

## weber.dur 132

### Lightweight lime-cement render

# Mineral lightweight render with round EPS fillers as base coat or interior base coat and top coat

#### Fields of application

Particularly dedicated for use on highly heat-insulating masonries.

Outdoors and indoors as base coat render with all **Weber** thick-layer and thin-layer mineral or organic overlay renders (finish top coats).

Also indoors as base coat and top coat render with all **Weber** mineral or organic overlay renders. For subordinated requirements, it can also be coated with solvent-free paints for interior use. Furthermore, as interior and exterior base coat render under ceramic wall tiles and slabs. For use outdoors and indoors.

#### **Description**

weber.dur 132 is a factory-mixed, mineral dry mortar according to EN 998-1.

#### Composition

Cement, white hydrated lime, graded mineral aggregates, round polystyrene fillers, hydrophobing agents, additives for better workability and adhesion to substrate.

#### Main features

- high yield
- · water-repellent
- · open to water vapour diffusion
- · low tension thanks to low modulus of elasticity
- best fitted for highly heat-insulating masonry due to its low bulk density and low thermal conductivity
- · enables quick finishing works
- · can be smoothed
- · for mechanical and manual application



- · for use on all mineral substrates and all highly heat-insulating wall building elements
- · also as interior and exterior base coat under ceramic tiles
- for use outdoors and indoors, depending on specific use

#### Technical values

Application thickness: 10 mm - 20 mm

Compressive strength (28 days): > 2 N/mm² (class CS II – EN 998-1)

Flexural strength (28 days): ≥ 1 N/mm<sup>2</sup>

Yield: approx. 950 liters/ton

Solid mortar density: < 1.200 kg/m³

Water vapour diffusion resistance value ( $\mu$ ):  $\leq 20$ 

Dynamic modulus of elasticity: < 3.500 N/mm<sup>2</sup>

Class of capillary water absorption: W 2

Thermal conductivity ( $\lambda$ ):  $\leq 0.51$  W/mK (P = 50%, tabulated)

Mortar group (DIN 18550):

Render type: lightweight render (type I)
Class of reaction to fire (EN 13501-1): A 1 (non-combustible)

#### Quality control

weber.dur 132 is subject to a regular quality control by self-monitoring according to EN 998-1.

#### General notes

- Protect fresh render surfaces from direct sunshine, strong winds or moisture.
- 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 render. 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.

#### Special notes

- weber.dur 132 is suitable for interior use as base coat render for ceramic wall tiles and slabs up to a total weight of 25 kg/m² for thin-bed mortar and tiles.
- Exterior use under ceramic wall tiles and slabs: apply the bonding and reinforcing mortar weber.therm 300 or 301 with the woven mesh weber.therm 310 on the whole surface of the levelled render; afterwards lay ceramic coverings.



- Limits of use: weber.dur 132 is not suitable for the hereunder mentioned substrates.
- Mineral building slabs (for ex. Aquapanel Outdoor, Blueclad, Duri/Masterpaneel): apply a full-surface reinforcement layer (thickness 5 7 mm) consisting of the bonding and reinforcing mortar weber.therm 300 and the woven mesh weber.therm 310 (mesh size 8 x 8 mm) on the levelled render layer; in case of thicker layer > 7 mm use the lightweight underlay render weber.therm 376.
- Polystyrene formwork blocks: see above; in case of thicker layer > 7 mm use the lightweight underlay render **weber.therm 376** (8 20 mm).
- Under favourable weather and hardening conditions, weber.dur 132 can be coated with all Weber mineral thin-layer overlay renders (range weber.star) after a drying time of ½ day per mm of application thickness.

#### **Substrates**

- Following substrates are allowed (see hereunder).
- Highly heat-insulating masonries: lightweight vertically perforated bricks (with thermal conductivity λ < 0.11 W/mK) and aerated concrete blocks (type G 2).</li>
- High-porosity substrates: aerated concrete, lime sandstones, lightweight vertically perforated bricks.
- Normal absorbent substrates: pumice stones, climate light blocks (KLB), Liapor bricks (combination of expanded clay and cement) and solid bricks.
- Low-porosity substrates: concrete blocks, highly-fired bricks and quarry stones.
- Low-grip and non-absorbent (dense and smooth surfaces): concrete, clinker.
- Mixed masonries: brickwork, quarry stones, aerated concrete, concrete.
- · Chipboard concrete formwork blocks.
- · Wood wool lightweight panels.
- For other substrates not mentioned in this document request technical advice.

