Technical Data Sheet

weber.therm 370

Special bonding mortar

High-performance mineral bonding mortar for critical substrates and for ceramic claddings within Etics weber.therm AK 500 and BK 500

Fields of application

As bonding mortar within the Etics (external thermal composite systems) **weber.therm AK 500** and **BK 500**.
For bonding of ceramic coverings and clinker brick slips on low-porosity substrates, such as bitumen waterproofing coatings or dense concrete surfaces within the pre-said Etics.
Within the system **weber.therm AK 500**: use as bonding mortar for mineral lamella wool insulation boards **weber.therm MW Facade** on concrete, in combination with following components: dowels **weber.therm**, bonding and reinforcing mortar **weber.therm 300/301** + woven mesh **weber.therm 310** and combination of ceramic coverings or/clinker brick slips and mineral overlay renders (as finish top coats).
Within the system **weber.therm BK 500**: use as bonding mortar for ceramic coverings or clinker brick slips on top of the reinforced mortar **weber.therm 300/301** + woven mesh **weber.therm 310** (over polystyrene insulation boards **weber.therm EPS 031 Facade** or **035 Facade**) in combination with the grout mortar **weber.therm 371 UNI/371 EF** or **371 SF**. Also as adhesive for mineral wool insulation boards on ceilings.
Furthermore, as adhesive for insulation boards on facade socket parts and old well-adhering bitumen coatings in earth-contacting basement walls.
For use outdoors.

Description

weber.therm 370 is a factory-mixed, mineral dry mortar according to EN 998-1. As cement-based thin-bed adhesive mortar with a high content of polymer resins, it also fulfills the standard EN 12004.

Composition

Cement, graded mineral aggregates, additives for better workability and adhesion to the base coat (underlay render).

Main features

- high bonding strength
- flexibilized
- long-term and frost-resistant bonding
- for use as bonding mortar for ceramic coverings within Etics **weber.therm AK 500** and **BK 500** on low-porosity substrates
- for use outdoors

Technical values

Water vapour diffusion resistance coefficient (μ):	≤ 25
Pull-off strength on substrate:	> 1 N/mm²
Solid mortar density:	approx. 1.600 kg/m³
Compressive strength (28 days):	approx. 10 N/mm² (class IV – EN 998-1)
Class of reaction to fire (EN 13501-1)	A2-s1, d0 (non-combustible)

Quality control

weber.therm 370 is subject to a regular quality control by external monitoring and self-monitoring according to EN 998-1.

General notes

- As cement-based thin-bed adhesive mortar, **weber.therm 370** is characterized by an extremely high bonding strength and elasticity; therefore it is particularly dedicated for the bonding of ceramic claddings on Etics.
- The joint surface should be at least 6% of the facade surface.
- After bonding of ceramic claddings on Etics, use the mineral grout mortars **weber.therm 371 EF** or **371 UNI** (for use with pointing trowel) or **371 SF** (for use with hard rubber board) for jointing works of ceramic claddings on facing masonry or facing brickwork (e.g clinker brick slips).
- After hardening it is weather-resistant, frost-proof and highly water-repellent. The surface of joints per m^2 should be at least 6% of the total surface.
- Specifications for ceramic coverings and clinker brick slips: resistance to frost (EN 202), individual surface of ceramic coverings ≤ 0.09 m^2 with a length of max. 30 cm and thickness of max. 15 mm, pore radius > 0.2 µm, pore volume of 20 mm^3/g, water absorption ≤ 6.0% (EN ISO 10 545-3) when using the polystyrene insulation boards **weber.therm EPS Facade** and ≤ 3% when using the mineral wool insulation boards **weber.therm MW Facade**.
- Black or very dark ceramic claddings/clinker brick slips are not suitable.

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Special notes

- For full information related to all application details, like assembly of boards, dowelling works, reinforcement of corners, assembly of profiles, socket parts etc., refer to the **Weber** installation instructions of both specific Etics and/or request technical advice.

Substrates

- Masonries (new and old) for bonding of ceramics: **weber.therm 3000/301** + woven mesh **weber.therm 310**
- Concrete for bonding mineral lamella wool insulation boards **weber.therm MW Facade**
- Allowed substrates: low-grip and non-absorbent substrates (dense and smooth surfaces, e.g concrete) and well-adhering bitumen coatings in earth-contacting areas

