

weber.floor 4602

Industry Base Extra

Cement-based levelling compound for industrial floors in thicknesses 5 - 50 mm (CT-C25-F7-AR1)

Fields of application

As a coarse levelling layer for very uneven industrial floors (concrete or screeds) prior to application of the final cement-based levelling compounds weber.floor 4610 Industry Top, weber.floor 4650 DesignColour and weber.floor 4655 Industry ResinBase or the epoxy resin coatings (weber.floor 4740 and 4741) in a thickness > 2 mm.

As top wear layer (without covering) for direct use on floors with light loads, such as pedestrian traffic, hand-pulled, pneumatic-tyred carts and moderate forklift traffic with pneumatic or solid rubber tyres.

For use indoors

Description

weber. floor 4602 is a factory-mixed, cement-based and polymer-modified floor levelling compound (max. grain size 2.0 mm).

Main features

- **EMICODE EC 1 PLUS**: very low emission of volatile substances
- CE marking: CT – C25 – F7 – AR1
- high flow performance and very good levelling property
- fits mechanical application very well
- very quick and economical application with **weber.floor Pumtruck** (mixing and pumping)
- early open to foot traffic
- can be used in different layer thicknesses (5 - 50 mm)
- fiber-reinforced
- resistance to abrasion (class AR1)
- suitable as coarse levelling layer (underlay) under reactive resin coatings
- suitable as top wear layer for vehicular traffic with light mechanical loads in industrial facilities
- self-aerating: no need of spike roller

Technical values

Water demand:	approx. 17% - 18%
Compressive strength (28 days):	> 25 N/mm ²
Flexural strength (28 days):	> 7 N/mm ²
Resistance to abrasion:	class AR1 (EN 13892-4/roll test BCA)
Consistency (slump /flow rate):	190 - 220 mm (with flow ring: Ø 68 mm/height 35 mm)
Layer thickness:	5 - 50 mm
Pot life:	approx. 15 - 20 minutes at 20°C
Application temperature (air):	≥ 5°C - ≤ 30°C
Application temperature (substrate):	8°C - 25°C
Fresh mortar density:	approx. 2.1 kg/dm ³
Reaction to fire:	class A2 fl s1 (EN 13501-1)
Abrasion resistance:	AR1.0
Open to foot traffic:	> 2 - < 4 hours
Open to light load:	approx. 3 days hours
Open to full load:	approx. 7 days
CE marking:	CT - C25 - F7 - AR1.0

Quality control

weber.floor 4602 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 on 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.
- In case of slopes (max. 1.5%) the flow performance can vary at some extent by reducing the water dosage.
- 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 1 week afterwards the ambient air and floor temperatures should not fall below 5°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.
- Do not add any foreign substances during mixing, pumping and application.

Substrates

- Cement bonded cement screeds are allowed substrates.

Substrate preparation

- The substrate must be load-bearing, dimensionally stable, 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 $\geq 1.5 \text{ N/mm}^2$.
- In case of capillary rising damp water 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.
- 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 4602.
- 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.
- Before pouring the hoses should be pre-lubricated with a slurry of limestone flour and water prior to the pumping of the first mixture. Alternatively a slurry with weber.floor 4031, 4150 or 4610 can be used. Afterwards this mix is disposed of in a container as waste. Do not use it for the levelling compound.
- 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 (190 - 220 mm) on the flow table. The mortar must not show any bleeding.
- Manual application: mix with max. 4.5 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). Respect 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 6 - 8 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 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 or section 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 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 Bodenverlaufsrakel** 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 4602, 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 4602 reach a pull-off strength $> 1.5 \text{ N/mm}^2$. 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 4602 must be prepared either by shot-peening or grinding. After mechanical preparation the residual moisture content of weber.floor 4602 must be $< 4\% \text{ CM-}\%$ (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. The resin coat thickness must be $\geq 2 \text{ mm}$.
- If a **weber.floor** cement-based coating will be applied, wait till weber.floor 4602 is open to foot traffic. Following cement-based levelling compounds can be applied: the cement-based levelling compound for industrial floors weber.floor 4610 Industry Top (4 - 15 mm), the cement-based coloured floor coating in commercial and industrial areas with light or medium mechanical loads weber.floor 4650 DesignColour (4 - 15 mm) or the cement-based levelling compound for industrial floors under reactive resin coating weber.floor 4655 (4 - 15 mm). 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 intensively.

Practical information

Water demand:
max. 4.5 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 Schwedenrakel 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 Bodenverlaufsrakel, 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.