

weber.floor 4610

IndustryTop

Cement-based levelling compound for industrial floors for thicknesses 4 - 15 mm (CT-C35-F10-AR0.5)

Fields of application

For height compensation on concrete or screed industrial floors with high mechanical loads and with high demands for flatness.

Dedicated for use as top wear layer on floors in warehouses and production halls with intensive forklift traffic on wheels, especially for medium or heavy loads

Also for parking buildings and underground car parks.

A subsequent application with **Weber** reactive-resin based coatings (weber.floor 4740 or 4741) in a thickness > 2 mm is possible.

For use indoors.

Description

weber. floor 4610 is a factory-mixed, cement-based and polymer-modified floor levelling compound (max. grain size 1.0 mm).

Main features

- **EMICODE EC 1 PLUS**: very low emission of volatile substances
- CE marking: CT – C35 – F10 – A0.5
- self-levelling
- fits mechanical application very well
- very quick and economical application with **weber.floor MixMobil**
- quickly open to pedestrian traffic
- can be used in different layer thicknesses (4 - 15 mm)
- resistant to high mechanical loads
- suitable for mechanical application (mixing and pumping)
- very good flow performance
- early open to pedestrian traffic

Technical Data Sheet



- resistant to abrasion (class AR0.5)
- tested non-skid performance (skid-proof level 10)
- resistant to mineral oils
- open to water vapour
- self-aerating: no need of spike roller

Technical values

Water demand:	approx. 19% - 20%
Compressive strength (28 days):	approx. 35 N/mm ²
Flexural strength (28 days):	approx. 10 N/mm ²
Resistance to abrasion:	class AR0.5 (EN 13892-4/BCA rolling wheel test)
Pot life:	approx. 15 - 20 minutes at +20°C
Application temperature (air):	≥ +10°C - ≤ +30 °C
Application temperature (substrate):	+10°C - +25 °C
Fresh mortar density:	approx. 2.05 kg/dm ³
Reaction to fire:	class A2 fl s1 (EN 13501-1)
Layer thickness:	4 -15 mm
Consistency (slump /flow rate):	220 - 240 mm (with flow ring: Ø 68 mm/height 35 mm)
Open to foot traffic:	> 1 hour - < 3 hours
Open to light load:	approx. 24 hours
Open to full load:	approx. 7 days
CE marking:	CT - C35 - F10 - AR0.5

Quality control

weber.floor 4610 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 levelling works of floors. If not issued and if necessary, request technical advice.
- Assess the levelling requirement beforehand and mark the finished floor heights.
- Take over existing movement joints.

- Arrange dummy joints for special structural features and special room geometry, i.e wall entry points, doorways, wall recesses.
- High temperatures shorten, lower temperatures extend the pot life.
- During application and for at least 1 week afterwards, the substrate and ambient air temperatures should not fall below +10°C.
- Relative humidity rate during setting: max. 70%
- In case of doubt regarding application, substrate or special structural features, request technical advice.

Special notes

- Limits of use: do not use outdoors.
- The hardened surface can vary in colour and appearance depending on raw material, job site conditions and the “handwriting” of the applicator.
- The untreated surface should generally be cleaned dry by sweeping.
- In case of chemical spillage or frequent moisture protect the surface with a reactive resin coating.
- In case of optic demands the layer thickness should be ≥ 6 mm. Refer to the **Weber** information sheet “Cleaning & care of industrial and commercial floors weber.floor 4610 - 4650”.
- Do not add any foreign substances during mixing, pumping and application.

Substrates

- Concrete, bonded cement screeds, the cement-based levelling compound for industrial floors weber.floor 4602 Industry Base-Extra (5 - 50 mm) and the cement-based high-strength industrial flow screed weber.floor 4605 (30 - 100 mm) are allowed substrates.
- Other substrates, like calcium sulphate screeds, magnesia screeds, stonewood screeds must be examined case-by-case.
- Refer to the specific **weber.floor** system recommendations. For full information request technical advice.

Substrate preparation

- The substrate must be load-bearing, dry, and free of dust and all adhesion-impairing substances.
- 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 ≥ 1.5 N/mm².

