

weber.epox design

2-comp EP resin adhesive and grout

Coloured epoxy resin adhesive (R2 T) and grout (RG)

Uses	Benefits
<ul style="list-style-type: none">• for residential rooms and wet-duty areas• for areas permanently under water• for thermal, medicinal and therapy baths	<ul style="list-style-type: none">• particularly easy handling for grouting and cleaning works• high colour brilliance and fine-grained texture• high chemical resistance

Fields of application

For fixing and grouting ceramic tiles and mosaic on walls and on floors indoors and outdoors for joints with a maximal width of 10 mm.

Mainly for use in areas permanently under water like swimming pools, wellness spas, thermal, medicinal and therapy baths; in residential and public baths and in wet-duty rooms.

Also for use in facilities whenever an increased chemical resistance for tiling fixing and for grouting is necessary, like canteen kitchens, cheese dairies, dairies, breweries, beverage production facilities, butcheries, slaughterhouses etc.

Furthermore for repair of worn-out joints between ceramic tiles and mosaic.

For use indoors and outdoors.

Description

weber.epox design is a factory-mixed, 2-component reaction resin adhesive and grout mortar. It is classified **R2 T as tile adhesive** according to EN 12004 as tile adhesive and **RG as grout** according to EN 13888.

Composition

Components (resin base and hardener) based on epoxy resin.

Main features

- **R2 T**: R2: pull-off strength $\geq 2.0 \text{ N/mm}^2$ after all storage conditions – T: thixotropic, slip $\leq 0.5 \text{ mm}$
- **RG**: reduced water absorption ($\leq 0.1 \text{ g}$) and higher abrasion resistance ($\leq 250 \text{ mm}^3$)

- particularly easy for grouting works and cleaning
- watertight
- brilliant colour effect
- fine surface texture
- resistant to numerous cleaners, diluted acids, lyes, salt solutions, oils etc.
- high abrasion resistance
- very easy to emulsify
- resistant to frost and thawing salts
- odourless
- for use indoors and outdoors

Technical values

Application temperature (air, substrate and material)	+10°C - +35°C
Pot life	max. 40 minutes
Mixing ratio	comp. A (resin base) : comp. B (hardener) = 3 : 1 (3.375 kg + 1.125 kg = 4.5 kg)
Pre-washing / emulsifiable	after approx. 10 minutes
Pre-washing / emulsifiable	up to approx.45 minutes
After-washing	up to approx.60 minutes
Open to foot traffic	approx.16 hours
Open to full service	approx.7 days
Minimal joint width	1 mm
Maximal joint width	10 mm
Minimal flexural strength after dry storage (28 days)	30 N/mm ²
Minimal compressive strength after dry storage (28 days)	45 N/mm ²
Maximal abrasion	250 mm ³
Maximal water absorption after 240 minutes	0.1 g
Suitability for areas permanently under water	yes
Chemical resistance	high
CE marking	R2 T in accordance with EN 12004 and RG in accordance with EN 13888
Clean-up	water (fresh product); only by mechanical means (dry product)

Quality control

- **weber.epox design** is subject to a regular quality control by self-monitoring according to EN 12004 and EN 13888.

General notes

- All characteristics mentioned in this data sheet are based on a temperature of +23°C without draught and a relative humidity rate of 50%.
- Higher temperatures accelerate, lower temperatures delay the reaction process.
- Comply with the national standards and/or guidelines, for ex. DIN 18157 “Execution of tilings and coverings” and the leaflets of ZDB (Central Association of German Construction Industry); if not issued and if necessary, request technical advice.
- Do not install or grout tiles, slabs or natural stones that have been stored damp, wet, or too cold.
- Mortar residues can settle on porous (also microporous), rough and matte surfaces. If in doubt, carry out a preliminary test on a trial area. If necessary, such discolorations can be prevented by pre-wetting the grouted surfaces.

Special notes

- For natural stones and other critical coverings (polished, unglazed, non-skid etc.), always carry out a preliminary test prior to grouting.
- There is a risk of staining or visible material residues in the pores.
- It is imperative to clarify in advance whether **weber.epox design** is suitable for the selected type of water treatment in baths/pools.
- Do not add water to the components during mixing and application.
- Take care when handling the component B (hardener); it is alkaline, skin aggressive and can cause irritation. Observe the safety regulations indicated on the packaging when handling and storing the material.
- Colour changes due to UV rays cannot be excluded. In the event of prolonged, frequent or intensive exposure to chemicals (e.g cleaning agents, disinfectants), discolouration may occur without impairing the properties of the product.

