bauroc

BUILDING SOLUTIONS

bauroc PLASTERING

INTERIOR FINISHING

bauroc INTERIOR FINISHING

Bauroc offers plastering mortars suitable for finishing aerated concrete walls. Bauroc **mortars** are suitable for interior finishing of both dry and wet rooms.

Interior finishing variants

Depending on the quality of masonry work and the evenness of the finished surface, bauroc wall may need only finishing with putty or alternatively finishing in two stages – basecoat plaster and finishing with putty.

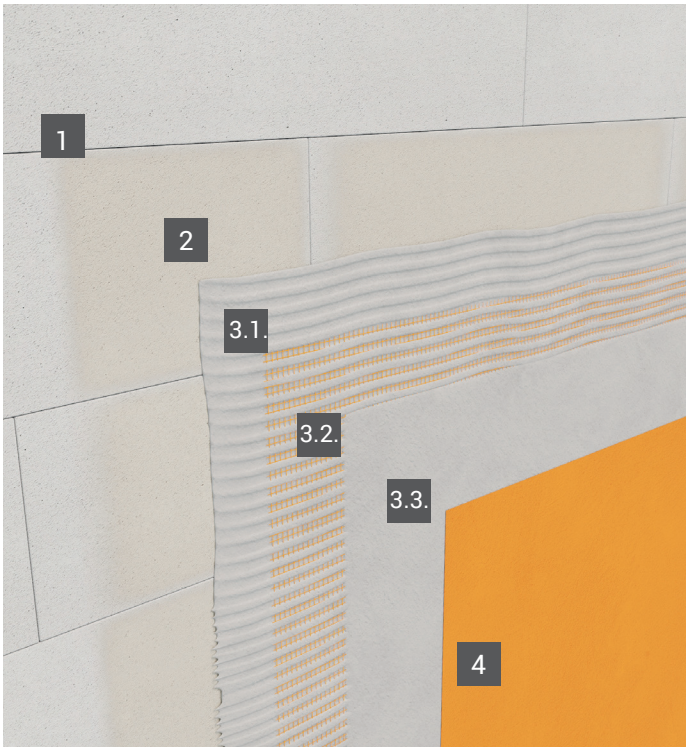
Finishing with putty only: due to the smooth surface of blocks, precise dimensions and thin glue joints, properly built bauroc walls do not need for a basecoat layer, but only leveling with bauroc PUTTY. This requires a properly prepared substrate, where all horizontal and vertical joints of the blocks have been filled with glue up to the edges and the wall has been sanded down perfectly. In case of this variant, the thickness of the leveling putty layer is ca 5 mm and it must be reinforced with suitable reinforcing mesh. Putty is applied to the wall in two layers, starting with a thick, ca 3–4 mm layer of putty, then pressing reinforcing mesh in that layer, and finally coating it with another, 1–2 mm thick layer of putty.

1. bauroc masonry
2. Bonding primer - bauroc PRIMER
3. Reinforced putty layer, ca 5 mm

   3.1. bauroc PUTTY, thickness ca 3–4 mm

   3.2. Reinforcement, fibre glass reinforcing mesh suitable for use in a thin putty layer. Recommended mesh weight is 160 g/m²

   3.3. bauroc PUTTY, thickness ca 1–2 mm
4. Decorative finishing layer, e.g. paint or wallpaper



Leveling + putty: in case of imperfect substrate, start by applying a minimum of 5 mm thick layer of bauroc LIGHTWEIGHT RENDER and smooth the rendered surface by applying a layer of bauroc PUTTY ca 2 mm thick. The render layer requires using reinforcing mesh.

