

weber.floor 4345

Quick-drying cement flow screed

Quick-drying and fiber-reinforced cement-based flow screed for thicknesses 30 - 90 mm in residential and commercial constructions (CT-C20-F5)

Fields of application

In residential and commercial constructions whenever a cement-based flow screed is required in combination with early covering maturity for laying flooring materials.

As bonded screed, unbonded screed on separating membrane, floating screed on insulation boards or on hollow space floors/raised floors.

For use indoors.

Description

weber.floor 4345 is a factory-mixed, cement-based screed mortar in the grain size 0 - 4 mm.

Main features

- CE marking: CT - C20 - F5 (EN 13813)
- flow-grade and very good levelling property
- early open to foot traffic after 24 hours
- early ready for overlay with floorings after 5 - 14 days
- fiber-reinforced
- allows surfaces of up to 50 m² without joints
- provides smooth surfaces
- class A 1 (reaction to fire): non-combustible

Technical values

Water demand:	approx. 13%
Compressive strength:	> 20 N/mm ²
Flexural strength:	> 5 N/mm ²
Hardening time:	> 6 hours
Pot life:	> 30 - < 35 minutes
Application temperature (air):	> 5°C - < 30°C
Application temperature (substrate):	5°C - 25°C
Fresh mortar density:	approx. 2.2 kg/dm ³
Reaction to fire:	class A 1fl (EN 13813)
Layer thickness:	30 - 90 mm, depending on system set-up
Consistency (slump):	35 - 40 cm (with 1.3-liter tin)
Open to foot traffic:	approx. 6 hours
Open to light load:	> 3 days
CE marking:	CT - C20 - F5 (EN 13813)

Quality control

weber.floor 4345 is subject to a regular quality control by self-monitoring according to EN 13813.

General notes

- Comply with the national standards and/or guidelines relating to laying works of cement screeds. If not issued and if necessary, request technical advice.
- High temperatures shorten, lower temperatures extend the pot life.
- For use on all floating constructions, roll out a separating membrane, for ex. a polyethylene-coated natron kraft paper or a PE foil. Furthermore, all walls and upstands (pillars, columns etc.) within the floor should be separated from the floor construction with an insulation foam strip (thickness ≥ 10 mm); it must reach downwards from the substrate up to the upper edge of the final covering.
- Surfaces of up to 50 m² without joints can be installed with a maximum side length of 10 meters and a ratio between length and width of 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

- Cut dummy joints after 48 hours.
- Grind the screed within 3 days after application to speed up drying.
- 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.

Special notes

- Limits of use: do not use outdoors.
- When used in wet-duty rooms, special measures for waterproofing should be taken, for ex. with the 1-comp. flexible cement-based waterproofing slurry weber.tec 824 or the 2-comp. waterproofing and tile adhesive weber.xerm 844 (waterproofing bonded layers).
- Minimal screed thickness: 30 mm (when used as bonded screed)
- Minimal screed thickness: 40 mm (when used on separating membrane)
- Minimal screed thickness: 45 mm (when used on insulation boards)
- Maximal screed thickness: in all cases 60 mm, except 90 mm on insulation boards
- The use of pouring trestles is not permitted.
- Do not add any foreign substances during mixing and application.

Substrates

- Concrete (when used as bonded screed), separating membrane or insulation boards (when used as floating screed), hollow space/raised floors are allowed substrate

Substrate preparation

- When used as bonded system, the substrate must be sufficiently load-bearing, dimensionally stable, frost-free, and free of dust and of all adhesion-impairing substances.
- Pre-wet the concrete surface intensively; avoid puddle formation and allow to dry until dull-moist.
- Apply a bonding layer consisting of weber.floor 4345 mixed with water on the dull-moist substrate, using a stiff broom.
- Always apply the screed mortar “wet-in-wet” on the fresh bonding layer.
- In case of rising damp take the appropriate measures for waterproofing.
- Level out larger unevennesses and height differences due to pipes laid on the floor beforehand with a lightweight levelling compound, for ex. the quick-setting lightweight levelling compound weber.floor 4520 (3 - 25 cm).

- When used as floating screed on separating membrane or on insulation boards, the load-bearing substrate must be clean and comply with the national rules/standards, in particular relating to load-dependent thicknesses of cement screeds (DIN 18560) and flatness tolerances (DIN 18202); if not issued or if necessary, request technical advice.
- The substrate preparation must be adapted to the specific job site conditions.

Working instructions

Mixing

- Mechanical application: use a mixing pump approved by **Weber** (for ex. m-tec Duomix 2000) with flow screed equipment.
- A static mixer at the end of the hose is absolutely necessary.
- Hose diameter \geq 35 mm; optimum: 40 mm
- A steady consistency is a pre-requisite for the final properties of the screed mortar. The flow rate of approx. 35 - 40 cm can be adjusted with the 1.3 liter tin. The mortar must not show any bleeding.
- Manual application: mix with max. 5.2 liters of water per 40 kg bag for 1 - 2 minutes until lump-free, using an electric drill and an appropriate stirrer (for ex. weber.sys Rührpaddel no. 8). Observe a maturing time of approx. 3 minutes and mix again shortly.
- Excessive water content reduces the mechanical strengths, and increases the risk of cracks and shrinkage.

Application

- Adjust the intended screed thickness by using levelling beams (screed gauges) and by creating a meter crack.
- Before pouring the hoses should be pre-lubricated with a slurry of Portland cement or limestone flour and water prior to the pumping of the first mixture. Afterwards this mix is disposed of in a container as waste. Do not use it for the screed mortar.
- The material is pumped onto the floor and evenly distributed by swinging the casting hose back and forth in order to obtain a homogeneous layer.
- Once the right height is reached, the cast surface is immediately beaten through, use the wobbling bar weber Schwabbelstange; first lengthwise and strongly, then crosswise and somewhat smoother. Such wavelike movements bring a good levelling and aerating effect.
- Clean mixing equipment and tools with water (fresh product). Hardened material can only be removed mechanically.

Aftercare

Technical Data Sheet



- Protect freshly installed surfaces from draughts, and the direct effects of sunlight and heat during 3 days.
- Do not use forced drying (de-humidifiers).

Readiness for covering

- weber.floor 4345 is ready for covering with floorings, when a residual moisture content of 5 CM-% (by weight) is reached.
- Depending on climatic conditions and layer thickness, the first moisture check must be carried out on the 5th day after screed installation.
- weber.floor 4345 must be covered with a flooring immediately upon reaching a residual moisture content of 5 CM-% (by weight).
- If the flooring cannot be laid at the time when the pre-said value is reached, or if a vapour-open flooring (for ex. parquet or textile flooring) is planned, protect weber.floor 4345 against over-drying with appropriate measures, e.g with one coat of the epoxy resin primer weber.floor 4712 (EC 1 -very low emission).
- For measurement of residual moisture content (immediately prior to laying of flooring) use a CM device (carbide hygrometer) as a rule.

Practical information

Water demand:
up to 5.2 liters / 40 kg

Tools:

Mixing pump (for ex. m-tec Duomix 2000) with flow screed equipment, electric drill stirrer weber.sys Rührpaddel no. 8, levelling beams (screed gauges), 1.3 liter tin for slump test, wobbling bar weber Schwabbelstange

Storage:

The product can be stored at least 9 months in its original unopened packaging, if kept dry and protected from moisture.

Consumption

per cm layer thickness: approx. 19.0 kg/m²

Packagings

Type	Sales unit	Number / euro-pallet
Paper bag	40 kg	30 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.