1. Product description

KEIM Universalputz is a renovation and thin layer exterior and interior wall render, based on lime cement with fiber reinforcement, (standard render to DIN EN 998-1). KEIM Universalputz corresponds to mortar category CS III, P II acc. to DIN V 18550. Combined with KEIM silicate coatings, KEIM Universalputz is a coordinated render/coating system.

2. Field of application

For new substrates as well as renovation and repair of:

- Sound existing renders (including synthetic resin renders)
- Sound existing paint coats (including synthetic resin paint coats)
- Interior and exterior areas
- Cracks
- Problem areas
- With fabric embedding (e.g. with KEIM Glass Fiber Mesh) over all or part of the surface.

Excellent adhering properties, thus KEIM Universalputz-fine is very suitable for machine application. KEIM Universalputz may be textured or felt-floated. Not suitable for plasto-elastic and saponifiable substrates.

3. Product properties

Binder based on white lime cement with calcite aggregate together with light aggregate and fiber reinforcement.

- Grain size: 0 - 1.3 mm
- Bulk weight: 1.35 g/cm³

Material characteristics to DIN EN 998-1:

- Compressive strength: > 3.5 - 7.5 N/mm², CS III
- Water vapor permeability µ: approx. 9
- Water absorption: W2
- Thermal conductivity:
  \[ \lambda_{10,\text{dry}} \leq \begin{cases} 
  0.83 \text{ W/(mK)} & \text{for } P = 50\% \\
  0.93 \text{ W/(mK)} & \text{for } P = 90\% 
\end{cases} \]

(*tabular values to EN 1745)

4. Application instructions

Initial preparation

Test load capacity of substrate. Remove any loose areas of renders or old existing coatings mechanically or by high-pressure water jetting.

Application

Highly absorbent substrate must be pre-wetted. Water requirement:: approx. 240 ml (8.1 fl oz) per kg (corresponding to 6 l (1.6 gal) per 25 kg sack); mix with hand mixer or render mixing machine. Layer thickness applied should range from: min. 4 mm to max. 10 mm.

If embedding KEIM Glass Fiber Mesh, apply 4 mm of KEIM Universalputz, press mesh in (mesh must overlap by 10 cm). The first layer must dry until the following day (18 - 24 hours). Then apply an additional 3 mm of KEIM Universalputz the following day for a total min. layer thickness of 6 mm.

If KEIM Universalputz is used as a finish render, textured or felt-floated. On a non-absorbent render substrate, the render must solidify completely before being felt-floated with an additional thin layer.
**TD** KEIM Universalputz (standard)

**Note:** Do not over mix material, as over mixing will cause a loss of strength. Material which has started to set cannot be remixed.

**Application conditions**
Ambient and substrate temperature must not fall below + 5°C (41°F) during the application and drying process. Do not apply in direct sunlight or onto sun-heated substrates. Protect surfaces from wind and rain during and after application.

**Post-treatment**
Protect the fresh layer of render from drying out too quickly and, if needed, keep moist by misting with water for up to 2 days after texturing or finishing with a felt float. Interior spaces must be heated with care, since too rapid heating may disrupt the hydraulic setting reactions.

**Drying times**
1 day per 1 mm of render thickness if an additional layer of render is to be applied. For painting or coating a setting time of 10 days is necessary.

**Finishing**
All KEIM render coating systems are suitable for exterior and interior use. KEIM Universalputz-fine can be over coated with paint after 10 days. Essential minimum layer thickness for coating with KEIM Purkristalat is 5 mm.

Preparatory work required on exterior surfaces:
Remove lime sinter layers with KEIM Lime Remover (Ätzflussigkeit), diluted 1:3 with water, then rinse off with clean water from bottom to top.

**Consumption**
Approx. 1.1 kg/m² (10.8 sq ft) per 1 mm layer thickness.

The stated consumption values are for guidance only and depend on the nature of the substrate and the application method. Exact consumption values can only be determined by applying trial areas on the structure to be plastered.

**Cleaning of tools**
Clean with water immediately after use.

**5. Packaging**
25 kg sack, 36 sacks/skid.

**6. Storage**
Storage life: 12 months in original packaging under dry, frost-free conditions. Protect from moisture.

**7. Hazardous substances ordinance class**

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
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<tbody>
<tr>
<td>Xi</td>
<td>Irritant,</td>
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<tr>
<td>R 38:</td>
<td>Irritating to the skin.</td>
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<tr>
<td>R 41:</td>
<td>Risk of serious damage to the eyes.</td>
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<tr>
<td>S 2:</td>
<td>Keep out of reach of children.</td>
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<tr>
<td>S 22:</td>
<td>Do not breathe dust.</td>
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<tr>
<td>S24/25:</td>
<td>Avoid contact with skin and eyes.</td>
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<tr>
<td>S 26:</td>
<td>In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</td>
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<tr>
<td>S 37/39:</td>
<td>Wear suitable gloves and eye/face protection.</td>
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</tbody>
</table>
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
Any residues must be emptied out of sacks before recycling.

10. Safety instructions

In combination with water, lime and cement have an alkaline action. Provide appropriate protection for surfaces which are not to be treated, in particular glass, ceramics, natural stone, etc. Protect the eyes and skin from splashes. When using, do not eat or drink. Keep out of reach of children.

Product code: ZP 1

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.