- In case of capillary rising damp or water vapour pressure from the substrate, apply 2 coats of epoxy resin primer as vapour-barrier, e.g weber.floor 4712 (EC 1 - very low emission) or weber.floor 4710 directly onto the concrete substrate with scattering of silica sand over the fresh second coat.
- Depending on substrate porosity, apply the acrylic bonding primer weber.floor 4716 diluted with water in a ratio of 1 : 3 in at least one operation. In case of highly porous substrates repeat the operation. Wait until the primer becomes transparent and dry (at the latest 2 days) prior to application of weber.floor 4610.
- Level out major unvenesses with weber.floor 4602 Industry Base-Extra (5 - 50 mm).
- 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).
- For optimal application the whole length of hoses should be at least 40 meters, and in winter 60 meters.
- A steady consistency is a pre-requisite for the final properties of the levelling compound. Monitor the consistency regularly via slump test. after mixing of every 5 tons of material. 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 max. 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. 8). 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

- Mechanical application: limited working lanes or 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 lane or section should not exceed 10 - 12 meters, depending on pump capacity and application thickness.
- If the specified width is exceeded, use the self-bonding foam strip weber.floor 4965 in order to form bays and stop ends.
- Pumping is carried out in sections so that a new lane or section is pumped as quickly as possible and to maintain a wet edge. The material is applied along the previous lane in the intended layer thickness, so that it can flow together.

- Smooth the fresh mortar without delay a serrated rake (notched blade scraper), e.g. **weber ABS Schwedenraker** in 60 cm width (for larger surfaces) and in 30 cm width (for angles and small surfaces). This tool will assist the self-levelling process and improves the de-aeration of the layer. Use a flat rake at shallow angle for levelling out minor marks (if any) for the final smoothing works.
- Manual application: pour and distribute the material in the intended layer thickness either with a serrated rake (notched blade scraper), e.g. **weber ABS Schwedenraker** in 60 cm width (for larger surfaces) and in 30 cm width (for angles and small surfaces). Afterwards smooth with the pre-said rake at shallow angle. A flat trowel can also be used in case of small areas and/or corners with difficult access.
- Note that the use of a flat rake (without notch blade) with distance pins, e.g. **weber Bodenverlaufsraker** is not always recommended; it takes over the profile of the substrate and makes only sense if the substrate is completely flat and the layer thickness is the same everywhere.
- 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 sunlight and heat.
- Ventilation is necessary as soon as the product is open to foot traffic; avoid draughts.
- If no coating will be applied on top of weber.floor 4610, carry out a surface treatment with wax, floor mop care or stone oil after 12 hours at the earliest. Protect the surface from dust and dirt deposit till the treatment will be done.
- Properly installed floors with weber.floor 4610 reach a pull-off strength > 1.5 N/mm². In case of deposit of dirt on the surface, carry out a slight grinding or shot-peening before applying a coating.
- If a **weber.floor** reactive resin-based coating (weber.floor 4740 or 4741) will be applied, respect a waiting time of at least 3 days. Check whether the surface of weber.floor 4610 must be prepared either by shot-peening or grinding. The residual moisture content of the substrate must be < 4% CM-% (by weight); its measurement occurs approx. 15 minutes after break of bottles. For measurement of residual moisture content use a CM device (carbide hygrometer) as a rule.
- If a **weber.floor** cement-based coating (weber.floor 4602 Industry Base-Extra or weber.floor 4605) will be applied, wait till weber.floor 4610 is open to foot traffic. Apply the bonding primer weber.floor 4716 diluted with water in a ratio of 1 : 3 in at least one operation; it is evenly distributed and applied with a soft broom by brushing in intensively.

Practical information

Colour:
dark grey

Water demand:
max. 5 liters/25 kg

Tools:
Mixing pump (for ex. m-tec Duomix 2000) or electric drill + stirrer weber.sys Rührpaddel no. 8, slump test tools (tin, ring and table), serrated rake (notched blade scraper) weber ABS Schwedenraker in 60 cm width (for larger surfaces) and in 30 cm width (for angles and small surfaces), flat rake (without notch blade) with distance pins weber Bodenverlaufsraker, flat trowel

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

Consumption / yield

per mm layer thickness: approx. 1.7 kg/m²

Packagings

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

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.