

Fine lime thin-coat render

21.350

gräfix 61

- Traditional lime render mortar
- Pure and cement-free
- Suitable for clay construction



Gräfix renders are cement-free, breathable lime mortars for conserving and restoring historical buildings. They are ideal for CLAYTEC clay substrates. Fine lime thin-coat render is a topcoat render for use on lime (outdoors) or clay (indoors).

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Field of application Breathable lime mortar for exterior plaster in timber-frame restoration and interior plaster on clay undercoat plaster for historical building conservation and restoration.

Composition Lime, crushed limestone sand 0-0.8 mm, additives to improve its workability (surfactants, cellulose and methyl cellulose total < 0.5%).

Material parameters Bulk density approx. 1,350 kg/m³, strength corresponds to CS I DIN EN 998-1

Supply form, coverage In moisture-proof 30 kg bags (yields 24 litres mortar), 40 bags/pal.

Storage Can be stored dry on pallets or wooden grid for at least 6 months.

Mortar preparation With the addition of approx. 8 l per 30 kg bag with a motor agitator, larger amounts can also be mixed with commonly available rotary drums, turbomixers and pug mill mixers. Can also be processed mechanically with a mixing pump.

Plaster base Clay undercoat plaster or old clay infills in existing buildings must be absolutely dry, dust-free, level and sufficiently rough. Lime basecoat render must have set.

Plaster structure the following plaster structures are possible depending on the substrate and desired fineness of the surface:
Fine: 61 fine lime thin-coat render on intact clay infills (single layer) according to CLAYTEC "Timber-frame construction worksheet"
Fine: 61 coarse lime basecoat render with hair + 61 fine lime thin-coat render (topcoat)
Very fine: 61 coarse lime basecoat render with hair + 61 fine lime thin-coat render + 66 k lime render smooth

Plaster application Exterior: coarse lime basecoat render with hair (CLAYTEC 21.200) or lime basecoat render (CLAYTEC 21.300) is wetted immediately before applying the plaster infill section by infill section or not too extensively (spray mist), several times if necessary.

Interior: Clay undercoat plaster is pre-wet very carefully (spray mist) until a uniform dark surface is achieved. A slurry of white lime hydrate and fine sand can be worked thoroughly into the clay with a firm brush as preparatory work.

Lime thin-coat render (CLAYTEC 21.350) is applied with CLAYTEC Japanese trowels or stainless spreaders. The ideal layer thickness is 2-3 mm (e.g. on interior clay undercoat plaster or exterior coarse lime plaster). A maximum of 3-5 mm are possible (e.g. as single layer plaster on old lime infills in existing buildings).

Apply from the edge of the infill section towards its centre and not vice versa for timber-frame infills. We recommend a cut of around 2-3 mm in depth with the trowel at the beam connection. The beam connection should not be executed as a bevel.

The surface is usually rubbed down; the grading curve chosen allows fine felt textures. The smoother the substrate, the smoother the surfaces that can be achieved.

Working temperature 5-25 °C substrate temperature

Working time 3-4 hours at most depending on the temperature, plaster thickness and absorption properties of the substrate.

Subsequent processing In hot or windy weather, the plaster has to be kept moist in the first few days, e.g. with a garden sprinkler (fine mist) to stop it drying out too fast.

Apply a breathable coating to the plaster to guarantee protection against frost and weather and to ensure a homogeneous colour. Suitable examples include fresco (on still-moist plaster) or lime paints applied to the dry surfaces (CLAYTEC 21.525), or silicate facade paints for exterior plasters exposed to heavy weathering.

Notes In line with historical practice, we can offer calves' hairs (CLAYTEC 32.012) for experienced restorers to use with lime mortar. These can be added individually in different ratios; a 5 kg pack is enough for approx. 40 bags (1 pallet) with an average mixing ratio.

In all cases, the suitability of the entire surface structure of plaster and coating must be tested by means of a sample application of sufficient area. Compensation claims, unless they result from factory mixing errors, are excluded.