

weber.tec 794

EP primer

2-comp. epoxy primer for substrate consolidation, as moisture barrier, crack sealer and binder for resin mortars

Fields of application

As primer for the 2-comp. coloured epoxy resin coating weber.tec 796.

For consolidation of concrete surfaces and screeds.

As vapour-barrier against rising damp under smoothing mortars and levelling underlay mortars.

Best designed as water-free primer on moisture-sensitive substrates.

For monolithic sealing of cracks and construction joints of concrete surfaced and screeds.

As bonding layer for bonded screeds and for adjoining works with screed mortar.

As binder in combination with oven-dried silica sands it is possible to obtain thin scratch layers, epoxy resin patching repair mortars and epoxy resin screed mortars (SR) for use on industrial floors.

For use indoors and outdoors.

Description

weber.tec 794 is a factory-mixed 2-component, solvent-free and transparent reactive resin based on epoxy resin.

Main features

- wide application range
- compatible on concrete and cement screeds substrate residual moisture up to 4 CM-% (by weight) for concrete and cement screeds
- very economical in case of large surfaces
- high-effective barrier effect against rising damp
- consolidates absorbent mineral substrates
- very good chemical resistance
- 100% solids content (i.e no water and no solvent) as epoxy resin composition according to the test method of German Association for Construction Chemicals
- for use indoors and outdoors

Technical values

Curing time:	approx. 8 hours
Pot life:	> 15 - < 60 minutes, depending on temperature
Application temperature:	+10°C - +45°C
Density:	approx. 1.1 kg/dm ³
Reaction to fire:	class Bfl s1 (EN 13501-1)
Consistency:	liquid
Open to foot traffic (curing time):	approx. 8 hours
Open to mechanical loads:	approx. 2 - 3 days
Open to chemical loads:	approx. 7 days
Mixing ratio:	comp. A (resin base) : comp. B (hardener) = 2 : 1 parts by weight
Clean-up:	thinner weber.sys 992 (fresh product); mechanical means (dry product)

Quality control

weber.tec 794 is subject to a regular quality control by self-monitoring.

General notes

- Comply with the national standards and/or guidelines relating to works with reactive resins. If not issued and if necessary, request technical advice.
- When used as primer, the material must be applied at falling temperatures.
- 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.
- Relative humidity rate < 75% during application and for 1 day afterwards
- Substrates with a reactive resin on top must be protected from rising damp by applying an appropriate waterproofing.
- Whitish stains might appear on the surface due to moisture (dew point); they must be eliminated prior to application of the next coatings at all costs.
- The substrate temperature must be at least 3°C above the prevailing dew point temperature.

Special notes

- Porous substrates and concrete with air-entraining agents cannot be primed pore-free; this usually might lead to blisters and channels in the subsequent coating.
- As a rule, reactive resins require a compressive strength $\geq 30 \text{ N/mm}^2$ and a tensile strength (pull-off strength) of concrete surfaces $\geq 1.5 \text{ N/mm}^2$.
- Do not add foreign substances during mixing and application.

Substrates

- Concrete, cement screeds, anhydrite screeds, magnesia screeds, stonewood screeds, mastic asphalt screeds, tiles, chipboards are allowed substrates.
- Other substrates must be examined case-by-case.

Substrate preparation

- The substrate must be load-bearing, dimensionally stable, dry, and free of dust, and all adhesion-impairing particles and substances.
- Optimal bonding of reactive resins onto the substrate depends on careful preparation. Therefore, it must always be prepared by appropriate mechanical means, so that the above-mentioned pull-off strength value is reached.
- The substrate preparation must be adapted to the specific job site conditions.

Working instructions

Mixing

- weber.tec 794 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 Rührpaddel no. 2 for approx. 2 minutes, at least until a homogenous mixture of uniform colour is achieved.
- Take care 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.
- **Mixing ratio for uses as primer and sealer for cracks:** mix components A and B in the original factory ratio.