1. bauroc masonry

2. Bonding primer, bauroc PRIMER

3. Leveling layer, min 10 mm

   3.1. bauroc LIGHTWEIGHT RENDER, layer thickness ca 3–4 mm

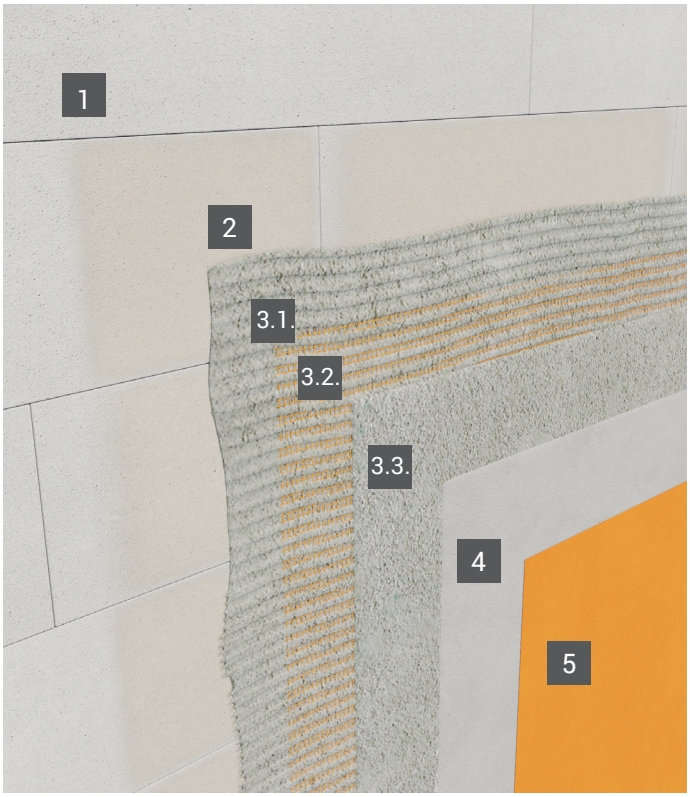
   3.2. Reinforcement, such as fibreglass mesh Capatect Gewebe 650/110

   3.3. bauroc LIGHTWEIGHT RENDER, layer thickness ca 1–2 mm

4. bauroc PUTTY, carefully smoothed pre-paint fine putty layer, thickness ca 2 mm

5. Decorative finishing layer, e.g. paint or wallpaper

In case of painted walls, the last thin putty layer must be carefully smoothed before applying a coat of paint, optionally ready-to-use putties can be used.



Requirements for substrate

The surface of the finished block wall must be even, clean, dust-free and evenly dry. There must be no holes, larger gaps and hardened glue on the wall surface.

Application Conditions

When performing internal plastering, the following requirements should be met. During the application and curing of the plaster, the air and surface temperature must not fall below +5°C or rise above +30°C. The recommended temperature is above 10 °C. Freshly rendered or plastered surface should be protected from too rapid evaporation of water from the render. Therefore, hot air blowers or infrared radiators must not be used to dry newly plastered surfaces. It is also important to make sure that plastered surfaces are not exposed to direct sunlight and draft. Avoid performing internal plastering in case of high relative humidity (over 80%). In high humidity, the curing time is longer.

Preparation work and application of putty

Checking compliance with the requirements

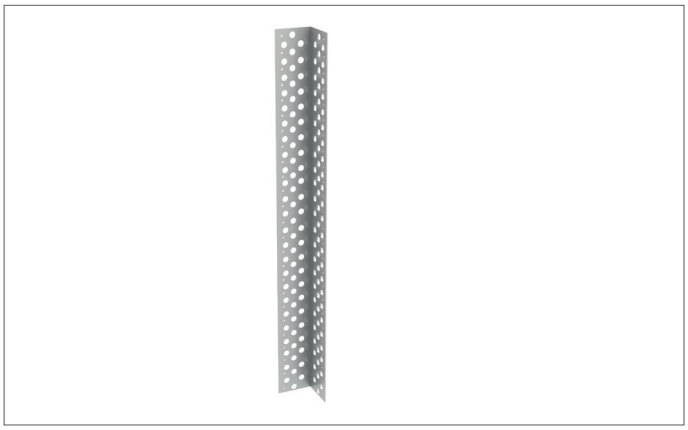
Check the compliance with the requirements of the substrateas well as the compliance of temperature and air humidity. If the wall surface does not meet the requirements, additional works are required. Clean the wall from any dirt if necessary. Fill the major defects on the wall surface with bauroc REPAIR MORTAR. The minor defects, such as emty vertical joints, fill with bauroc PUTTY (prepare a thicker mortar!) or bauroc THIN JOINT MORTAR. After that, smooth the wall surface by using a bauroc SANDING BOARD. Remove loose dust with a brush or a vacuum cleaner. If the substrate is wet, let it dry sufficiently before plastering. In case of failure to comply with temperature and air humidity requirements throughout the entire period of finishing works, incl. curing of plastering layers, it is important to take necessary measures to meet such requirements. For example, if the finished surface may be exposed to direct sunlight through a window, use lightdiffusing or obscuringmaterial to cover the window for the period of performing the finishing works.