#### Substrate preparation

- The substrate must be load-bearing, clean, dry, free of dust, and all adhesion-impairing particles and substances.
- Remove efflorescence and residues of formwork oils; if necessary, by mechanical means.
- · Remove cement laitance (hard sinter skin) with a notched large trowel.
- · High-porosity substrates: pre-wet; if necessary, use an appropriate primer.
- Normal absorbent substrates: pre-wet.



- Low-porosity substrates: apply the cement stipple coat (bondcoat) weber.dur 100 with a surface coverage of 50%, using the throw-on technique with a triangular hawk trowel, at a rate of approx. 4 kg/m²; after initial setting roughen with a hard broom.
- Mixed masonries: pre-wet and apply the cement stipple coat weber.dur 100 wart-like (with a surface coverage of 50%) in case of low-porosity substrates, e.g concrete blocks, highly-fired bricks and quarry stones; for large-size quarry natural stones use the normal-setting stipple coat weber.san 160 WTA.
- Low-grip and non-absorbent substrates: apply the mineral bonding layer weber.dur 101 or the cement-based bonding mortar weber.therm 370 in approx. 5 mm thickness at a rate of approx. 5 kg/m² and comb horizontally with a notched trowel.
- Large-size lime sandstone blocks: apply the mineral stipple coat weber.dur 100 with a surface coverage of 50% with a consumption of 4 kg/m<sup>2</sup>.
- Respect the drying time of the pre-said products (1 day per mm) prior to next applications.
- The substrate must be load-bearing, clean, dry, free of dust, and all adhesion-impairing particles and substances.
- 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.
- 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

- <u>Mechanical application</u>: the render can be applied with all conventional render machines (with mixing, conveying and spraying equipment). For full information request our 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 as base coat render (outdoors/indoors)

- Spray/apply weber.dur 132 and strike off with a stainless smoothing trowel.
- Apply in 1 or 2 layers in the appropriate thickness of approx. 15 mm (min. 10 mm max. 20 mm), depending on type and evenness of substrate.
- Rule level the render flush and perpendicular with a straight edge (for ex. aluminium beam), avoiding honeycombs or gaping holes.
- Highly heat-insulating masonries: apply 1 or 2 layers (min. 10 mm max. 20 mm).
- High-porosity substrates and/or differently absorbent substrates (mixed masonries): apply 2 layers "wet-in-wet" (1<sup>st</sup> layer of approx. 15 mm and 2<sup>nd</sup> layer up to 5 mm thickness). After the render surface changes from glossy to matt (approx. 10 20 minutes) apply the 2<sup>nd</sup> layer. The thickness of the 1<sup>st</sup> layer should be 2/3 of the total thickness (20 mm). In case of mixed masonries apply a reinforcement layer. (bonding and reinforcing mortar weber.therm 300 + woven mesh weber.therm 310) afterwards.
- Normal absorbent substrates: apply 1 layer of 10 20 mm thickness.
- Low-porosity substrates: apply 1 layer of 10 20 mm thickness.
- Low-grip and non-absorbent substrates: apply 1 or 2 layers (with a short delay of approx. 10 minutes) in a total thickness of approx. 10 20 mm.
- Chipboard concrete formwork blocks / wood wool lightweight panels: apply 1 layer of approx.
   10 20 mm thickness, inserting the woven mesh weber.therm 310 in the upper third of the render layer.
- Use as interior base coat under ceramic wall tiles and slabs: apply 1 layer of 10 mm thickness and roughen the levelled render layer with a grid float in tight circular motions prior to application of ceramic coverings.
- Use as exterior base coat under ceramic wall tiles and slabs: see above "Special notes".
- When used in 2 layers with time delay, comb the 1<sup>st</sup> layer horizontally with a notched large trowel or a hard broom; let dry the 1<sup>st</sup> layer 1 day per mm and afterwards apply the 2<sup>nd</sup> layer.
- In case of required total thickness > 20 mm, comb the last layer horizontally with a notched large trowel or a hard broom; let dry the 1<sup>st</sup> layer 1 day per mm and afterwards apply a further layer of 10 20 mm thickness. The use of a metal cloth is mandatory on non-loading substrates.
- Respect the drying time of weber.dur 132 (1 day per mm thickness) prior to next applications.
- Leave the surface of **weber.dur 132** as required for the specific overlay render (finish top coat) or paint to ensure best key (see hereunder).

