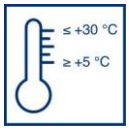
Technical Data Sheet
Art. No. 0401

Undercoat Render

Levelling and pore undercoat render, low alkali
Undercoat render according to WTA Code of Practice 2-9-04/D and DIN EN 998-1 for single layer applications up to 40 mm thick.
Test Certificate and external surveillance by Gütegemeinschaft Naturstein, Kalk und Mörtel e.V. [Quality Association for Natural Stone, Lime and Mortar] Cologne, Germany.


For use Indoors and outdoors



Working temperature

Dry mortar/ water

Mixing time


Mortar cover/ filling knife/ trowel/ spray application

Shelf-life


Protect from moisture

Range of use

- Undercoat render and pore undercoat render for restoring old buildings and masonry work, especially render bases with salt loads
- Especially for subsequent coating with one of the Remmers Restoration Renders
- For preparing the substrate and for levelling the entire surface of highly uneven render bases
- As a filling and levelling mortar on rubble stone masonry work
- For all mineral wall building materials suitable for the application of render such as masonry brick, sand-lime brick, concrete, aerated concrete, rubble stone and lime-cement and cement render (indoors and outdoors).

Property profile

Remmers Undercoat Render is a factory-mixed, mineral, pore undercoat render for restoring buildings. The product has excellent working properties.

- Easy to apply and finish in one coat from 10 to 40 mm thick!
- Can be applied by machine
- Highly stable
- Fibre reinforced
- Promotes drying, resistant to salt with a large active pore space (> 50 %)
- Highly water vapour permeable
- Resistant to water, weather and frost

Characteristic data of the product

Bulk density:	approx. 1.10 kg/dm³
Colour:	grey
Working time:	> 1 hour
Compressive strength:	CS III
Capillary water absorption:	> 1.0 kg/m²
Water penetration depth:	> 5 mm
Water vapour diffusion resistance coefficient µ:	< 15
Porosity:	> 50 % by volume
Reaction to fire (DIN EN 988):	Euro Class A 1

Substrate

The substrate must be load bearing and free of material that could interfere with the adhesion. Remove damaged old render at least 80 cm above the damaged zone and chase out joints 2 cm deep. Thoroughly remove coats of paint and coatings.
The substrate may be dry or matt damp (max. 6 % by mass) but should not show any pressing moisture. Rising damp should be waterproofed beforehand in the Remmers Kiesol System.
Pre-wet absorbent render bases until they have become matt damp (not wet). On absorbent masonry with low strength, Undercoat Render can be applied as a bonding layer. On highly absorbent substrates and mixed masonry work, throw on Remmers Preparatory Mortar (Art. No. 0400) over the entire surface; on smooth and

Remmers GmbH 49624 Löningen Tel 05432/83-0 Fax: 05432/3985 www.remmers.de

dense substrates, thrown on in nodules. When waterproofing grout has been used (e.g. Sulfatex grout, Art. No. 0430), a spritz is applied to the last still fresh layer of grout. Adhesion of the Preparatory Mortar can be improved by adding Remmers Haftfest (Art. No. 0220). After the preparatory mortar has set (24-48 hours), the render can be applied.

Directions

Pour **approx. 7.0 litres of water** into a clean container (mortar tub), add **20 kg Undercoat Render** and mix thoroughly with suitable mixing equipment/paddle for approx. 3 minutes until homogenous and the proper consistence for working has been achieved. When a machine is used, the water setting depends on the conveyor screw used. After pre-treating the render base, apply the mixed mortar by hand or with a suitable machine.
Undercoat Render is applied in layers from 1 to 4 cm thick. Apply the render as a contact layer first, allow to bind briefly and then fill up to the intended thickness of the render. When executing restoration work in conjunction with Remmers Restoration Renders and for levelling layers, a minimum thickness of 10 mm is required. Layers thicker than 40 mm are to be applied in two working operations.
Areas in render bases that are highly uneven and cleft must be treated in two layers to avoid large differences in the thickness of the render since this could lead to cracks or hollow areas. When working in more than one layer, the first layer is roughened with e.g. a render comb to provide anchorage for the following layer. The second layer of Undercoat Render is applied as soon as the first layer has sufficiently dried; at the earliest the next day. If only shorter waiting/standing times are available, work can be carried out in one working operation in two layers, wet-on-wet (wet-on-damp). Place iQ-Tex Reinforcement Fabric (Art. No. 0236) between the layers. When work is continued with Remmers Restoration Render or other render coatings, waiting time is at least 7 days; 3 days if there is a layer of reinforcement. Roughen the surface.

Notes

Initially set mortar cannot be made workable again by adding water or fresh mortar. Do not use if the temperature of the air, substrate and building material is below +5° C or above +30 °C. The characteristic data given for the product was determined under laboratory conditions at 20 °C and 65 % relative humidity. Lower temperatures lengthen, higher temperatures reduce working and setting time.
Do not apply to gypsum substrates.
Protect Remmers Undercoat Render from drying out too quickly, especially in sunlight and wind outdoors and in drafts and thermal loads indoors. If necessary, subsequently wet /spray with water.
To ensure the success of the restoration measures, the required conditions for drying must be created, e.g. by setting up driers after the applied render has sufficiently set (at the earliest after 7 days) – see WTA Code of Practice 2-9-04/D. The surface of the render should be free of visible cracks. Fine hair cracks are not a reason for complaint since they do not impair the properties of the render.

Tools, cleaning

Render machine with rotor, e.g. P.F.T. G4 with Rotoquirl 1, Putzknecht S 48 classic or S 58, mixer, positive mixer, double shaft mixer, continuous mixer with a long mixing tube, float, levelling rule (aluminium), render comb, broom, trowel.
Clean tools with water while the render is still fresh.

Packaging, application rate, shelf-life

Packaging:
20 kg paper bags

Application rate – dry mortar:
Approx. 9.5 kg/m² dry mortar per cm thick layer

Shelf-life:
At least 12 months stored dry in closed bags.

Safety, ecology, disposal

Further information on safety when transporting, storing and handling as well as disposal and ecology is found in the latest Safety Data Sheet.

CE

Remmers
Baustofftechnik GmbH
Bernhard-Remmers-Straße 13
D-49624 Löningen

09
EN 998-1:2010-12
GBI P43

Undercoat Render

Designed rendering / plastering mortar without special characteristics

Reaction to fire:	class A1
Adhesion:	≥0,08 N/mm² (fracture pattern B)
Water absorption:	W 0
Water vapour permeability:	μ ≤ 15
Thermal conductivity ($\lambda_{10,dry}$):	≤ 0,83 W/mK for P = 50%
(tab. value EN 1745)	≤ 0,93 W/mK for P = 90%
Durability (against freeze-thaw):	Resistant, by use acc. TDS
Dangerous substances:	NPD

Remmers (UK) Limited Crawley
United Kingdom
Tel: +44 (0) 1293 594 010
Fax: +44 (0) 1293 594 037
www.remmers.co.uk