Priming the substrate

bauroc PRIMER is particularly suitable for treating porous substrates as aerated concrete, reducing suction and ensures proper adhesion between the substrate and plaster coat. Dilute the concentrate with tap water in a mix ratio 2:1 - two parts of Primer and one part of water. Apply primer by using a brush or a paint roller liberally and evenly to the entire surface to the saturation point. Protect primed surfaces from too rapid drying. Priming should be performed immediately before plastering. At normal temperature, primed surface can be plastered after approx. 12 hours.

Application of corner beads

Apply galvanised Corner Beads for intarnal use to the corners and around the window and door openings. Using the correct type of beads ensure the best finished look, ensure durability and help protect the corners from damage. Cut beads to the required length, suitable scissors are normally used. Use bauroc PUTTY to fix the Corner Beads to the wall.



Preparation of mixtures

The contents of the package of bauroc PUTTY or bauroc LIGHTWEIGHT RENDER (25 kg) are mixed with 6–7 l of clean water to a uniform consistency. When using bauroc PUTTY for a thicker reinforcement layer, use less water (ca 6 l), for pre-paint smooth PUTTY layer use more water (ca 7 l). Stirring time is approximately 5 minutes, depending on stirrer power. Then let the mixture stand for about 5 minutes and mix again. If necessary, add a little water to adjust the consistency. Freshly prepared mortar should be used within approx. 2,5 hours. Be sure to follow the mixture preparation instructions on the product package.

Application of reinforced plaster or putty layer to the substrate

The optimal method for application of bauroc PUTTY or bauroc LIGHTWEIGHT RENDER to substrate is using Plaster Spray Machine. This ensures an even layer with required thickness upon just a single application and easier and quicker processing of the layer later on. When applying by hand, use a putty knife or a notched trowel. For large surfaces use a 35–45 cm wide putty knife or trowel.

Plaster application with a pump

Manual plaster application

First, apply the mortar of approx. 3-4 mm (2/3 of the total thickness of the leveling layer) to the surface and install an overlapping fibre glass reinforcement mesh in it. The second layer of mortar of approx. 1-2 mm must be applied without delay, wet-on-wet. The mesh must be embedded in the upper third of the leveling layer. Reinforcing mesh must be chosen in accordance with the mortar, e.g. 160 g/m² fibreglass mesh works well for both plaster and putty. Adjacent mesh sheets should overlap each other by approx. 10 cm (the required overlap is usually indicated with a marking on the mesh). Mesh sheets horizontal joints should have an overlap of a min. 20 cm.

