

weber.floor 4741

Low-emission EP coating

Pigmented, 2-component low-emission and AgBB-tested epoxy resin coating

Fields of application

As thin or thick coating for concrete floors and cement screeds floor surfaces, for e.g. in industrial and commercial facilities, workshops, warehouses, production areas, car parking decks etc. which are subject to medium and heavy mechanical loads.

It can provide smooth thin coatings from 1.5 mm up to approx. 2.0 mm (without silica sand) thickness as well as thick coatings from approx. 2.0 mm up to 4.0 mm (with silica sand). Thanks to addition of silica sand on top non-skid surfaces can be achieved.

Also as top sealer on coated surfaces with scattering of silica sand on top, as well as new coating over old epoxy resin coatings.

For indoors.

Description

weber.floor 4741 is a factory-mixed 2-component, solvent-free, pigmented reactive resin on epoxy resin basis.

Main features

- CE marking: SR – B1.5 – AR0.5 – IR10
- decorative look
- multi-use
- impervious to liquids
- available in a wide colour range (approximately RAL colour chart)
- good chemical resistance
- high abrasion resistance
- low emission; hence suitable for recreative rooms (tested according to the AgBB-scheme - Committee for Health-Related Evaluation of Building Products)
- 100 % solid content (no water and no solvent) as epoxy composition according to the test method of German Association for Construction Chemicals)
- official approval Z-156.605-818

Technical values

Curing time:	approx. 18 hours
Pot life:	up to 30 minutes at +20°C
Application temperature (air):	≥ +10°C - ≤ +30°C
Application temperature (substrate):	+10°C - +30°C
Max. relative humidity rate:	< 75 %
Reaction to fire:	class Bfl s1 (EN 13501-1)
Application thickness:	1.5 - 4.0 mm
Consistency:	liquid
Open to light load:	approx. 2 days
Open to full load:	approx. 7 days
Mixing ratio:	comp. A (resin base) : comp. B (hardener) = 5 : 1 parts by weight or 100 : 35 parts by volume
CE marking:	SR - B1.5 - AR0.5 - IR10

Quality control

weber.floor 4741 is subject to a regular quality control by self-monitoring.

General notes

- Follow the national guidelines/standards; if not issued and if necessary, refer to the BEB data sheets of "Industrial floors of reactive resin KH-O/U, KH-1 to KH-5 and KH-O/S" (Germany).
 - In case of medium mechanical loads apply one layer in a thickness of 2 mm; in case of high mechanical loads the layer thickness should be 3 - 4 mm.
 - Minor shade deviations are unavoidable due to different product batches. If a uniform colour appearance is important, work on contiguous sections should be carried out using the same batch number (see label on packaging).
 - All characteristics mentioned in this data sheet relating to pot life, delay for pedestrian traffic, consumption and filling ratios with mineral fillers are temperature-dependent and are based on +20°C.
 - Epoxy resins are not permanently colour-stable under UV radiation and weather influences and they tend to become chalky due to accelerated ageing.
 - The substrate temperature must be at least 3°C above the prevailing dew point temperature.
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Special notes

- Porous substrates and concretes with air-entraining agents can lead to blisters and channels in the coating.
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- When used in thicknesses up to 2.0 mm or as thin top seal layer **weber.floor 4741** must be used uncut (without silica sand).
- When used in thicknesses from 2.0 mm up to 4.0 mm mix silica sand **weber.floor 4935** (0.1 - 0.3 mm) up to 50% by weight.
- The above-mentioned abrasion class (AR) of the CE marking label is given for a smooth coating (without any broadcast of silica sand on top and without mixing with silica sand).
- The minimal thickness of **weber.floor 4741** must be at least 2 mm when applied on fibre-reinforced levelling mortars.

Substrates

- Concrete, cement screeds and epoxy resin coatings with silica sand on top are allowed substrates.
- Other substrates must be examined case-by-case.

