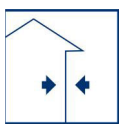


Technical Data Sheet Art. No. 0416

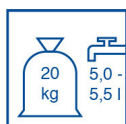


Universal Restoration Render HS

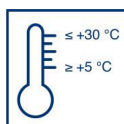
Fibre based, WTA restoration render with high sulphate resistance and low effective alkali content



For use
indoor and
outdoor



Dry mortar /
water



Working
temperature



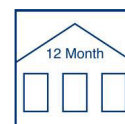
Mixing time



Mortar cover /
filling knife /
trowel



Working time



Shelf-life



Protect from
moisture

Range of use

- For repair, renovation and restoration of old, damp and salt-loaded masonry work, wall surfaces and plinth areas
- Can be used on all mineral substrates appropriate for the application of render, e.g. masonry brick, sand-lime brick, concrete, aerated concrete, rubble stone and lime and lime-cement render (indoors and outdoors)

Property profile

Remmers Universal Restoration Render HS is a factory-mixed, mineral, light-weight render with outstanding properties for restoring buildings.

- Easy to apply and finish in one coat up to 30 mm!
- Can be applied by machine
- Highly stable
- Fibre reinforced
- Promotes drying – large active pore space (> 50 %)
- The binder is highly resistant to sulphate with low effective alkali content
- Prevents heat loss caused by the penetration of moisture

Characteristic data of the product

Colour:	grey
Bulk density:	approx. 1,15 kg/dm ³
Working time:	60 min.
Compressive strength:	CS II
Water penetration depth h:	< 5 mm
Reaction to fire (DIN EN 998-1):	Euroclass A 1

- Resistant to water, weather and salt

Substrate

The substrate must be load-bearing and free of material that could interfere with adhesion. Remove damaged old render at least 80 cm above the damaged zone and chase out friable joints 2 cm deep. Remove paint and other coatings thoroughly. The substrate must be dry to matt damp (max. 6 % by mass) but should not show any pressing moisture. Treat rising damp in the Remmers Kiesol System. If there are heavy salt loads, apply Remmers Undercoat Render (Art. No. 0401) first.

Pre-wet absorbent render bases until the surface is matt damp (not shiny). On absorbent masonry work of low strength, Restoration Render

Universal HS can be applied as a bonding layer.

On dense substrates, throw on Remmers Preparatory Mortar (Art. No. 0400) over the entire surface; otherwise throw on in nodules.

When mineral waterproofing grouts have been used (e.g. Sulfatex Grout, Art. No 0430), a full cover spritz is applied to the last still fresh layer of grout. The adhesion of the preparatory mortar can be improved by adding Remmers Hafffest (Art. No. 0220).

After the preparatory mortar has set (24-48 hours), the render can be applied.

Directions

Pour **approx. 5.0 - 5.5 l of water** into a clean container (mortar tub), then add **20 kg Restoration Render Universal HS**. Mix with a suit-

able mixer (e.g. BEBA double shaft mixer) for approx. 3 minutes until homogenous and the proper consistency for working has been achieved. When a machine is used, the water setting depends on the conveyor screw used.

Universal Restoration Render HS is applied in a single layer from 2 to 3 cm thick.

Apply the render as a contact layer first, allow to briefly set, then fill up to the intended thickness of the render.

In areas that are highly uneven or there are a lot of holes in the render base, work should be carried out in two layers to avoid large differences in the thickness of the render which could lead to cracks or hollow areas. The first layer is roughed, e.g. with a render comb, to provide anchorage for the second layer. The second layer is applied after 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). In this case, a layer of reinforcement fabric, iQ Tex 6.5/100 (Art. No. 0236) is placed between the layers. When used on critical substrates, we recommend bedding the reinforcement fabric into the upper third of the restoration render. Close freshly applied Universal Restoration Render HS immediately with a moistened toothed float and level with a rule. After the surface has become matt, it is carefully worked with a soft sponge float. After further setting, the surface is finished with the same sponge float. Very smooth, fine surfaces can be achieved if a grated scraper is used after sufficient setting and Fine Render (Art. No. 0408) is applied at least 3 days later.

The statements above are compiled from our field of production and according to the latest technological developments and application techniques.

Since application and working are beyond our control, no liability of the producer can be derived from the contents of this information sheet. Any statements made beyond the contents of this information must be confirmed in writing by the producer.

In all cases, our general conditions of sale are valid. With the publication of this Technical Information Sheet all previous editions are no longer valid.

Textured surfaces can be produced with Remmers Decorative Render L (Art. No. 0515). Meets the requirements of WTA.

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 or 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 Universal Restoration Render HS to gypsum substrates.

May contain traces of pyrite or iron sulphide.

Protect Universal Restoration Render HS 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 right conditions for drying must be created, e.g. by setting up room 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 of no concern since they do not impair the technical properties of the render.

Tools, cleaning

Render machine with rotor, e.g. P.F.T. G 4 or G 5 with rotoquirl, Putzknecht S 48.3 or S 58, positive mixer, double shaft mixer, float, trowel, smoothing trowel, wood float, plastic float.

Clean tools and equipment with water while the render is still fresh.

Packaging, application rate, storage

Packaging:

20 kg paper bags

Application rate – dry mortar:

Approx. 10.5 kg/m² 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.



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GBI P50-1

EN 998-1:2010-12

Sanierputz Universal HS

Designed rendering/plastering mortar used on moist masonry walls containing water soluble salts

Reaction to fire:	class A1
Adhesion:	≥ 0,08 N/mm ² (fracture pattern B)
Water absorption:	≥ 0,3 kg/m ² a. 24 h
Water vapour permeability:	μ ≤ 15
Thermal conductivity	≤ 0,27 W / (m·K)
λ _{10 dry}	for P=50%
Durability	Resistant, by
(against freeze-thaw)	use acc. TDS
Dangerous substances:	NPD



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