Substrate preparation

- The substrate must be load-bearing, sufficiently dry, level and free of all adhesion-impairing substances.
- Remove dirt, dust and loose particles.
- Knock off protruding concrete and mortar residues.
- Remove efflorescence and residues of formwork oil; if necessary, via steam-blasting.
- The substrate evenness must comply with the allowed tolerances (variations) defined by the national standards/guidelines (for ex. DIN 18202 “Tolerances in Building Constructions”). If necessary, take the appropriate remedial measures for levelling the substrates; if in doubt, request technical advice.
- Differences of ± 10 mm can be compensated during bonding (± 20 mm for additionally dowelled system). Unevenness > 10 mm (or > 20 mm) must first be levelled out with **weber.therm 300** (bonding and reinforcing mortar) or **weber.dur 132** (lightweight render).
- Respect the drying time of the pre-said products (at least 7 days) before bonding insulation boards.
- The contractor should report concerns in case of heavy contamination, efflorescence, excessively smooth surfaces, greater unevenness than allowed and too high building moisture (e.g as a result of moisture-donating finishing works).
- Check old renders carefully and remove all hollow or brittle parts. Clean old substrate and/or old render; if necessary, pre-wet. Repair the areas with a lightweight lime-cement render, for ex. **weber.dur 132**.
- Remove at least 70% of any existing old paint coats.

- If the organic paint or render is load-bearing, the insulation boards can be applied after the facade cleaning.
- If the coating is not load-bearing, it must be opened in a checkerboard pattern and removed by steam- or sandblasting by at least 70%.
- Carry out tensile adhesion tests (pull-off tests) in case of critical substrates.
- Expansion joints of the building structure must be taken over in the whole construction of the system. In all cases expansion joints should be arranged every 30 meters. Follow the national norms /standards; if necessary, refer to the norm DIN 18 540 “Sealing of External Wall Joints with Joint Sealants”.
- For the flush and perpendicular alignment of connections and terminations fix the render profiles with the profile bonding and installation mortar **weber.mix 125**.
- The substrate preparation must be adapted to the specific job site conditions.

Working instructions

- Temperature of air, materials and substrate during application and drying: ≥ +5°C
- Do not add any foreign substances during mixing and application.
- Clean mixing equipment and tools with water (fresh product). Hardened material can only be removed mechanically.

Mixing

- Mechanical application: the mortar can be applied with all conventional render machines (with mixing, conveying and spraying equipment). For full information request technical advice.
- Manual application: mix the bag content (30 kg) with approx. 6.5 liters of water until lump free, using an electric drill and an appropriate stirrer. After a maturing time of approx. 5 minutes, mix thoroughly again. Depending on weather conditions, the pot life of the mortar is approx. 2 hours.

Application as adhesive for ceramic coverings clinker brick slips on Etics

- Do not apply more adhesive than can be covered within 10 - 20 minutes.
- Apply **weber.therm 370** with a notched trowel (notch size 8 mm) according to the “buttering-floating method”, i.e the mortar is applied on the backside of the ceramic coverings and also on the reinforcement layer (**weber.therm 300/301** + woven mesh **weber.therm 310**).
- Press the ceramic coverings strongly onto the fresh mortar layer without delay and knock on lightly.
- Care must be taken to ensure that all ceramic coverings are bonded full-surface.

- For grouting ceramic claddings use the grout mortar **weber.therm 371 UNI/371 SF** or **371 EF**.

Application as bonding mortar for insulation boards

- The insulation boards can be glued with the bonding and reinforcing mortars **weber.therm 300** or **301**.
- In case of dense substrates (e.g concrete) use **weber.therm 370**.
- Spray/apply the bonding mortar in a frame shape all around the insulation boards **weber.therm** (specific for each Etics) and in 2 - 3 vertical strips on their backside.
- A special glue gun (for ex. PFT or Putzmeister) can also be used to apply the bonding mortar onto the insulation boards.
- As a rule, a contact between substrate and boards of at least 50% must be obtained after their final settlement.
- In case of mineral lamella wool insulation boards **weber.therm MW Facade** the mortar is applied full-surface on their backside. Alternatively, the mortar can be sprayed in beads (width 5 cm and 1.5 - 2 cm thick) with an interval of max. 10 cm on the substrate.
- Position the boards directly without delay (within max. 10 minutes), press them on and float them in using horizontal movements.
- The insulation boards must be covered full-surface on their backside and pressed onto the substrate.

Practical information

Colour:
natural grey

Water demand:
approx. 6.5 liters / 30 kg

Tools:
Electric drill + stirrer, glue gun, stainless smoothing trowel, notched trowel (notch size 8 mm).

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

Consumption / yield

Bonding of insulation boards: Bonding of clinker brick slips:	approx. 5.0 kg/m² approx. 4.0 kg/m²	approx. 6.0 m² / 30 kg approx. 7.5 m² / 30 kg

ckagings

Type	Sales unit	Number / euro-pallet
Paper bag	30 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.