

## weber.cal 176

### Mineral lightweight lime plaster

Natural mineral lightweight lime plaster for interior use based on air lime and hydraulic binder



### Product profile

- for mechanical and manual application
- suitable for use on highly insulating masonry substrates
- for indoor use

### Product advantages

- room humidity-regulating and mould-inhibiting
- very high yield
- natural white with fine felt texture

### Product description

**weber.cal 176** is a factory-mixed, mineral dry mortar according to DIN EN 998-1 and DIN 18550.

### Fields of application

**weber.cal 176** is a mineral lime lightweight render for interior use. It is particularly suitable for highly insulating masonry substrates with low compressive strength. Thanks to its reduced modulus of elasticity, **weber.cal 176** offers a high level of crack resistance. All mineral top coats from **Weber**, as well as solvent-free paints, can be applied on top of **weber.cal 176**. Its building physics properties, such as good indoor humidity regulation and high vapour diffusion openness, provide a healthy and comfortable living environment.

### Product features

- for mechanical and manual application
- is highly permeable to water vapour
- is mould-inhibiting
- is moisture-regulating
- fine felt texture
- natural white

### Consumption / yield

at 15 mm thickness	approx. 15.0 kg/m <sup>2</sup>	approx. 2.0 m <sup>2</sup> /30 kg
Fresh mortar yield	approx. 1000 l/tonne	

### Technical values

Grain sizes	approx. 0.8 mm
Layer thickness	10 - 20 mm
Water demand	approx. 10 l/30 kg
Solid mortar density	1,250 kg/m <sup>3</sup>
Water vapour diffusion resistance [μ]	≤ 20
Dynamic modulus of elasticity	< 3,000 N/mm <sup>2</sup>
Class of capillary water absorption	WO
Reaction to fire [EN13501-1]	A1
Strength class	CS I
Mortar Group (DIN 18550)	PII
Base color	Natural white

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Application tool	render machine, smoothing trowel, notched trowel, broom, Rabbospeed, sponge float
Composition	white hydrated lime, white cement, graded mineral aggregates, air-entraining agent, additives for better workability and adhesion to substrate

### Storage

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Shelf life	min. 12 months
Storage conditions	In the original unopened packaging, dry and protected from moisture.

### Application

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#### Surface preparation

- The substrate must be clean and load-bearing, and free from any substances that could impair adhesion.
- Dry or highly absorbent surfaces must be pre-wetted if necessary.
- Low-porosity substrates (e.g. concrete or old brick) require pre-treatment with the mineral bonding layer **weber.dur 101** as a grooved levelling compound.
- Observe the drying time of the prevailing base coat.
- The substrate evenness must comply with the allowed tolerances (variations) defined by the national standards and/or guidelines (e.g. deviations from DIN 1053 "Masonries" or DIN 18 202 "Tolerances in building construction"). If necessary, take the appropriate remedial measures to level the substrate. If in doubt, request technical advice.

#### Application

##### Mechanical application:

The mortar can be applied with all conventional plastering machines.

##### Manual application:

Thoroughly mix the contents of the bag with the specified amount of water to achieve a consistency suitable for application.

- Spray/apply **weber.cal 176** to the specified thickness (approx. 10-20 mm).
- Level the freshly applied plaster mortar using a straightedge, ensuring it is plumb and free of lumps.
- In the case of highly absorbent and/or differently absorbent surfaces, a two-layer application "wet-on-wet" is required. The thickness of the first layer should be 2/3 of the total plaster thickness.
- Roughen the surface of the base coat according to the type of final coat to be applied. For fine scratch texture, for example, use a broom or notched decorative trowel after the first coat has been applied.
- To achieve a smooth, polished surface indoors, we recommend using lime smoothing plaster **weber.cal 178**.
- As an inlay **plaster**: After a curing period of approximately 1 to 5 days, apply a layer of 2-3 mm. Once the material has set, rub down or sponge float the surface. If necessary, perform additional surface treatment to achieve the desired finish.

### General notes

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**Health and environmental protection are always our top priorities. Therefore, please observe the following instructions:**

- Avoid eye and skin contact by wearing suitable protective clothing (safety goggles and gloves).
- Wear long trousers.
- If contact with the eyes or skin nevertheless occurs, rinse thoroughly the affected area with water immediately and consult a doctor if necessary.
- The longer fresh render remains on your skin, the greater the risk of serious skin damage.
- Ensure thorough ventilation during and after application and drying.
- Avoid eating, drinking or smoking while applying the product.
- Keep it out of the reach of children and keep children away from fresh render.
- Use a combination filter A2/P2 for spray mist.
- Do not pour the product or its residues into bodies of water, drains or onto the ground.
- Only dispose of containers once they are completely empty for recycling.
- Clean tools immediately after use with soap and water.
- Material residues can be mixed with water and disposed of as construction site waste once hardened.
- Always follow the manufacturer's health and safety instructions during the application.

Do not add any foreign substances when mixing or applying the product.

The air temperature, the used materials and the surface must not fall below +5 °C during application and drying.

Freshly rendered surfaces must be protected from direct sunlight, strong winds and moisture.

Application and execution in accordance with DIN 18 350 VOB/C and DIN 18 550.

The consumption figures mentioned in this document refer to the minimum thickness of the render layer. Due to variations in substrates and application methods, the actual consumption may differ. Exact consumption must be determined on a mock-up of the job site (trial area).

Adjacent building parts must be separated from the built-in render system.

**weber.cal 176** is subject to regular quality control through self-monitoring in accordance with DIN EN 998-1 and DIN 18550.

## Packaging units

Type	Unit	PU
sack	30 kilogram	42 sacks / palett
silo		

The information in this technical information 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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