Technical Data Sheet

weber.therm armadura base

Solid mineral reinforcing base coat render

Solid, mineral reinforcing base coat render for ultra-thick Etics weber.therm circle

Fields of application

As thick-layer, solid and mineral reinforcing mortar/render within the high-performance, massive and fully mineral Etics (external thermal insulation composite system) **weber.therm circle**.
The system consists of following components: mineral wool insulation board **weber.therm MW 040** Facade circle (100 - 200 mm), dowels **weber.therm**, **weber.therm armadura base** + woven mesh **weber.therm 310** as separation layer, lightweight reinforcing mortar **weber.therm 302** + woven mesh **weber.therm 310** and mineral overlay render (finish top coat) according to EN 998-1.
The base coat render is particularly suitable for the facade insulation of buildings, whenever a massive, dismantlable and recyclable structure is required.
For use outdoors.

Description

weber.therm armadura base is a factory-mixed, mineral dry mortar according to EN 998-1.

Composition

Cement, white lime hydrate, classified mineral aggregates, perlite, hydrophobing agents, additives for better workability and adhesion to substrate (underlay render)

Main features

- increases the resistance to shocks and external influences (for ex. vandalism, bird picking, hail)
- increases component mass and heat storage capacity
- can be dismantled and recycled together with the other parts of the mineral render shell (lightweight bonding and reinforcing mortar **weber.therm 302** and mineral overlay render)
- for mechanical and manual application
- for use as base coat render within ultra-thick-layer, dismantlable and recyclable Etics **weber.therm circle**
- for use outdoors

Technical values

Application thickness:	10 mm - 15 mm
Water absorption coefficient (w):	< 0.5 kg/m² * √h
Water vapour diffusion resistance value (μ):	≤ 25
Class of capillary water absorption (EN 1062-1):	W 2
Yield:	approx. 800 liters/ton
Solid mortar density:	approx. 1.300 kg/m³
Compressive strength (28 days):	> 2 N/mm² (class II – EN 998-1)
Pull-off strength on substrate:	≥ 1 N/mm²
Mortar group:	P II (DIN 18550)
Class of reaction to fire (EN 13501-1):	A 1 (non-combustible)

Quality control

weber.therm armadura base is subject to a regular internal quality control according to EN 998-1.

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).
- Adjacent building parts must be separated from the built-in render system.
- Protect the fresh mortar from rain so as to avoid efflorescence among others, and also from too quick water evaporation, for ensuring an optimal hardening.

Special notes

- **Limits of use**: do not use **weber.therm armadura base** in combination with ceramic coverings.
- Allowed substrates: masonry (new and old buildings) and concrete
- Unlike the conventional Etics, the insulation boards within the system **weber.therm circle** are not glued onto the substrate with a bonding mortar, but directly fastened with the screw dowels **weber.therm Schraubdübel SRD-5**.
- For full information related to all application details, like assembly of boards, dowelling works, reinforcement of corners, assembly of profiles, socket parts etc. request technical advice.

Substrate preparation

- The substrate (underlay render) must be clean, load-bearing, sufficiently dry, level and free of dust, and all adhesion-impairing substances.
- Remove dirt and loose particles.
- Knock off protruding concrete and mortar residues.
- Remove cement laitance (hard sinter skin) with a notched large trowel before applying further layers.
- 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 ± 7 mm can be compensated during the system installation. Unevenness > 7 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) prior to bonding of 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**.
- The system installation is allowed on old load-bearing paint. For a reliable water vapour diffusion of the whole mineral construction we recommend to open old paints by cutting or removing them partially.
- Expansion joints of the building structure must be taken over in the whole construction. In all cases expansion joints should be arranged every 30 meters. Follow the national norms/standards; if not issued and if necessary, refer to the norm DIN 18 540 “Sealing of External Wall Joints with Joint Sealants”.
- For the correct 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

- Temperature of air, materials and substrate during application and drying: ≥ +5°C - ≤ +30°C
- Do not apply when frost is expected overnight.
- 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 (25 kg) with approx. 6.5 liters of water until lump free, using an electric drill and an appropriate stirrer.

Application within the Etics weber.therm circle

- The insulation boards **weber.therm MW 40** Facade circle are fixed to the wall without bonding mortar, but fastened with the screw dowels **weber.therm SRD-5** with anchor plate **weber.therm VT 112**.
- Spray/apply **weber.therm armadura base** in 10 - 15 mm thickness onto the insulation boards and strike off with a stainless smoothing trowel.
- Rule level with a straight edge (for ex. aluminium beam), avoiding honeycombs or gaping holes.
- Use the woven mesh **weber.therm 310** as separation layer; during dismantling, it will stabilize the render shell and ensures a clean separation of the whole render shell from the insulating material. Lay the mesh “wet-in-wet” in vertical or horizontal wrinkle-free strips across the whole surface. The strips must overlap by 10 cm. Gently press the strips with a flat trowel. The mesh must lie in the lower third of the mortar layer.

Application of reinforcement layer

- Respect the drying time of **weber.therm armadura base** (at least 1 day per mm/approx. 14 days) prior to application of the reinforcement layer.
- Afterwards apply a reinforcement layer onto the pre-said separation layer (base coat render **weber.therm armadura base** + woven mesh **weber.therm 310**); for this purpose apply the lightweight bonding and reinforcing mortar **weber.therm 302** in one layer of 5 - 8 mm thickness and insert the woven mesh **weber.therm 310**. Follow the instructions relating to its application as described above. The mesh must lie in the upper half of the mortar layer

Application of mineral overlay renders

- Respect the drying time of **weber.therm 302** (at least 7 days).
- 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.
- As third layer of the render system apply a thick-layer or thin-layer mineral overlay render (as finish top coat). The whole solid render shell can thus achieve a total thickness ≥ 25 mm.
- The use of a mineral overlay render makes it easy to dismantle the 3-layer render shell as a whole and to recycle all render layers in one go as one-variety material type.
- In case of thick-layer mineral overlay renders (scratch renders **weber.top 200**/**203**/**204** and **206 AquaBalance**) comb **weber.therm 302**, using a hard broom or a notched large trowel.
- In case of thin-layer mineral overlay renders (floated renders **weber.star 220**/**221**/**224**/**240**/**260** and **280 AquaBalance**) rule level **weber.therm 302** to a flat and in-plane surface with a wooden float (do not smooth it).
- The light reflectance value (LRV) of the top coat (overlay render) should be ≥ 20.

Practical information

Grain size:
up to 1 mm

Colour:
natural grey

Application thickness:
10 mm - 15 mm

Water demand:
approx. 6. 5 liters / 25 kg

Tools:
Render machine or electric drill + stirrer, stainless steel smoothing trowel, straight edge (for ex. aluminium beam); for finishing works in case of scratch renders: hard broom or notched large trowel; in case of floated renders: wooden float.

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

Consumption / yield

10 mm thickness:	approx. 12.5 kg/m²	approx. 2.0 m² / 25 kg

Packaging units

Type	Sales unit	Number / euro-pallet
Paper 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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