

weber.xerm 866 F

Quick-setting all-bed natural stone mortar

Quick-setting thin-, medium- and thick-bed mortar with thermo-hybrid technology (C1 FTE)

Fields of application

Dedicated for the discoloration-free fixing of calibrated and uncalibrated natural stone slabs (granite, porphyry, limestone, travertine, sandstone, quartzite, marble, etc.) as well as terracotta, stoneware and porcelain stoneware indoors and outdoors.

Also for laying natural stone window sills.

Following floor substrates are allowed: cement and calcium sulphate screeds (heated and non-heated) and also mastic asphalt screeds (indoors).

The product combines the properties of a thin-, medium-bed or thick-bed adhesive.

It stands out by a relatively quick hardening with high crystalline water retention, even at low temperatures. It is therefore also suitable for laying materials that are sensitive to moisture and discoloration.

Furthermore, suitable for levelling substrates in a thickness up to 30 mm on small-size areas.

For use indoors and outdoors.

Description

weber.xerm 866 F is a factory-mixed, flexible thin-, medium- and thick-bed mortar of **class C1 FTE** ("quick-setting cement-based adhesive with reduced slip and extended open time") according to EN 12004.

Composition

Special cement, selected aggregates, additives

Main features

- **class C1 FTE:** C1: pull-off strength $\geq 0.5 \text{ N/mm}^2$ after all tested storage conditions – F: fast-setting – T: thixotropic, slip $\leq 0.5 \text{ mm}$ – E: extended open time ≥ 30 minutes
- can be applied as thin-, medium- or thick-bed adhesive
- for layer thickness from 3 mm up to 30 mm
- quick-setting

Technical Data Sheet



- high crystalline water retention
- very low shrinkage during setting
- suitable for moisture (discoloration)-sensitive natural stone slabs
- 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 load:	approx. 3 days
Pull-off strength after dry storage/heat aging/water immersion/freeze thaw cycling:	≥ 0.5 N/mm ²
Temperature resistance:	-20°C - 70°C
Reaction to fire:	class E (EN 12004)
Chromate content:	low content (EC regulation 1907/2006)

Quality control

weber.xerm 866 F is subject to a regular quality control by self-monitoring according to EN 12004.

General notes

- **Limits of use:** do not use **weber.xerm 866 F** outdoors and in areas permanently under water; in these cases, use the epoxy resin adhesive **weber.xerm 847**.
- For laying bright, highly translucent and calibrated natural stone slabs we recommend the quick-setting and flexible natural stone adhesive **weber.xerm 864 F**.
- 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” and the leaflets of ZDB (Central Association of 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.
- Respect the maximum residual content of substrate 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.
- Check the compatibility of the tile adhesive with natural stones on a trial area.
- 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 lower compressive strengths and raw densities (e.g. gypsum plasters, lightweight plasters, aerated concrete etc.), calcium sulphate screeds or mastic asphalt screeds, the maximum adhesive bed thickness must not exceed 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.
- When applied on mastic asphalt screeds, their hardness must correspond to the class IC 10 (indentation on cubes) or ICH 10 (indentation on screed) according to EN 13813. The maximum layer thickness of **weber.xerm 864 F** is 15 mm.

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 fast multi-use primer can also be used for absorbent and non-absorbent 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 the specified amount of clean water (approx. 5.5 liters per 20 kg bag as thick-bed mortar or approx. 6.8 liters as thin-bed mortar) into a suitable container. Add powder and stir until lump-free with an electric drill and the stirrer **weber.sys Rührpaddel** no. 2 or no. 8.
- If required, stir up the mortar again with a trowel or a slow-speed drill without adding more water.

Application

- Apply a contact coat of **weber.xerm 866 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) push the tiles into the fresh mortar bed with a slight twisting motion and press down.
- Scratch out the joints before the tile adhesive hardens.
- In case of non-calibrated natural stone slabs and all natural stone materials that may tend to discolour, first apply a scratch coat of **weber.xerm 866 F** on their backside (back-buttering).
- In case of application as thick-set mortar apply **weber.xerm 866 F** either on the substrate or on the backside of tiles or slabs.
- Place large-bodied slabs onto the mortar bed with installation aids; put in the right height and level using a rubber mallet.
- 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:
light grey

Bed thickness:
3 mm - 30 mm

Water demand:
as thick-bed mortar approx. 5.5 liters / 20 kg
as thin-bed mortar approx. 6.8 liters / 20 kg

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

Storage:
The product can be stored at least 6 months in its original unopened packaging, if kept dry and protected from moisture.

Consumption

6 mm notch:	approx. 1.8 kg/m ²
8 mm notch:	approx. 2.2 kg/m ²
10 mm notch:	approx. 2.8 kg/m ²
medium-bed notch:	approx. 3.8 kg/m ²
per mm layer thickness:	approx. 1.1 kg/m ²

Packagings

Type	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.