#### Application as base coat render (outdoors) with overlay renders

 All Weber mineral (range weber.star and weber.top) and organic (range weber.pas) overlay renders can be used as finish top coats on top of weber.dur 132.

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- In case of thick-layer mineral overlay renders (scratch renders weber.top) comb weber.dur
   132, 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.dur 132 to a flat and in-plane surface with a wooden float (do not smooth it).

#### Application as base coat and top coat render (indoors) with boverlay renders/paints

- Apply a 1<sup>st</sup> layer (base coat) in the appropriate thickness of approx. 15 mm (min. 10 mm max. 20 mm) and comb horizontally with a notched large trowel or a hard broom.
- Next day apply a 2<sup>nd</sup> layer (top coat) in 3 4 mm thickness.
- Indoors/overlay renders: rule level weber.dur 132 to a flat and in-plane surface with a
  wooden float and apply a thin-layer mineral (range weber.star) or organic (range weber.pas)
  overlay render.
- Indoors/paints: rule off weber.dur 132 to a smooth surface with a damp sponge float or felt
  float in tight circular motions and apply a paint (range weber.ton) for interior use, for ex.
  weber.ton 411 AquaBalance or 412 AquaBalance. However, the EPS grains may crumble
  out of the surface and do not provide a nice paintable surface, so that this application should
  be restricted to subordinated surfaces.

#### Uses of reinforcement layer

- For the following unfavourable building conditions we recommend the use of a full-surface reinforcement layer (5 8 mm) consisting of the bonding and reinforcing mortar weber.therm 300 and the woven mesh weber.therm 310. This layer provides a dimensional stability and "decouples" the overlay render (top coat) from stresses of the substrate (i.e wall-building material and underlay render as base coat).
- Prolonged damp weather and increased building moisture (also from substrate): respect the drying time of the underlay render (at least 4 weeks) and apply an additional reinforcement layer onto the underlay render (base coat).
- Special exposure of the facade (heavily stressed weather sides): apply an additional reinforcement layer onto the base coat.
- Fine-grained overlay renders (freestyle textured top coats) with a grain size < 2 mm: apply an additional reinforcement layer onto the base coat.
- Dark colours of the overlay renders (top coats): apply an additional reinforcement layer onto the base coat.
- Considerable irregularities in the substrate: apply an additional reinforcement layer onto the base coat, like in the case of mixed masonries with also different porosity.
- XPS or HWL roller shutter boxes: apply the reinforcement layer directly onto the substrate in the concerned areas and insert the woven mesh **weber.therm 310** on the base coat.



- Missing overbinding dimension (= smallest distance between the vertical butt joints of two superimposed stones) on a large scale: carry out static tests and apply an additional reinforcement layer onto the base coat.
- Many cracked stones on different spots: apply an additional reinforcement layer onto the underlay render; in case of several cracked stones below one another: carry out a static investigation.
- Other building conditions may justify the application of a reinforcement layer; if in doubt, request technical advice.

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Grain size:

1.0 mm

Colour:

natural grey

Application thickness:

10 mm - 20 mm

Water demand:

approx. 8 liters / 30 kg

Tools:

Render machine or electric drill + stirrer, stainless steel smoothing trowel, straight edge (for ex. aluminium beam), notched large trowel; for finishing works in case of overlay renders: hard broom, notched large trowel or wooden float; in case of paints: sponge float or felt float; in case of ceramic coverings: grid float

#### Storage:

The product can be stored up to 3 months in its original unopened packaging, if kept dry and protected from moisture.

#### Consumption / yield

15 mm thickness: approx. 16.0 kg/m² approx. 1.9 m² / 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.