

weber.therm 309

Organic bonding mortar

Bonding mortar for non-mineral substrates within weber.therm Etics systems

Fields of application

As bonding mortar for polystyrene or mineral wool insulation boards on non-mineral substrates within the Etics (external thermal insulation composite systems) **weber.therm A 200, B 100** and **B 200** with panels/boards (with official approval Z-33.47-836).
For use outdoors.

Description

weber.therm 309 is a factory-mixed, ready-to-use dispersion-based adhesive.

Composition

Organic binders, graded mineral aggregates, additives for better workability.

Main features

- ready-to-use
- high bonding strength
- solvent-free
- for use as bonding mortar for polystyrene or mineral wool insulation boards on non-mineral substrates within Etics **weber.therm A 200, B 100** and **B 200**
- for use outdoors

Technical values

Class of capillary water absorption (EN 1062-1):	W 3
Water vapour diffusion stream density: V	2
Pull-off strength on substrate: \geq	0,3 N/mm ²
Class of reaction to fire (EN 13501-1): A (2-s1, d0 (non-combustible) when used on mineral substrates)

Quality control

weber.therm 309 is subject to a regular quality control by self-monitoring.

General notes

- With the exception of **weber.therm 370**, do not add any foreign substances during mixing and application.
 - Temperature of air, materials and substrate during application and drying: $\geq +5^{\circ}\text{C}$
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Special notes

- **Limits of use:** **weber.therm 309** is not suitable for bonding the insulation boards **weber.therm EPS** speedy.
 - Under normal conditions (+20°C/65% relative humidity rate) and depending on the thickness the drying time is approx. 24 - 48 hours; at lower temperatures and higher humidity rates, a drying time of several days may be necessary.
 - Maximum moisture content of wooden panels: 12.5% by weight
 - 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 the specific Etics and/or request technical advice.
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Substrates

- Following substrates are allowed (see hereunder).
 - Organically bonded wooden panels (EN 13986) with a thickness > 12 mm, e.g. chipboard panels of type P 5 or P 7 (EN 312), plywood panels of type 2 or 3 (EN 636), wood fiber panels (EN 622), sanded OSB panels (EN 300).
 - Cement-bonded chipboards and fiber-cement boards.
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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), **therm 376** or **weber.dur 132** (lightweight renders).
- 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; if they are insufficiently load-bearing, use a galvanised, welded wire mesh, like Distanet, Welnet or similar and fix it with at least 8 dowels/m² to the substrate.
- 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 vertical 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

Mixing

- Stir the packaging content well, using an electric drill and an appropriate stirrer until lump-free.
- A dilution with up to 1 % clean water is possible.

Application as bonding mortar for insulation boards

- All **weber.therm** polystyrene (except **weber.therm EPS speedy**) and mineral wool insulation boards are allowed.
- Apply **weber.therm 309** with a stainless smoothing trowel in a frame shape all around the insulation boards and in 2 - 3 vertical strips on their backside.
- Alternatively, apply the mortar full-surface on the backside of insulation boards and comb with a notched trowel (notch size 10 x 10 mm).
- Whenever a faster strength development is required, **weber.therm 309** can be mixed up with the special cement-based bonding mortar **weber.therm 370** up to max. 10% by weight.
- Position the boards directly without delay (within max. 10 minutes), press them on and float them in using horizontal movements.
- As a rule, a full contact between substrate and boards of at least 50% must be obtained after their final settlement.

Application of overlay renders

- The choice of overlay renders as finish top coats depends on the specific Etics (**weber.therm A 200**, **B 100** or **B 200**).
- For full information request technical advice.

Practical information

Colour:
natural white

Tools:
Electric drill + stirrer, stainless smoothing trowel, notched trowel (notch size 10 x 10 mm).

Storage:
The product can be stored up to 12 months in its original unopened packaging, if kept dry and protected from moisture.

Technical Data Sheet



Consumption / yield

Bonding mortar: approx. 3.0 kg/m² approx. 8.3 m² / 25 kg

Packagings

Type	Sales unit	Number / euro-pallet
Plastic bucket	25 kg	24 buckets

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.