220 - 240 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 electric drill and an appropriate stirrer (for ex. 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 6 - 8 meters.
- If the specified width is exceeded, use the self-bonding foam strips weber.floor 4965 in order to form bays and stop ends.
- Smooth and de-aerate the fresh mortar without delay either with the notched blade scraper weber ABS Schwedenraket in 30 cm width (for angles and small surfaces) and in 60 cm width (for larger surfaces) which will assist the self-levelling process, or with the flat rake weber Großflächenraket (without notched blade) for smoothing works at a shallow angle. If necessary, use a spike roller.
- In case of layer thickness ≥ 20 mm, use the wobbling bar weber Schwabbelstange; first lengthwise and strongly, then crosswise and somewhat more easily. Such wavelike movements bring a good levelling and aerating effect.
- If a sufficient bonding with the substrate (concrete, cement screeds, timber, ceramic tiles) cannot be achieved in case of bonding constructions, weber.floor4310 must be installed as floating system, i.e. on a separating membrane; refer to the **Weber floor** recommendation "Thin-layer renovation on separating membrane".
- For works on anhydrite, magnesia and stonewood screeds lay the woven mesh fabric weber.floor 4945 with overlapping of ≥ 50 mm between each strip in case of critical substrates and/or heterogeneous substrates prior to application of weber.floor 4310.

- For works on separating membranes, acoustic membranes and insulation boards use weber.floor 4945 with overlapping of ≥ 50 mm between each strip prior to application of weber.floor 4310.
- For full information relating to the application on all allowed substrates refer to the specific **Weber floor** recommendations.
- Clean mixing equipment and tools with water (fresh product). Hardened material must be removed mechanically.

Aftercare

- Protect freshly installed surfaces from draughts, and the direct effects of sun light and heat.
- Ventilation is necessary as soon as the product is open to foot traffic, and 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 for the first 2 days.
- If a floor covering cannot be laid immediately when the levelling compound is ready for covering in case of application on separating membranes or on insulation boards, the product must be protected against over-drying through appropriate measures, e.g. with one coat of the epoxy resin weber.floor 4712 (EC 1) up to saturation.

Readiness for coverings

- Approx. 1 week per cm layer thickness at +20°C and 65% r.h. for all types of floor coverings

Practical information

Water demand:

4.25 - 4.75 liters / 25 kg

Tools:

Mixing pump m-tec Duomix 2000, electric drill + stirrer weber.sys Rührpaddel no. 3, slump test tools (tin, ring and table), notched blade scraper weber ABS Schwedenraket in 30 cm width (for angles and small surfaces) and in 60 cm width (for larger surfaces), flat rake weber Großflächenraket (without notched blade), flat trowel, wobbling bar weber Schwabbelstange, spike roller

Storage:

The product can be stored at least 6 months in its original unopened packaging, if kept dry and protected from moisture.

Consumption

per mm layer thickness: approx. 1.7 kg/m²

Packagings

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