Steps for Mesh Installation:

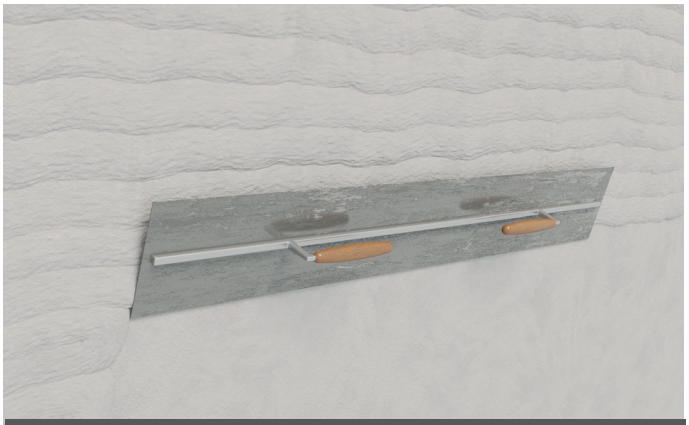
1. When a sufficient area has been applied, comb first mortar layer through with a notched trowel, this will provide a consistent depth of layer.

2. ja 3. Cut sections of reinforcing mesh from the roll and apply as shown in the image. Float mesh into the top of the mortar and then smooth over gently.

The second layer of mortar must be applied without delay, wet-on-wet, to guarantee complete embedding of all fabric sheets and a total thickness of the reinforced leveling layer min.5 mm.

Application of smoothed putty layer before painting

After the reinforcement layer has completely hardened and dried, apply a thin, 1–2 mm thick layer of fine putty and smooth it. If one coat of putty is not enough, add another layer of fine putty to the wall and smooth it carefully after it has cured. bauroc PUTTY is a very good product to be used the last fine putty layer. Before application of the putty, assess visually whether the leveling layer has hardened enough. Under normal conditions, let the plaster layer harden for 24 hours and start puttying the next day after plastering. In case the interval between plastering and puttying is longer than 4 weeks, the plaster layer must be additionally primed before puttying by using a bonding primer suitable for the plaster, e.g. Caparol Putzgrund 610.



Levelling of putty

Smoothing of plastered surface

After levelling and brief drying of the putty, smooth the surface with a stainless-steel trowel or treat the surface with a sponge scrubber (felt). After a drying, the surface can be sanded, using sandpaper (no 150 or 180). Remove sanding dust after sanding. The puttied and sanded surface must be properly even and free of dust before applying a coat of paint or wallpaper.

Sanding down the plastered surface

Top coating

Under normal conditions, the surface finished with bauroc PUTTY can be painted after ca 7 days. First, the puttied surface is primed and only then at least two coats of the main paint are applied. Joints between intersecting walls, ceilings and walls, walls made of different materials, window or door frames, or other possible corners and joints must be filled/sealed with a suitable hermetic, suchas paintable acrylic mass. Acrylic mass is applied to the surface after priming as there might be insufficient adhesion between the putty layer and the acrylic.

Interior paints suitable for bauroc PUTTY include e.g.

• CAPAROL Samtex 3 E.L.F, dull matt washable paint, corresponds to standard DIN 53 778 class 2 “scrub-resistant”

• CAPAROL Samtex 7 E.L.F, silk matt washable paint, corresponds to standard DIN 53 778 class 2 “scrub-resistant”

CAPAROL Samtex 10 E.L.F, silk matt washable paint, subjected to wear, corresponds to standard DIN 53 778 class 1 “scrub-resistant”

• CAPAROL Samtex 10 E.L.F, silky matte washable paint, corresponds to standard DIN 53 778 class 1 “highly abrasion proof”

• CAPAROL Samtex 20 E.L.F, silk-gloss washable paint, for highly stressed surfaces, corresponds to standard DIN 53 778 class 1 “scrub-resistant”

Finishing of ceilings

Ceilings made of bauroc FLOOR ELEMENTS can be puttied and painted just like walls made of bauroc blocks. Spray-apply a thin layer of bauroc PUTTY to the full surface of the ceiling. It is not recommended to fill the longitudinal joints of ceiling panels, formed by bevelled panel edges, before puttying due to the risk of a visible crack at the place of the panel joint in a smooth ceiling. Such a risk is not present in case of bevelled panel joints, because even if a fine crack appears in the bottom of the joint, it will not be visible.