Substrate preparation

- The substrate must be solid, load-bearing, dry, and free of dust and all adhesion-impairing impurities.
- Optimal bonding of reactive resins onto the substrate depends on careful preparation. Therefore, the substrate must always be prepared by appropriate mechanical means, for ex. shot blasting, milling, etc., so that a tensile strength (pull-off strength) $\geq 1.5 \text{ N/mm}^2$ in case of industrial floors and $\geq 1 \text{ N/mm}^2$ in case of residential and commercial floors is reached.
- Reactive resin coatings require a smooth, load-bearing and uniformly primed substrate.
- Use the 2-comp. solvent-free and low-emission epoxy primer **weber.floor 4712** (low emission EC 1 and normal-setting). Observe the technical data sheet.
- Major unvennesses of concrete must be levelled out with the cement-based levelling mortars **weber.floor 4602** Industry Base Extra or **weber.floor 4655** Industry ResinBase.
- Intensively sand or roughen old, well-bonded epoxy coatings until “white break”. If in doubt, carry out a test on a trial area.
- The substrate preparation must be adapted to the specific job site conditions.

Working instructions

Mixing

- **weber.floor 4741** is supplied in 2 pre-mix twin packagings (component A = resin base and component B = hardener) with the specific mixing ratio for use. Avoid mixing of partial quantities.

- Empty the component A totally into the component B.
- Mix both components with a slow-speed electric drill and with the stirrer **weber.sys Rührpad-del no. 2** or **no. 8** for approx. 2 minutes, at least until a homogeneous mixture of uniform colour is achieved.
- Care must be taken to ensure that the product is also thoroughly mixed in the corners and at the bottom of the mixing container.
- We recommend decanting into a clean container and mixing shortly again.

Application

- Pour mixed material (with or without silica sand) onto the cured primer and distribute in the intended layer thickness.
- Do not use rakes with steel spikes.
- Unfilled coatings (without silica sand) in layer thickness 1.5 - 2.0 mm: use the rake **weber Großflächenraker** equipped the specific notched blade **weber Zahnleiste no. 1** (notch 2.5 mm). Consumption for 2 mm thickness: approx. 2.5 - 3.0 kg/m²
- Filled coatings (with silica sand) in layer thickness of 2.0 - 4.0 mm: use an electric drill and an appropriate stirrer, and mix 1 part by weight **weber.floor 4741** and 0.5 part by weight **weber.floor 4935** (0.1 - 0.3 mm); use the rake **weber Großflächenraker** equipped the specific notched blade **weber Zahnleiste no. 2** (notch 5.0 mm). Consumption: approx. 1.7 kg/m² and per mm layer thickness.
- When working on inclined or vertical surfaces, add the thixotropic agent **weber.floor 4917** (2% - 8%) after mixture of both components of **weber.floor 4741** in order to achieve a non-sag consistency. Use a flat trowel.
- For a non-skid surface or a decorative coating broadcast the fresh coating with oven-dried silica sand in the desired grain size up to saturation. After 24 hours sweep away the excess material (non-bound sand) and apply **weber.floor 4741** (unfilled) on top as sealer, using a rubber squeegee for distributing the material and afterwards with a shorthair lambskin roller for providing a thin layer.
- Clean mixing equipment and tools with the thinner **weber.sys 992** immediately after use and whenever working steps are interrupted (fresh product). Hardened material can only be removed mechanically.

Aftercare

- Avoid water load within the first 7 days.
- A premature water load or dew point situation can impair the setting process, with spots and differences of the gloss level as result.
- If a matte finish is requested, apply the matte and low-emission epoxy sealer **weber.floor 4774**. Delay between coating and sealer: at least 16 hours, maximum 24 hours at +20°C.
- The application of an additional wear coat on smooth coatings/sealers with a wax-dispersion based treatment is recommended. Request technical advice.

Practical information

Colours:

standard colours (approximately RAL chart): 1001, 1015, 3009, 5014, 6011, 7001, 7015, 7023, 7030, 7032, 7035, 7040; other colours on request

Tools:

Electric drill + stirrer weber.sys Rührpaddel no. 2 or no. 8, rake weber Großflächenrakel equipped with the notched blade **weber Zahnleiste no. 1** (notch 2.5 mm) or **no. 2** (5.0 mm), shorthair lambskin roller, rubber squeegee, flat trowel.

Storage:

The product can be stored at least 12 months in its original unopened packaging, if kept dry, protected from moisture and direct sunlight, and at temperatures $\geq +10^{\circ}\text{C}$.

Consumption

per mm layer thickness:	approx. 1.4 kg/m ²
as unfilled coat (without silica sand) per mm layer thickness:	approx. 1.0 - 1.5 kg/m ²

Packagings

Type	Sales unit	Number / euro-pallet
Metal bucket (kit with comp. A + comp. B)	12 kg	30 buckets
Metal bucket (kit with comp. A + comp. B)	25 kg	12 buckets

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.