

### weber.tec 824

1-comp. flexible cement-based waterproofing slurry

# Crack-bridging waterproofing product as bonded system under tiles and slabs

#### **Fields of application**

As flexible, crack-bridging, 1-component hydraulically-setting waterproofing slurry.

To be used as composite waterproofing (i.e as bonded system) in wet-duty areas with low, moderate or high moisture loads under ceramic coverings in interior areas on walls and floors.

The product hardens virtually free of cracks and residual stress and can be directly covered with ceramic coverings.

Suitable for waterproofing in combination with ceramic coverings in case of all water load classes W0-I up to W3-I according to DIN 18534-3 in indoor areas as described hereafter:

**Low water load (W0-I)**: walls of domestic bathrooms beyond shower areas / walls of domestic kitchens / floors of domestic rooms without drain, for ex. in kitchens, utility rooms, guest toilets in case of moisture-sensitive substrates.

**Moderate water load (W1-I)**: walls of domestic bathrooms above bathtubs and in showers / floors of domestic bathrooms without or with drain without high water load from the shower area / floors of domestic rooms with drain in case of moisture-sensitive substrates.

**High water load (W2-I)**: walls of showers in sports facilities and industrial premises / walls and floors in sports facilities and industrial premises / floors with drains or gutters and flush-floor showers in case of moisture-resistant substrates.

**Very high water load (W3-I)**: very high exposure to water on surfaces with very frequent or longlasting exposure to spray water, service water or water from intensive cleaning operations, for ex. pedestrian areas around swimming pools / showers and shower rooms in sports facilities and industrial premises in case of moisture-resistant substrates.

In addition, for the reliable waterproofing of several substrates against water penetration, such as heated/unheated screeds, masonries, concrete, aerated concrete, mineral renders, gypsumbased substrates, old ceramic tiles etc. which are exposed to strong water load after tiling.

Furthermore, for use as moisture protection in splash water areas (facade socket areas) and as post-applied internal waterproofing when renovating old buildings.

The product hardens virtually free of cracks and residual stress and can be directly covered with ceramic coverings.

After setting it is waterproof, frost-, sulphate- and ageing-resistant.

For use indoors and outdoors.

#### Description

**weber.tec 824** is a 1-component, hydraulically-setting and flexible waterproofing slurry. With official approval (Germany) in combination with several **Weber** cement-based flexible tile adhesives.



#### Composition

Cement, selected quartz sands, additives

#### Main features

- one-component
- flexible
- resistant to sulphates
- · good bonding onto substrates
- · for indoors and outdoors

#### **Technical values**

+5°C - +30°C
approx. 45 minutes
approx. 4 hours
approx. 20 hours

#### **Quality control**

weber.tec 824 is subject to a regular quality control by self-monitoring.

#### General notes

- Comply with the national standards and/or guidelines, for ex. EN 14891 "Liquid-applied water- impermeable products for use beneath ceramic tiling bonded with adhesives", DIN 18534-3 "Bonded waterproofing under tiles and slabs with liquid products for interior use", DIN 18195"Waterproofing of buildings" and the leaflets of ZDB (Central Association of German Construction Industry); if not issued and if necessary, request technical advice
- All characteristics mentioned in this data sheet are given for a temperature of +23°C, without draft and a relative humidity rate of 50%.
- Higher temperatures and lower humidity rates accelerate, lower temperatures and higher humidity rates delay the setting process.
- Do not use material that has already stiffened.



- Existing structural joints must be covered with the sealing tape **weber.tec 828** DB G or DB 150 and incorporated into the tile covering in a congruent manner.
- During installation of ceramic coverings or natural stones, avoid damage to the waterproofing layer

#### **Special notes**

- Limits of use: do not use weber.tec 824 on balconies, terraces and in swimming pools; in these cases we recommend the 2-comp. reactive waterproofing slurry weber.tec Superflex D 2 or the 2-comp. waterproofing, tile adhesive and de-coupling system weber.xerm 844
- **weber.tec 824** is not suitable for direct use; it must be covered with appropriate hard protective layers (screed or tiles).
- It is resistant to water loads with pressure under permanent wet conditions after 7 days at the earliest.

#### Substrates

• For water loads W0-I and W1-I following moisture-sensitive substrates are allowed:

gypsum- and gypsum lime renders (EN 13279-1) / gypsum wall blocks (EN 12859) / gypsum boards with fleece reinforcement (EN 15283-1) / gypsum fiberboards (EN 15283-2) / gypsum boards (EN 520) / calcium-sulphate screeds (EN 138138).

For water loads W2-I and W3-I following moisture-resistant substrates are allowed: concrete (EN 206) / cement renders (mortar group CS IV ≥ 6.0 N/mm<sup>2</sup> - EN 998-1) / cement-based mineral building panels / cement screeds / lime-cement renders (mortar groups CS II ≥ 1.5 - 5.0 N/mm<sup>2</sup> and CS III ≥ 3.5 - 7.5 N/mm<sup>2</sup> - EN 998-1) / hollow lightweight concrete panels / aerated concrete panels / composite lightweight boards of extruded or expanded polystyrene with mortar reinforcement and woven mesh (for ex. tilebacker boards weber.sys 833 and 834).

