

## weber.xerm 854

### Flexible lightweight tile adhesive

# Low-dust, white, lightweight adhesive mortar for laying tiles, slabs and glass tiles (C2 TE / S1)

### Fields of application

For fixing wall and floor ceramic tiles indoors and in specific outdoor areas as well as non moisture (discoloration)-sensitive natural stones, porcelain stoneware and artificial stones (for ex. terrazzo). Thanks to its white colour, the product is also particularly suitable for bonding glass tiles and glass mosaics.

Suitable in damp, wet-duty and cold storage rooms.

Following substrates are allowed: cement and calcium sulphate screeds (heated and non-heated), concrete, mastic asphalt (indoors), gypsum plasterboards and gypsum fiberboards, cement and lime-cement renders/plasters, gypsum plasters, rigid foam boards, lightweight multi-use tilebackers **weber.sys 834** and old load-bearing tile coverings.

The lightweight adhesive mortar combines the properties of a thin-, medium- and flow-bed adhesive with the highest yield. It is characterized by a very high stability on walls for all laying materials and its particularly easy workability.

For use indoors and partially outdoors.

### **Description**

weber.xerm 854 is a factory-mixed, flexible lightweight adhesive mortar of class C2 TE / S1 ("deformable cement-based adhesive with reduced slip and extended open time") according to EN 12004.

### Composition

Cement, selected aggregates, lightweight fillers, additives

#### Main features

- class C2 TE / S1: C2: pull-off strength ≥ 1.0 N/mm² in all storage conditions
  - T: thixotropic, slip ≤ 0.5 mm E: extended open time ≥ 30 minutes
  - S1: deformation ≥ 2.5 mm
- low dust
- combines the properties of a thin-, medium- and flow-bed



- · suitable for fixing demanding coverings, like glass tiles and natural stones
- · extremely high yield
- · above average slip resistance
- · highly flexible
- · for laying glass tiles
- for levelling unevenness and defects up to 10 mm thickness
- · for use outdoors (specific applications) and indoors

#### Technical values

Application temperature:	+5°C - +30°C
Pot life:	approx. 3 hours
Bonding open time:	approx. 30 minutes
Open to foot traffic:	approx. 24 hours
Open for grouting works:	approx. 24 hours
Open to full service:	approx. 7 days
Pull-off strength after dry storage/heat aging/ water immersion/freeze thaw cycling:	≥ 1.0 N/mm <sup>2</sup>
Temperature resistance:	-15°C - +70°C
Reaction to fire:	class A2 s1, d0 (EN 12004)
Chromate content:	low content (EC regulation 1907/2006)

### **Quality control**

weber.xerm 854 is subject to a regular quality control by self-monitoring according to EN 12004.

#### **General notes**

- Limits of use: do not use weber.xerm 854 for bonding "tile on tile" outdoors, in permanently wet areas or in areas permanently under water (without waterproofing); in these cases; use the epoxy resin adhesive weber.xerm 847.
- Neither use for bonding the impact acoustic and de-coupling boards weber.sys 830 and sys 832, nor for fixing tiles or slabs on top.
- For full information relating to allowed substrates and tile coverings refer to the **Weber** chart "Overview Tile Adhesives".



- 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 and lower humidity rates accelerate, lower temperatures and higher humidity rates delay the setting process.
- Comply with the national standards and/or guidelines, for ex. DIN 18157 "Execution of tilings and coverings by thin-bed method with cement-based mortars" and the leaflets of ZDB (Central Association of the German Construction Industry); if not issued and if necessary, request technical advice.
- Take preliminary measures before fixing coverings on wooden (timber planks) or metal substrates, for ex. with de-coupling boards combined with a self-levelling mortar or an epoxy resin covered with silica sand etc. Request technical advice.
- For installation of natural or artificial stone slabs follow the supplier's recommendations. If in doubt, carry out preliminary tests.
- Check the compatibility of the tile adhesive with natural stones on a trial area.
- Respect the maximum residual moisture content of the substrate at the time of installation
  of ceramic tiles and natural stones; it should not exceed 2.0 CM-% (by weight) in case of
  heated or non-heated cement screeds, 0.5 CM-% (by weight) in case of heated or nonheated anhydrite screeds, 1.0 CM-% (by weight) in case of gypsum plasters, and air-dry for
  cement and cement-lime renders/plasters. The moisture content must be measured with a
  carbide hygrometer (CM) as a rule.
- Check the compatibility of the tile adhesive with natural stones on a trial area.
- Do not install tiles, slabs or natural stones that have been stored damp, wet, or too cold.
- Protect the structure from moisture until the tile adhesive has completely set.
- Do not use material that has already stiffened.

### Special notes

- When levelling substrates with low compressive strength and bulk density (e.g gypsum plasters, lightweight plasters, aerated concrete, etc.), calcium sulphate screeds or mastic asphalt screeds, apply the tile adhesive in a maximum thickness of 3 mm.
- When fixing glass mosaics and glass tiles follow the supplier's recommendations. Even in case of professional works the risk of discoloration cannot be excluded.

#### 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 agent residues.
- · Remove chalking paints as well as solid lacquer and dispersion paints mechanically.
- Calcium sulphate flow screeds: grind, vacuum off dust and use the 1-comp. quick-drying multi-use primer **weber.prim 804**.
- Absorbent substrates: apply the primer weber.prim 801.
- Non-absorbent, smooth substrates (indoors): apply the bonding primer weber.prim 803.
- weber.prim 804 as multi-use primer can also be used for absorbent and non-absorbent substrates.
- Old or soiled asphalt substrates must be mechanically roughened. Clean, sufficiently sandedoff asphalt screeds can be covered without primer; otherwise asphalt screeds must be pretreated with the primer weber.prim 803.
- The substrate preparation must be adapted to the specific job site conditions.

### **Working instructions**

### **Mixing**

- Pour clean water in a suitable mixing vessel and add the powder. Mix the bag content (25 kg) with approx. 11.5 13.3 liters liters of water, using an electric drill and an appropriate stirrer (for ex. **weber.sys Rührpaddel** no. 2 or no. 8) until lump-free.
- If required, stir up the mortar again with a trowel or a low-speed drill without adding more water.

#### **Application**

- Apply a contact coat of **weber.xerm 854** on the substrate with the smoothing trowel and comb down a uniform adhesive bed with the notched trowel at an angle of 45° 60°.
- Before a skin starts to form (check the tackiness of combed down tile adhesive with the finger) slide the tiles into the adhesive bed with a slight twisting motion and press down.
- In case of glass tiles apply the adhesive full-surface also as contact layer on their backside.
- Scratch out the joints before the tile adhesive hardens.
- Remove fresh mortar residues using a wet sponge.
- Clean mixing equipment and tools with water (fresh product). Hardened material can only be removed mechanically.



### **Practical information**

Colour:

white

Bed thickness: up to 10 mm

Water demand:

11.5 - 13.3 liters / 25 kg according to desired consistency

Tools:

Electric drill + stirrer **weber.sys Rührpaddel** no. 2 or no. 8, smoothing trowel, 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

medium-bed notch:	approx. 3.5 kg/m²
10 mm notch:	approx. 2.1 kg/m²
8 mm notch:	approx. 1.8 kg/m²
6 mm notch:	approx. 1.3 kg/m²
4 mm notch:	approx. 1.0 kg/m²

### **Packagings**

Туре	Sales unit	Number / euro-pallet
Paper bag	25 kg	40 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.