Substrate preparation

- The substrate must be sufficiently solid, load-bearing, clean, dry, dimensionally stable, and free of all adhesion-impairing particles and substances.
- Concrete substrates must be free of cement laitance.

- Completely remove oil, grease, wax and care product residues.
- We recommend the EP resin primer **weber.prim 807** for binding residual dust on highly absorbent surfaces.
- Prior to begin of grouting works scrape all joints to a uniform depth and wait until the tile adhesive has set (cured).
- All joint sides must be dry, clean, free of fats and dust.
- In case of grouting mosaic completely remove glue residues with an appropriate cleaning agent so as to avoid an eventual microbiological fouling.
- In case of renovation works a joint depth of minimum 3 cm is mandatory.
- The substrate preparation must be adapted to the specific job site conditions.

Working instructions

Mixing

- **weber.epox design** is supplied in a 2 pre-mix twin packaging (component A = resin base and component B = hardener) with the specific mixing ratio for use.
- The mixing of partial quantities is not allowed.
- Do not add any other additives, such as water, solvent or similar.
- Empty the component B (smaller packaging of 1.125 kg) totally into the component A.
- Mix both components with a slow-speed electric drill and an appropriate stirrer for at least 2 minutes, until a homogeneous 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 it into a clean container and mixing it shortly again.
- As a rule, only mix whole packagings and do not make portioning.

Application in general

- Do not apply in case of very warm weather conditions and draughts.
- In case of internal application take care of sufficient ventilation with fresh air.
- Always wear safety goggles and gloves.

Application as tile adhesive

- Apply **weber.epox design** on horizontal or inclined surfaces with a notched trowel in a layer thickness up to approx. 3 mm.

- In case of use on vertical surfaces, the notch size must not exceed 8 mm.
- Press on the tiles into the fresh resin bed with a slight twisting motion, press down and align without delay.
- Remove fresh mortar residues with a wet sponge.
- Clean mixing equipment and tools immediately after use with water. Hardened material can be only removed mechanically.

Application as grout

- Apply **weber.epox design** into the joints and remove excess material in diagonal movements, using the hard rubber board **weber.sys Epoxidharzfugbrett** (best practice). Do not use a rubber squeegee.
- The pre-said rubber board will allow deep and flush application into the joints; it also makes the removal of excess material easier.
- Application with mechanical or manual gun is also possible

Pre-cleaning / Emulsifying

- Start the pre-washing at the latest 10 minutes after removal of excess material.
- Sprinkle warm water or spray the instant cleaner for fresh epoxy resin grout (RG) **Fila Epox Waschhilfe** over the grouted surfaces. Use a form-stable hard sponge or an abrasive pad in order to emulsify the grout.
- In case of glazed non-porous surfaces, use a soft sponge and some water.
- In case of patterned surfaces and slabs, use a hard sponge and some water.

After-cleaning

- Clean the grouted surface with a viscose sponge and clean water. Rinse the sponge often and change the water at regular intervals.
- Wipe off any eventual remaining mortar haze with a damp sponge at the latest 24 hours after the completed grouting works.
- For an easier after-cleaning spray **Fila Epox Waschhilfe**.
- Warm water makes the cleaning process easier.
- Clean mixing equipment and tools immediately after use with water. Hardened material can be only removed mechanically.

Aftercare

- Protect the fixed and grouted external surfaces for at least 7 days from direct sunlight, frost and rain.

Practical information

Colours:

white, silver grey, cement grey, dark grey, black

Tools:

Electric drill + stirrer, notched trowel, hard rubber board **weber.sys Epoxidharzfugbrett**, manual or pneumatic gun, hard sponge, abrasive pad, soft sponge.

Storage:

The product can be stored at least 18 months in its original unopened packaging, if kept dry and cool at a temperature $\geq +5^{\circ}\text{C}$.

Consumption/Yield

As tile adhesive

4 mm notch: approx. 1.6 kg/m²

6 mm notch: approx. 2.2 kg/m²

8 mm notch: approx. 2.6 kg/m²

As grout

split tiles 11.5 x 24 cm: approx. 2.5 kg/m²

tiles 20 x 20 cm: approx. 0.5 kg/m²

tiles 15 x 15 cm: approx. 0.9 kg/m²

mosaic 2 x 2 cm: approx. 1.0 kg/m²

Packagings

Type	Sales unit	Number / euro-pallet
Plastic bucket (comp. A +B)	4.5 kg	63 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.