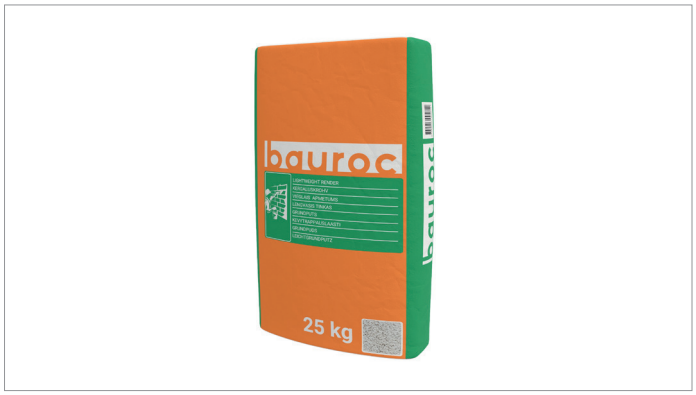
Products of bauroc PLASTERING SYSTEM

bauroc PRIMER (BONDING PRIMER)

bauroc PRIMER is intended for priming aerated concrete walls both indoors and outdoors before plastering and puttying. Colourless when dry.

- Density ca 1.1 kg/dm^3.
- Concentrate consumption 0.1–0.35 l/m², depending on substrate absorbency.
- Supplied in concentrated form in 10 litre plastic containers, 50 containers per pallet. Before use, dilute concentrate product with water in the ratio of 2 parts by volume of bauroc PRIMER and 1 part by volume of water.
- Keep in a cool place but protect from freezing! Shelf life 12 months. Date of manufacture: see the package.

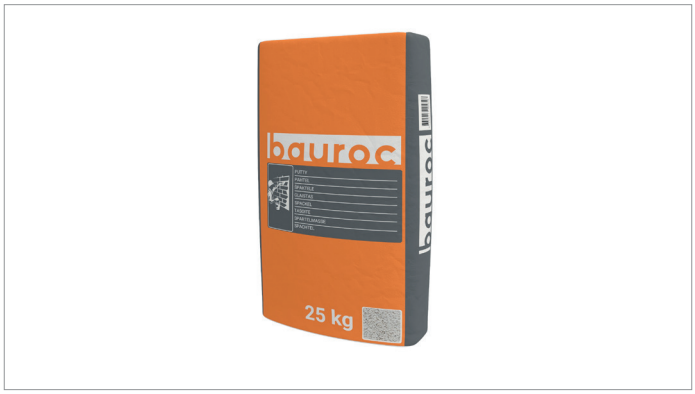
bauroc LIGHTWEIGHT RENDER



bauroc LIGHTWEIGHT RENDER is a mineral reinforceable lightweight render for creating a substrate for the finishing layer of aerated concrete masonry walls for indoor and outdoor use. bauroc LIGHTWEIGHT RENDER is a reinforceable plastering mortar made of lime and cement binder with highquality mineral additives, which make it extremely elastic.

- Dry density of hardened render: 1.1–1.3 kg/dm^3.
- Compressive strength after 28 days: CS II.
- Adhesion strength: >0.10 N/mm², FP: B.
- Thermal conductivity $\lambda_{10,\,dry}$: ≤0.33 W/(m · K).
- Product consumption: ca 1.2 kg dry plastering mortar is required for a 1 mm thick layer.

bauroc PUTTY



bauroc PUTTY is a fine grain finishing putty for levelling masonry, uneven substrate, or render in both dry and wet rooms, indoors and outdoors.

- Maximum grain size is 0.2 mm.
- Dry density of hardened render: 1.4–1.5 kg/dm^3.
- Compressive strength after 28 days: CS IV.
- Adhesion strength: >0.40 N/mm², FP: A,B.
- Thermal conductivity $\lambda_{10,\,dry}$: ≤0.45 W/(m · K), (P=50%, EN 1745)
- Product consumption: Product consumption:ca 1.4–1.5 kg/m²/mm.

BUILDING SOLUTIONS

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