Technical Data Sheet

weber.xerm 859 F

Temperature-independent setting flexible adhesive

Flexible tile adhesive with temperature-independent processing properties (C2 FTE / S1)

Fields of application

weber.xerm 859 F is a flexible thin- and medium-bed mortar based on an innovative mortar technology: its processing is largely independent of temperatures. Hence it enables the laying of all common materials, e.g. earthenware, stoneware, porcelain stoneware, many mosaic types as well as natural stones that are insensitive to moisture and discoloration whenever they must be carried out on time with a reliable schedule for walkability and grouting, both at warm or cold ambient temperatures.
This feature makes the tile adhesive ideal for works in outdoor areas, but also for works under time pressure indoors, e.g in warm or cold storage rooms as well as on large surfaces, like showrooms and sales rooms, counter halls, entrance halls, hallways etc.
Furthermore, **weber.xerm 859 F** can be applied on the **Weber** bonded waterproofing solutions **weber.tec 822** (1-comp. liquid foil), **824** (1-comp. cement-based slurry), **Superflex D 2** and **weber.xerm 844** (2-comp. quick-setting and reactive compounds) and **weber.tec 827**/**827 S** (2-comp. epoxy resins).
It can also be used on **weber.tec 825** and **826** (waterproofing membranes) and **weber.sys 832** (impact sound insulation and de-coupling boards).
For use indoors and outdoors.

Description

weber.xerm 859 F is a factory-mixed, flexible thin- and medium-bed mortar of **class C2 FTE** / **S1** (“quick-setting, deformable cement-based adhesive with reduced slip and extended open time”) according to EN 12004.

Composition

Special cement, selected aggregates, additives

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Product features

- **EMICODE EC 1 PLUS**: very low emission of volatile substances
- **class C2 FTE / S1**: C2 = pull-off strength ≥ 1.0 N/mm^2 in all storage conditions – F = quick-setting – T = thixotropic, slip ≤ 0.5 mm – E = extended open time ≥ 30 minutes – S1 = deformation ≥ 2.5 mm
- adhesive component for **weber.tec 825** (waterproofing foil and water vapour barrier)
- temperature-independent pot life and setting time
- predictable waiting time till pedestrian traffic and grouting works
- quick development of mechanical strengths
- long open time
- optimal for large-size floor tiles
- for use on balconies and terraces
- suitable for heated floor constructions
- for use indoors and outdoors

Technical values

Application temperature:	+5°C - +30°C
Pot life:	approx. 45 minutes
Bonding open time:	approx. 30 minutes
Open to foot traffic:	approx. 3 hours
Open for grouting works:	approx. 3 hours
Open to full service:	approx. 3 days
Initial grab adhesion:	≥ 0.5 N/mm^2
Pull-off strength after dry storage/heat aging/ water immersion/freeze thaw cycling:	≥ 1.0 N/mm^2 (EN 12004)
Temperature resistance	-20°C - +70°C
Reaction to fire:	A2-s1, d0
Chromate content:	low content (EC regulation 1907/2006)

Quality control

weber.xerm 859 F is subject to a regular quality control by self-monitoring according to EN 12004.

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General notes

- **Limits of use**: do not use **weber.xerm 859 F** 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**.
- 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%.
- The setting process remains nearly unchanged within a temperature range of +5°C up to +30°C and also in case of humidity rate variations.
- 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.
- Respect the maximum residual moisture content of the substrate moisture at the time of installation of ceramic coverings 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 non-heated 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.
- Tiling materials that are particularly sensitive to discolouration and deformation must be fixed with a water-free adhesive (e.g reactive resin adhesive). If in doubt, carry out preliminary tests.
- 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.
- Do not use in contact with non-ferrous metals, such as aluminium, copper, lead or zinc. Used stainless steel components, e.g rails and edge protector angles.

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.
- 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: use the primer **weber.prim 801**.
- Non-absorbent, smooth substrates (indoors): use the bonding primer **weber.prim 803**.
- **weber.prim 804** as multi-use primer can also be used for absorbent and non-aborbent substrates.
- Old or soiled mastic asphalt substrates must be mechanically roughened. Clean and sufficiently sanded-off with silica sand asphalt screeds can be covered without primer; otherwise asphalt screeds must be pre-treated 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. 6 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 859 F** 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 fresh mortar bed with a slight twisting motion and press down.
- 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

Colours:
grey

Bed thickness:
up to 10 mm

Water demand:
approx. 6 liters / 25 kg

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

Storage:
The material can be stored at least 9 months in its original unopened packaging, if kept dry and protected from moisture.

Consumption

6 mm notch:	approx. 2.2 kg/m²
8 mm notch:	approx. 2.8 kg/m²
10 mm notch:	approx. 3.4 kg/m²
medium-bed notch:	approx. 4.5 kg/m²

Packagings

Type	Sales unit	Number / euro-pallet
Plastified bag	25 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.

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