

weber.floor 4655

Industry ResinBase

Cement-based levelling compound for thicknesses 4 - 15 mm for industrial floors under reactive resin coating (CT-C35-F7)

Fields of application

For height compensation for industrial floors in a thickness from 4 mm up to 15 mm.

It is designed as a quick-drying levelling layer for use under epoxy resin coatings (weber.floor 4740 and 4741) in a thickness of at least 1 mm on concrete and cement screeds.

For floors with light resp. medium mechanical loads, e.g warehouses and production facilities with intensive forklift traffic, narrow aisles of high bay rackings and car parking decks.

For new floors and renovation floor projects.

For use indoors.

Description

weber. floor 4655 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 F7 (EN 13813)
- · self-levelling
- · fits mechanical application very well
- very quick and economical application with weber.floor Pumptruck (mixing and pumping)
- can be used in different layer thicknesses (4 15 mm)
- · early open to foot traffic
- can be early covered with reactive resin coatings (approx. 1 day)
- · self-aerating: no need of spike roller



Technical values

Water demand: approx. 18% - 20% Compressive strength (28 days): approx. 30 N/mm² Approx. 7 N/mm²

Consistency (slump /flow rate): 240 - 260 mm (with flow ring:

Ø 68 mm/height 35 mm)

Pot life: > 10 - < 15 minutes at +20°C;

higher temperatures shorten,

lower temperatures extend the pot life

Application temperature (air): $\geq +5^{\circ}\text{C} - \leq +30^{\circ}\text{C}$ Application temperature (substrate): $+8^{\circ}\text{C} - +25^{\circ}\text{C}$

Reaction to fire: class A 2 fl s1 (EN 13501-1)

Layer thickness: 4 -15 mm

Open to foot traffic: > 1 - < 3 hours

Open to light load: approx. 24 hours

Open to full load: approx. 7 days

CE marking: CT - C35 - F7 (EN 13813)

Quality control

weber.floor 4655 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.
- 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.
- · Take over existing movement joints.
- 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.
- Level out deeper unevenness up to 10 cm by adding round gravels 16/32 mm. Refer to the weber.floor system recommendation "Floor levelling works with gravel filling". For full information request technical advice.



Special notes

- · Limits of use: do not use outdoors.
- Thickness of reactive resin coatings > 1 mm
- Do not add any foreign substances during mixing, pumping and application.

Substrates

• Concrete, bonded cement screeds and the cement-based levelling compound for industrial floors weber.floor 4602 Industry Base-Extra (5 - 50 mm) are allowed substrates.

Substrate preparation

- The substrate must always be prepared by appropriate mechanical means, e.g grinding or shot-peening, in order to reach a pull-off strength ≥ 1.5 N/mm².
- 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.
- Wait until the primer becomes transparent and dry (at the latest 2 days) prior to application of weber.floor 4655.
- 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.
- 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 (240 260 mm) on the flow table. The mortar must not show any bleeding.
- Manual application: mix with approx. 4.7 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 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 temporary 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 Schwedenrakel 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 Schwedenrakel 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 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.
- Respect a waiting time of at least 3 days before a weber.floor reactive resin coating (weber.floor 4740 or 4741) is applied. weber.floor 4755 must have reached a residual humidity content < 4 CM-% (by weight). Measurement occurs approx. 15 minutes after break of bottles.
- Properly installed floors with weber.floor 4655 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 reactive resin-based coating (weber.floor 4740 or 4741) will be applied, check whether the surface of weber.floor 4655 must be prepared either by shot-peening or grinding.

Readiness for covering

• weber.floor 4655 can be covered with reactive resin-based coatings (weber.floor 4740 or 4741) after approx. 24 hours at +20°C and 65% relative humidity rate.

Practical information

Colour:

light 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 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, flat trowel, weber Bodenverlaufsrakel

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

Туре	Sales unit	Number / euro-pallet
Plastified bag Pumptruck	25 kg	42 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.