#### Substrate preparation

- As a rule, like for application of all bonded waterproofing systems, the substrate must be sufficiently load-bearing, clean, dry, frost-free, free of oil and grease, dimensionally stable, and free of all adhesion-impairing particles and substances.
- Completely remove loose or flaking mortar and paint residues.
- Mineral substrates: if necessary, level out with a quick-setting levelling mortar, like weber.plan 818 (1 - 30 mm) or plan 819 (5 - 30 mm). Use the primer weber.prim 801 or, if necessary, pre-wet until dull-moist.
- PVC connections: roughen with sandpaper and use the epoxy resin primer **weber.prim 807** and scatter the oven-dried silica sand **weber.sys Hartquarzmaterial** (0.1 0.5 mm) over the fresh resin coat in order to obtain a firm contact layer on the PVC.



- Old ceramic coverings: use the bonding primer **weber.prim 803**. Check if the bonding is sufficient; if not, roughen the substrate by mechanical means.
- Metal parts (e.g gutter suspension metal plates, edge trim profiles etc.): degrease with the thinner weber.sys 992, embed in the flexible waterproofing epoxy resin weber.tec 827 S (trowel-grade), dowel and screw together. Afterwards cover the top side of the metal parts with the pre-said resin and scatter the oven-dried silica sand weber.sys Hartquarzmaterial (0.7 1.2 mm) up to saturation over the fresh resin coat.

#### **Working instructions**

#### Mixing

• Pour clean water in a suitable mixing vessel and add the powder. Mix the bag content (20 kg) with approx. 5.0 - 5.4 liters of water, using an electric drill and an appropriate stirrer (for ex. **weber.sys Rührpaddel** no. 2 or no. 8) for at least 3 minutes until lump-free.

#### Application

- Start the waterproofing works by installing all necessary weber.tec 828 accessories.
- Apply a first coat of **weber.tec 824** on the substrate in the specific areas, like corners, pipes ducts, connection joints, butt joints and movement joints (wall/wall and wall/floor) as well as in areas with material transitions. Use a paint brush for these preliminary works.
- All required **weber.tec 828** components are pressed into the fresh coat. After drying their sides are coated over with a second coat of **weber.tec 824**. This coat is applied approx. 1 cm over the fleece-free zone.
- When using the prefabricated inner corners weber.tec 828 DI G and/or outer corners weber.tec 828 DA G, first install these elements onto the waterproofing layer. Afterwards the sealing tape weber.tec 828 DB G or DB 150 is embedded with an overlap of ≥ 5 cm over the prefabricated corner pieces in the butt area.
- For waterproofing sanitary pipe ducts use the prefabricated pipe sleeves **weber.tec 828** MDK G, MDM G or MD G according to the required opening. The expansion zone of the sleeves has a pre-punched hole which can be enlarged up to the required dimension. Glue the sleeves onto the substrate with **weber.tec 824**.
- After completion of all preliminary waterproofing works apply 2 3 full-surface coats of **we-ber.tec 824**; ensure that a uniform and pore-free coat covers the whole substrate.
- The 1<sup>st</sup> coat must be carefully applied onto the substrate; best practice is to use a paintbrush or a block brush in order to close all porosities, defects and voids.
- After approx. 4 hours (at +23°C) apply the 2<sup>nd</sup> coat, using a paintbrush, a block brush or a flat trowel. If a drying time between each coat must be respected, its application must however occur "wet-on-wet", i.e do not allow the 1<sup>st</sup> layer to dry completely, when the 2<sup>nd</sup> one is applied. In addition, the 2<sup>nd</sup> or 3<sup>rd</sup> coat is applied, when the previous coat can no longer be damaged.



- The maximum rate per layer is 1.4 kg/m<sup>2</sup>.
- A total layer thickness of min. 2 mm must be achieved at each point of the surface.
- After work completion check the total thickness and if any defects.
- After a delay of at least 20 hours, cover **weber.tec 824** with a screed or ceramic tiles, slabs or natural stones. Following tile adhesives are recommended: **weber.xerm 850 Plus**, **852**, **854**, **858 BlueComfort**, **859 F**, **860** or **861**.
- Remove fresh mortar residues with a wet sponge.
- Clean mixing equipment and tools with water (fresh product). Hardened material can only be removed mechanically.

#### **Practical information**

Application thickness: at least 2 mm

Water demand: 5.0 - 5.4 liters / 20 kg

Tools:

Electric drill + stirrer weber sys Rührpaddel no. 2 or no. 8, paintbrush, block brush, flat trowel

#### Storage:

The product can be stored at least 12 months in its original unopened packaging, if kept dry.

#### Consumption

per mm layer thickness: approx. 1.4 kg/m<sup>2</sup>

#### Packagings

Туре	Sales unit	Number / euro-pallet
Paper bag	20 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.