Technical Datasheet

weber.floor 4320

Fast-setting, rapid-drying floor levelling compound for renovation and timber floors

Quickly ready for covering, fiber-reinforced and flow cement-based floor levelling compound for thicknesses 2 - 50 mm

Fields of application

As self-levelling mortar for a wide range of floor substrates via manual or mechanical application. As bonded or floating system and as heated screed (as bonded system on electric and capillary tube underfloor heating elements or as unbonded system on heat conducting metal plate underfloor heating elements). Ideal for levelling works of large surfaces as well as for quick refurbishment and renovation of old floors, whenever speed of application and drying are essential. It forms a sound, even, smooth and load-bearing substrate for all common flooring materials. For use indoors.

Description

weber.floor 4320 is a factory-mixed, cement-based, polymer-modified, self-drying, fiber-reinforced and flow levelling underlay for floors.

Composition

Special gypsums, special cements, mineral fillers, vinyl acetate-copolymer, plasticizer, additives

Main features

- EMICODE EC 1 ^{PLUS}: very low emission of volatile substances
- CE marking: CT - C30 - F7 (EN 13813)
- multi-use
- good flow performance
- can be used in different layer thicknesses
- quickly ready for overlay with flooring materials
- fiber-reinforced

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- suitable as bonded system on electric and capillary tube underfloor heating elements
- suitable as unbonded system on heat conducting metal plate underfloor heating elements

Technical values

Water demand:	approx. 17% - 19%
Compressive strength (28 days):	> 30 N/mm²
Flexural strength (28 days):	> 7 N/mm²
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:	2 - 50 mm; 10 mm on timber floors and ceramic tiles; 20 mm on separating membranes; 25 mm on insulation b
Consistency (slump/flow rate):	190 - 220 mm (with flow ring: Ø 68 mm/height 35 mm)
Open to foot traffic:	≥ 2 - ≤ 4 hours
Open to light load:	approx. 24 hours
CE marking:	CT - C30 - F7 (EN 13813)

Quality control

weber.floor 4320 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 upstands (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 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 information for tailored-made (special) solutions.
- Do not add any foreign substances during mixing and application.

Special notes

- Limits of use: only use indoors.
- For the levelling of mastic asphalt, follow the next recommendations; in case of surfaces with poor cover of sand, use the epoxy primer weber.floor 4712 (EC 1) and scatter silica sand weber.floor 4936 (0.3 - 0.8 mm); in case of surfaces with good cover of sand, use the acrylic primer weber.floor 4716 diluted with water in a ratio of 1 : 1.
- In case of floating constructions, the compressibility of the insulation boards must not exceed 3 mm.
- When gluing solid wooden planks, large-sized strip parquet (> 30 cm) or solid parquet with a considerable risk of dimensional change, an intermediate primer with the reactive resins weber.floor 4718 R (PU-based) or weber.floor 4712 (EC 1) (EP-based) must always be applied. Above-mentioned wooden floor coverings are then glued with the 2-comp. PU adhesive weber.floor 4838.
- For unbonded constructions on separating membranes and for floating constructions on insulation boards, the multi-use primer weber.prim 804 or a reactive resin-based primer must always be applied, whenever tiles and slabs are laid using a cement-based adhesive.

Substrates

Concrete, cement screeds, calcium sulphate screeds, magnesia screeds, stonewood screeds Timber floors and ceramic tiles in layer ≥ 10 mm As unbonded construction on separating membrane in layer ≥ 20 mm As floating constructions on insulation boards in layer ≥ 25 mm On electric and capillary tube underfloor heating (bonded system) with a covering of heating elements by ≥ 10 mm On heat conducting metal plate underfloor heating (unbonded system) with a covering of heating elements by ≥ 25 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, loose boards should be fastened with screws or nails, and all openings and holes > 2 mm closed with a silicone sealant, for ex. weber.fug 880 or an acrylic sealant, for ex. weber.fug 888.
- Use the glass fibre net weber.floor 4945 to reinforce the mortar on inhomogeneous substrates, wooden planks, separating membranes and insulation boards.

- Use the specific primer in accordance with the prevailing substrate: either the acrylic primer weber.floor 4716 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 (190 - 220 mm) on the flow table. The mortar must not show any bleeding.
- Manual application: mix with approx. 4.25 - 4.75 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 Schwedenrakel 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 Großflächenrakel (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.
- 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 covering

- 1 day for tiles
- 3 days for textile, PVC, rubber or linoleum coverings
- 7 days for parquet and laminate flooring

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 Schwedenrakel in 30 cm width (for angles and small surfaces) and in 60 cm width (for larger surfaces), flat rake weber Großflächenrakel (without notched blade), flat trowel, wobbling bar weber Schwabbelstange, spike roller

Storage:

The product can be stored for 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

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