

KEIM Porosan®-HF-Sanierputz (Lime White restoration render/stucco)



1. Product description

Dry bagged mortar from lime, white cement, sand and additives results in a natural white, open pore hydrophobic restoration render mortar (R) to DIN EN 998-1 with a short setting time. Strength corresponds to mortar category CS II or P II to DIN V 18550. Complies with WTA data sheet 2-9-04/D and has been WTA certified.

2. Field of application

KEIM Porosan-HF-Sanierputz is a quick-setting restoration render for renovating damp and salt-laden rendered surfaces. It is suitable for very damp walls in old buildings, basement areas, cellars etc. and as a render undercoat and topcoat for exterior and interior use on surfaces not in contact with the ground, below grade. A single layer of render is possible in the areas of low or moderate salt loading (with prior preliminary investigation). Not suitable on its own in the case of problems with seeping water or condensation (root cause must be eliminated). Due to its fine grain size, it is ideally suitable for felt-floated walls and comparable fine textures.

3. Product properties

- Grain size: 0–1 mm
- Porosity: > 40%
- Color: natural mineral white
- Mineral WTA restoration render with high salt retention capacity
- Automatic air entraining properties ensure high porosity resulting in high diffusion rate and good drying capacity
- Applicable by machine
- Prevents salt efflorescence at the render surface (elevated salt retention capacity)

- Condensation-repellent property safeguards against damp and salt spots
- Frost-resistant

Material characteristics to DIN EN 998-1:

- Compressive strength: 1.5–5 N/mm², CS II
- Flammability: A1 (non-flammable)
- Water vapor permeability μ : approx. 7
- Water absorption: > 0.3 kg/m² (10.8 sq ft) after 24 h
- Tensile bond strength: ≥ 0.08 N/mm² (fracture pattern A, B or C)
- Thermal conductivity:
 $\lambda_{10, \text{dry, mat}}$: ≤ 0.39 W/(mK) for P = 50%*
 ≤ 0.43 W/(mK) for P = 90%*
(*tabular values to EN 1745)

4. Application instructions

Substrate preparation

Remove existing salt laden render to at least 80 cm (32 inches) above the visible damage (very important) to reveal sound masonry. Immediately remove rubble containing salt from job site. Remove crumbly joint mortar to a depth of at least 2 cm (¾ inch) and replace crumbly stones. Thoroughly clean the masonry without using water (e.g. using a wire brush) and then remove dust (e.g. with compressed air).

Pre-wet highly absorbent masonry.

Apply a crisscross roughcast key coat with KEIM Porosan-Key Coat (Trass-Zementputz) to non-absorbent masonry or quarry stone work in such a way that the masonry is still readily visible afterwards (approx. 50–70% cover).

Indentations, holes and other uneven areas should be filled/leveled with KEIM Porosan Equalizer (Ausgleichsputz-NP) (observe setting times).



Consumption

Material usage: approx. 1.0 kg/m² (10.8 sq ft)-mm

Water usage: 5.5-6.5 l/sack or 220-260 l/t
(1.4-1.7 gal per sack or 58-68 gal/ton)

Yield: 1 sack (25 kg) produces approx. 25 l
(6.6 gal) of wet mortar

Mixing

KEIM Porosan Top Coat (Trass-Sanierputz-NP) is prepared using conventional mixing pumps (for example P.F.T. G4, G5, Putzknecht S 48, m-tec M3) without post mixers and without air entraining screw jackets. Free fall mixers, compulsory mixers and other mixers which produce elevated air contents are not suitable.

When hand mixing, use a paddle and mix for no longer than 2 minutes. Stir mortar to a pliable, stable consistency and apply to render substrate: apply an initial render layer of 8–12 mm (1/4" - 1/2") and then apply wet-on-wet to the desired thickness after a short waiting time. Do not remix material once stiffened. Do not add any third-party additives.

Multilayer rendering

To ensure that the restoration render functions properly, the render is usually applied in two layers, with each layer 10 to 25 mm thick. Roughen lower layers well and observe a setting time of approx. 1 day per mm. Before applying the second layer, brush off any salts that have penetrated through to the surface in the meantime without using water. The total thickness should not exceed 40 mm. Greater total render thicknesses can be achieved with a base render layer of KEIM Porosan Equalizer (Ausgleichsputz-NP).

Caution: Because this render is quick-setting, finishing can generally start after only 2–3 hours. Setting is delayed by high atmospheric humidity

and low temperatures, while it is accelerated at higher temperatures.

Uneven areas, relatively deep holes or areas with surface loss should also be leveled with KEIM Porosan Equalizer (Ausgleichsputz-NP).

Application conditions

Do not apply in high air temperatures, strong wind or rain, or at air and substrate temperatures below + 5 °C (41 °F).

Post-treatment

KEIM Porosan-HF-Sanierputz should be protected from sun or wind to prevent it from drying out too rapidly and, if necessary, should be kept moist.

Note

In damp rooms (rel. atmospheric humidity of over 65%), the atmospheric humidity must be reduced low enough, by careful heating and ventilation or dehumidification, for the base render to be able to dry out within 10 days.

The building contractor should be informed that such rooms also need to be adequately heated and ventilated during subsequent use.

Finishing/paint coating

Topcoats with additional renders are possible (after an appropriate setting time), provided their s_d-values are below 0.2 m.

A KEIM colored finish may be applied once at least 10 days have elapsed. Surfaces must be pretreated with a 1:3 dilution of KEIM Lime Remover (Ätzflüssigkeit) and then washed down with water.

KEIM Porosan-HF-Sanierputz can only function properly if coated with a highly water vapor permeable KEIM mineral paint system.



5. Packaging

25 kg (55 lb) sacks, 42 sacks per pallet.

6. Storage

Shelf life is 6 months under dry conditions.

7. Hazardous substances ordinance class

Xi	Irritant,
R 38:	Irritating to the skin.
R 41:	Risk of serious damage to the eyes.
S 2:	Keep out of reach of children.
S 22:	Do not breathe dust.
S24/25:	Avoid contact with skin and eyes.
S 26:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 37/39:	Wear suitable gloves and eye/face protection.
S 46:	If swallowed, seek medical advice immediately and show this container or label.

8. Transport hazard class

n/a

9. Disposal

EC Waste Code no. 17 01 01.

Do not allow the product to enter the sewer system. Solidify any residual material with water and dispose of in a building material landfill site. Empty sacks should be disposed of in accordance with official regulations.

10. Safety instructions

The mineral binder has an alkaline action. Protect surfaces which are not to be treated by covering. Any splashes on surrounding surfaces must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes. Keep out of reach of children.

Please refer to EC Safety Data Sheet.

GISBAU Product Code/ Giscode: ZP 1

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