Technical Datasheet

weber.xerm 847

Reaction resin adhesive

Highly flexible reaction resin-based adhesive for water-free or medium-resistant tile fixing

Fields of application

As high-bond and flexible tile adhesive for use on glazed and unglazed ceramic surfaces, on absorbent mineral substrates (concrete, render, floor screeds), on aluminium and stainless steel as well as on the liquid-applied epoxy resin waterproofing membranes weber.tec 827 and 827 S.
Suitable for bonding ceramic tiles and slabs, particularly in commercial kitchens and also for renovation works "tile on tile" on balconies and terraces, even on existing glazed or unglazed ceramic coverings. Dedicated for use on walls and floors with high loads of chemicals, oils, fats and/or water in damp, wet-duty rooms, thermal, medicinal and therapy pools, saunas and solariums, canteens and commercial kitchens, kitchen rooms and worktops, laboratory rooms and tables, laundries, breweries etc. For indoors and outdoors.

Description

weber.xerm 847 is a factory-mixed, 2-component, solvent-free reaction resin adhesive of **class R2 TE** according to EN 12004.

Composition

Components (resin base and hardener) based on epoxy resins

Main features

- **class R2 TE** – R2: pull-off strength ≥ 2.0 N/mm^2 in all storage conditions – T: thixotropic, slip ≤ 0.5 mm – E: extended open time ≥ 30 minutes
- certified by Det Norske Veritas for use on American cruise liners
- high bonding strength

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- highly flexible
- crack-bridging
- waterproof
- resistant to numerous diluted acids and alkalis
- heat and frost resistant

Technical values

Application temperature:	+10°C - +35°C
Pot life:	approx. 25 minutes
Mixing ratio:	comp. A (resin base) : comp. B (hardener) = 10 kg : 1.2 kg
Open to pedestrian traffic:	approx. 24 - 48 hours
Open for grouting works:	> 24 hours
Open to full service:	approx. 7 days
Pull-off strength after drying/ heat aging/water immersion:	≥ 2.0 N/mm²
Reaction to fire:	class E

Quality control

weber.xerm 847 is subject to a regular quality control by self-monitoring according to EN 12004.

General notes

- All characteristics mentioned in this data sheet are based on a temperature of +23°C without draughts and a relative humidity rate of 50%.
- Higher temperatures and lower humidity accelerate, lower temperatures and higher humidity delay the reaction process.
- For application follow the national standards/guidelines; if not issued and if necessary, refer to DIN 18157 "Execution of tilings and coverings" and the leaflets of ZDB (Central Association of the German Construction Industry).

- Respect the maximum residual substrate moisture at the time of installation of ceramic coverings and natural stones; it should not exceed 2.0% in case of heated or non-heated cement screeds, 0.5% in case of non-heated anhydrite screeds, and 1% air dry for cement and cement-lime renders/plasters. Measurement is done with a carbide hygrometer as a rule.
- Do not install tiles, slabs, or natural stones that have been stored damp, wet, or too cold.

Special notes

- **Limits of use**: do not use outdoors on surfaces above heated or inhabited rooms and indoors on heated anhydrite screeds.
- For full information relating to allowed substrates and tile coverings refer to our chart **"Overview Tile Adhesives"**.
- weber.xerm 847 is suitable for embedding gutter suspension metal plates on balconies and terraces; the plates must be additionally anchored to the substrate.
- High-quality reactive resins, such as epoxy or polyurethane resins, require a concrete compressive strength of at least 30 N/mm² and an adhesive tensile strength (pull-off strength) of 1.0 N/mm².
- The residual humidity content of concrete must be < 4% by weight. Measurement is done with a carbide hygrometer as a rule.
- The substrate temperature must be at least 3°C above the dew point temperature.
- A declaration of conformity for marine applications can be found at: https://sg-weber.de/marine.

Substrate preparation

- The substrate must meet the requirements of national standards/guidelines; if not issued and if necessary, refer to DIN 18157.
- The substrate must be sufficiently solid, load-bearing, clean, dry, dimensionally stable and free of adhesion-impairing substances.
- Concrete substrates must be free of cement laitance.
- Remove oil, grease, wax and care product residues completely.

- Remove minor grease or wax stains on glazed and other non-absorbent surfaces (e.g. due to the use of household cleaners) completely with the thinner weber.sys 992.
- In case of use "tile on tile" check the bonding on non-glazed tiles and slabs which surface has been pre-treated in the factory, on job site or with care products by a preliminary test. If adhesion is insufficient, roughen the substrate by grinding or sand-blasting, and check the adhesion again.
- Substrates with larger cavities and breakouts must be levelled out or repaired beforehand, for ex. using weber.xerm 844 + silica sand weber.sys Hartquarzmaterial (0.1 - 0.5 mm) in a mixing ratio of 1 : 2 parts by weight.
- Steel substrates must be treated with a high-grade anti-corrosion product: grind up to "white break" and scatter silica sand weber.sys Hartquarzmaterial (0.7 - 1.2 mm), so as to obtain a good key with the adhesive.
- Stainless steel and aluminium substrates must first be covered with a thin scratch coat of weber.xerm 847; afterwards tiles and slabs are laid "wet-on-wet" onto the scratch coat.
- Absorbent mineral substrates (concrete, renders, cement and anhydrite screeds): use the 2-comp solvent-free epoxy resin primer weber.prim 807 and apply weber.xerm 847 on the sticky primer; if not possible, scatter the silica sand weber.sys Hartquarzmaterial (0.3 - 0.5 mm) up to saturation over the fresh primer and allow to dry, before applying weber.xerm 847.
- The substrate preparation must be adapted to the specific job site conditions.

Working instructions

Mixing

- **weber.tec 847** 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 B totally into the component A.
- Mix both components with a slow-speed electric drill and the stirrer weber.sys Rührpaddel no. 2 or no. 8 (according to packaging size) approx. 3 minutes, 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

- weber.xerm 847 is applied on walls with a notched trowel (notch size 4 or 6 mm).
- weber.xerm 847 can also be applied according to the medium-bed method on horizontal surfaces.
- For use on the epoxy waterproofing membrane weber.tec 827 wait max. 5 days (depending on air and substrate temperature); if not possible, scatter the silica sand weber.sys Hartquarzmaterial (0.7 - 1.2 mm) up to saturation over the fresh second epoxy resin coat and allow to dry, before applying weber.xerm 847.
- Clean mixing equipment and tools with the thinner weber.sys 992 (fresh product). Hardened material can only be removed mechanically.

Practical information

Colours:
light grey

Tools:
Electric drill + stirrer weber.sys Rührpaddel no. 2 or no. 8, thin-bed or medium-bed notched trowel

Storage:
The product can be stored at least 12 months in its original unopened packaging, if kept dry and protected from moisture.

Consumption

4 mm notch:	approx. 1.7 kg/m²
6 mm notch:	approx. 2.1 kg/m²
8 mm notch:	approx. 2.4 kg/m²

Packagings

Type	Sales unit	Number / euro-pallet
Metal bucket (kit with comp. A + comp. B)	5 kg	42 buckets
Metal bucket (kit with comp. A + comp. B)	10 kg	45 buckets