

weber.therm retec 700

Bonding and reinforcing mortar

Bonding and reinforcing mortar for renovation system weber.therm retec

Fields of application

The system **weber.therm retec** allows the renovation of Etics (external thermal insulation composite systems) of first generation. Without dismantling of existing systems, old renders on facades or old Etics with organic renders are renovated and transformed into a sustainable mineral system. **weber.therm retec 700** can be used as bonding and reinforcing mortar, if an additional insulation is required.

Also for use as levelling mortar on the old-bearing renders, without additional insulation. For use outdoors.

Description

weber.therm retec 700 is a factory-mixed, mineral dry mortar. With European patent 0810338.

Composition

White cement, white hydrated lime, graded mineral aggregates, fibers, hydrophobing agents, additives for better workability and adhesion to organic coatings.

Main features

- resource conservation through continued use of existing insulation
- · quick drying of existing insulation via the slot method
- high bonding strength on organic overlay renders
- · open to diffusion of water vapour
- · very good flow
- optimal properties from the point of view of building physics
- for use as bonding and reinforcing mortar within Etics weber.therm retec with or without additional insulation
- · for use outdoors



Technical values

Water absorption coefficient (w): < 0.5 kg/m² * √h

Water vapour diffusion resistance value (μ): ≤ 25 Capillary water absorption W 2

(EN 1062-1):

Pull-off strength on substrate: > 0.3 N/mm²

Yield: approx. 750 liters/ton

Quality control

weber.therm retec 700 is subject to a regular quality control by external monitoring and self-monitoring.

General notes

- Comply with the national guidelines and/or standards (for ex. DIN 18550); if not issued and if necessary, request technical advice.
- The consumption figures mentioned in this document refer to the minimum layer thickness of the mortar. Due to specific substrates and application variations the consumption might vary. Exact consumption must be determined on a job site mock-up (trial area).
- Protect the fresh mortar from too quick water evaporation, for ensuring an optimal hardening.

Substrate preparation

- The inspection of the facade must be carried out by the Weber Technical Department for Applications. All works can begin upon receipt of its recommendation.
- Clean the whole facade with high-pressure water; regulate temperature and pressure in accordance with the degree of dirt.
- Saw slots (joints) with a milling machine in vertical and horizontal directions 15 x 15 cm up to 30 x 30 cm according to the damage extent.
- Dimensions of slots in the EPS insulation boards: width of 5 7 mm and depth of 5 mm.
- If required, take measures for fire protection.



Working instructions

Mixing

- Mechanical application: the render can be applied with all conventional render machines (with mixing, conveying and spraying equipment). Special machine equipment and an aftermixer are recommended. For full information request technical advice.
- <u>Manual application</u>: mix the bag content (30 kg) with approx. 8 liters of water until lump free, using an electric drill and an appropriate stirrer.

Application with additional insulation

- Spray/apply **weber.therm retec 700** in 6 8 mm thickness and strike-off with a stainless smoothing trowel.
- Rule level with a straight edge (for ex. aluminium beam), avoiding honeycombs or gaping holes; and comb horizontally with a notched trowel (notch size min. 10 x 10 mm).
- Position the new mineral wool or polystyrene insulation boards **weber.therm** directly, press them on and float them in using horizontal movements.
- Afterwards apply the mortar as reinforcement layer with the woven mesh **weber.therm 310** (mesh size 8 x 8 mm) on the whole surface. Lay the mesh "wet-in-wet" in vertical or horizontal wrinkle-free strips across the whole surface. The strips must overlap by at least 10 cm. Gently press the mesh with a flat trowel. The mesh must lie in the upper half of the mortar layer.
- The dowels are installed through the woven mesh and the fresh mortar layer; the choice of dowels must be determined by the **Weber** Technical Department for Applications.

Application without additional insulation

- Spray/apply weber.therm retec 700 in 6 8 mm thickness, strike-off with a stainless smoothing trowel and insert the woven mesh weber.therm 310 on the whole surface.
- Follow the instructions relating to its application as described above.
- In this case too, the dowels are installed through the woven mesh and the fresh mortar layer; the choice of dowels must be determined by the **Weber** Department for Applications.

Application of overlay renders

- All Weber mineral overlay renders can be used as finish top coats on top of weber.therm retec 700; their final choice depends on the specific system.
- Depending on weather conditions and type of finish top coat, the reinforcement layer can be pre-wetted (preferably the day before); alternatively, the universal primer weber.prim 403 can be applied in case of thin-layer overlay renders.



- In case of thick-layer mineral overlay renders (scratch renders **weber.top**) comb **weber.therm retec 700**, using a hard broom or a notched large trowel.
- In case of thin-layer mineral (range weber.star) or organic (range weber.pas) overlay renders rule level weber.therm retec 700 to a flat and in-plane surface with a wooden float (do not smooth it).

Practical information

Application thickness:

6 mm - 8 mm

Water demand:

approx. 8 liters / 30 kg

Tools:

Milling machine, render machine (with after-mixer), electric drill + stirrer, stainless smoothing trowel, straight edge (for ex. aluminium beam), flat trowel; for finishing works in case of scratch renders: hard broom or notched large trowel; in case of other renders: wooden float.

Storage:

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

Consumption / yield

Bonding mortar:	approx. 5.0 kg/m²	approx. 6.0 m ² / 30 kg
Reinforcing mortar:	approx. 7.0 kg/m²	approx. 4.0 m ² / 30 kg
Bonding and reinforcing mortar:	approx. 12.0 kg/m²	approx. 2.5 m ² / 30 kg

Packagings

Туре	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.