- **Mixing ratio for use as scratch layer:** first mix components A and B in the original factory ratio; afterwards mix 1 part by weight of weber.tec 7940 and 2 - 2.5 parts by weight of filling sand weber.sys Hartquarzmaterial or floor 4935 (0.1 - 0.3 mm). Consumption of filler: approx. 2 kg/m² and per mm layer thickness.
- **Mixing ratio for use as epoxy screed** as SR C35 - F10 - AR1 - B1.5 - IR4 (EN 13813): first mix components A and B in the original factory ratio; afterwards mix 1 part by weight of weber.tec 7940 and 10 parts by weight of silica sand weber.floor 4932 (max. grain size 1.2 mm) for screed thicknesses up to 7 mm or weber.floor 4933 (max. grain size 3 mm) for screed thicknesses over 7 mm, using a forced-action mixer. Consumption of silica sand: approx. 2.1 kg/m² and per mm layer thickness.

Application

- **As primer:** apply weber.tec 794 and distribute in one operation at a rate of 300 - 500 g/m² with the rubber squeegee and smooth down uniformly with a shorthair lambskin roller in crosswise directions. Afterwards scatter uniformly the silica sand weber.floor 4936 (0.3 - 0.8 mm) at a rate of approx. 1.5 - 2.5 kg/m² on the fresh coat. After curing (approx. 8 hours) vacuum off any loose sand.
- **As vapour-barrier against rising damp:** apply a first coat at a rate of 500 - 600 g/m². Do not scatter silica sand on the first coat. As soon as the first coat can be walked on (after max. 36 hours), apply a second coat with 400 - 500 g/m² and scatter uniformly the silica sand weber.floor 4936 (0.3 - 0.8 mm) up to saturation at a rate of approx. 3 kg/m². Use a rubber squeegee for material spreading and smooth uniformly with a shorthair lambskin roller in crosswise directions.
- **As scratch layer:** apply the mixture (consisting of the epoxy resin mixed with mineral fillers) with a flat trowel on the primed substrate. Scatter the silica sand weber.floor 4936 (0.3 - 0.8 mm) at a rate of approx. 1.5 - 2.5 kg/m², while the scratch layer is still fresh.
- **As sealer for cracks:** open the cracks up to 2/3 the screed depth using an angle grinder. Make cross-cuts of approx. 25 cm length crosswise to the crack line. Vacuum out cracks and cross-cuts. Insert the steel anchors weber.sys Estrichklammer (or weber.floor Wellenverbinder) of size 70 x 6 mm into cracks and cross-cuts. Fill by pouring weber.tec 794; if necessary, repeat the process until cracks and cross-cuts are completely filled. Wider cracks can be pre-filled with a mix of resin and silica sand weber.floor 4936 (0.3 - 0.8 mm) up to 2 parts by weight. Wipe off any excess resin from the surface, using a flat trowel. Fully broadcast the still wet resin with the pre-said silica sand up to saturation, in order to provide a good bonding with the next products. After curing (next day) vacuum off any loose sand.
- **As binder for epoxy resin mortar:** first apply the resin (uncut - without silica sand) as primer; afterwards apply it as bonding layer with brush or roller on the primed substrate. Lay the epoxy mortar in the intended layer thickness with a flat trowel, gauge or levelling boards (aluminium beams). Always work "wet-on-wet": priming coat and scratch layer must be tacky before they are covered. Compact and smoothen the epoxy mortar, using a smoothing trowel or a power trowel. Whenever the epoxy resin mortar will receive an epoxy resin coating, scatter the silica sand weber.floor 4936 (0.3 - 0.8 mm) at a rate of approx. 1.5 - 2.5 kg/m², while the epoxy mortar is still fresh.

Technical Data Sheet



- Clean mixing equipment and tools with the thinner weber.sys 992 each time work is interrupted (fresh product). Hardened material must be removed mechanically.

Practical information

Colour:
transparent

Tools:
Electric drill + stirrer weber.sys Rührpaddel no. 2, forced-action mixer (for epoxy mortars), brush, shorthair lambskin roller, rubber squeegee, gauge or levelling boards (aluminium beams), flat trowel, power trowel

Storage:
The product can be stored at least 24 months in its original unopened packaging, if kept dry, protected from moisture and direct sunlight, at a temperature $\geq +10^{\circ}\text{C}$.

Consumption

as primer:	> 300 - < 500 g/m ² per operation
as binder with silica sand (for scratch layer or epoxy resin mortar):	depending on filling ratio
as crack filler:	approx. 1.1 kg per liter

Packagings

Type	Sales unit	Number / euro-pallet
Metal bucket (kit with comp. A + comp. B)	10 kg	30 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.