

# akurit KHF-it.

Lime fine adhesive plaster

## **fine-grained lime adhesive plaster**

Lightweight plaster mortar LW CS III acc. EN 998-1

- with defined hardening characteristics
- safe alternative to gypsum plaster on concrete surfaces with increased residual moisture



## Applications

- as base plaster and finish coat
- thin-layer bond plaster for felt-float finishing on concrete
- no bonding bridge required on concrete surfaces
- for interior and external use

## Properties

- with accelerated curing behaviour
- uniform and attractive felt finish
- smooth and easy to process
- high yield
- behaviour in fire A1 - non-flammable

## Composition

- Grey cement in accordance with DIN EN 197-1
- calcium hydroxide in accordance with DIN EN 459-1
- finely fractionated, crushed limestone sand
- Mineral lightweight aggregates
- additives for improving bonding to the subsurface
- additives for regulating and improving workability and product properties

## Substrate

### **Suitable substrates**

- Concrete surfaces with increased residual moisture > 3 M.-%
- normal concrete
- Lightweight concrete
- Not suitable for subsurfaces containing gypsum

### **Condition / Testing**

- For assessing the plaster primer, VOB/C DIN 18350, Section 3, DIN EN 13914-1/13914-2 as well as the plaster standard DIN 18550-1/18550-2 should be observed.
- The subsurface must be even, dry, clean, load-bearing, absorbent and free of adhesion impairing residues, efflorescence and sinter skins.
- There must be no visible water film, water droplets or condensation (condensed moisture) on the surface of the substrate.

### **Pretreatment**

- Separating surface layers, such as cement films, formwork release oil or sinter skins must be removed using suitable methods.
- Recesses and cavities in the substrate must be levelled off beforehand.
- Always wait until the specified standing times have elapsed before applying subsequent layers.
- Note: Organic primers or bonding bridges must not be used on damp concrete.

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## Processing

### Temperature

- Do not process or allow to dry out at air, material or substrate temperatures below +5°C, or if there is a risk of exposure to night frost, or at temperatures above +30°C, or in direct sunlight, or on heated up surfaces, and/or in windy conditions.

### Mixing / Preparing / Processing

- Suitable for processing by hand, or with conventional plastering machines.
- Before starting work, containers, plastering machine and hoses must be thoroughly cleaned, otherwise the curing behaviour may be negatively affected.
- When mixing manually, first place the quantity of water specified in the technical data in a clean container and then sprinkle in dry mortar. Use clean tap water.
- Use a suitable agitator to mix the material until smooth and free of lumps. Leave to develop for a moment and then mix again.
- Do not mix with other products and/or other substances.
- When machine-processing: Adjust the amount of water accordingly to obtain a workable consistency.
- Keep work interruptions to a maximum duration of 15 to 20 minutes.
- If the work is interrupted for longer periods, then clean the plastering machine and mortar hoses.

### Applying / Processing / Assembling

- Apply material evenly in 5 to 10 mm per layer and disperse without further waiting time.
- On small, locally limited areas, application thicknesses up to a maximum of 15 mm are possible.
- Wait until sufficiently hardened before scraping or dressing.
- Continuing the work too early can lead to disturbing the structure and the adhesion to the substrate.
- Level off any blisters in the plaster surface by trimming with the straightedge or the lattice plane.
- For felted surfaces, at the latest on the following day, cover with the same material in the grain thickness and felt off.

### Processing time

- Approx. 20 minutes at 20°C and 65% relative air humidity
- Mortar that has already started to harden must never be thinned down with additional water, remixed or applied.

### Drying / Hardening

- To prevent the plaster from drying out too quickly at higher temperatures, the plastered area should be kept moist for at least three days.

### Subsequent coating / workability

- Suitable as a base plaster beneath ceramic tiles and panels with a weight per unit area of up to 50 kg/m<sup>2</sup>, including adhesive.
- Smoothed surfaces can be produced after sufficient hardening with AKURIT it smoothing filler or AKURIT KGL lime smoothing plaster.
- All types of mineral finishing plaster and organically bound plasters, such as silicate, silicon resin or emulsion plasters, may be applied as finish plaster.
- Lime, silicate, silicone resin and dispersion paints are suitable as a final coat.
- Note: If the product is used on concrete surfaces with a high residual moisture level, breathable surface coatings are to be used.

### Tool cleaning

- Clean all tools and equipment with water immediately after use.

### Notes

- Additional mechanical plaster bases or fastening systems are not necessary.
- When using on concrete surfaces with a high residual moisture level, breathable surface coatings are to be used.

## Packaging

- 20 kg/sack
- loose in silo

## Storage

- Store sacks appropriately and in dry conditions on pallets.
- If stored in its original packaging, the product will keep for at least 3 months from the date of manufacture.

## Quantity required / Yield

- consumption: approx. 5.3 kg/m<sup>2</sup> per 5 mm plaster thickness
- yield: app. 19 l fresh mortar per 20-kg-Bag
- yield: app. 950 l fresh mortar per t
- The quantity required depends on the substrate and method of application. Determine the exact quantities required by carrying out a trial on site.

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## Technical Data

<b>Product type</b>	Lightweight plaster mortar LW
<b>Category</b>	CS III
<b>Compressive strength</b>	approx. 6.0 N/mm <sup>2</sup>
<b>Grain</b>	0 – 1 mm
<b>Water requirement</b>	approx. 6.5 l per 20 kg/sack
<b>Set mortar bulk density</b>	approx. 1.2 kg/dm <sup>3</sup>
<b>Fire behaviour</b>	A1 (non-flammable) in accordance with EN 13501
<b>Adhesive tensile strength</b>	≥ 0.08 N/mm <sup>2</sup>
<b>Capillary water absorption</b>	W <sub>c</sub> 2 according to EN 998-1
<b>Water vapour permeability μ</b>	5/20 (table value EN 1745)
<b>Thermal conductivity λ<sub>10,dry,mat.</sub> for P=50%</b>	≤ 0.33 W/(mK)
<b>Thermal conductivity λ<sub>10,dry,mat.</sub> for P=90%</b>	≤ 0,36 W/(mK)

All data are average values that were determined under laboratory conditions according to relevant test standards and application tests. Deviations are possible under practical conditions.

## Safety and disposal instructions

### Safety

- This product produces an alkaline reaction when it comes into contact with moisture/water. Therefore ensure that skin and eyes are protected. If it should come into contact with the skin or eyes, rinse them thoroughly with water. See a doctor immediately if it comes into contact with the eyes.
- Follow further instructions in the safety data sheet.

### GISCODE

- ZP1 (products containing cement, low-chromate)

### Disposal

- Dispose of the material in accordance with the official regulations.
- Completely empty and recycle the packaging.
- Dispose of hardened product in accordance with the local regulations. Do not allow to enter the sewer system. Dispose of the hardened product in the same way as concrete waste and slurries. Waste code according to the Ordinance on the European Waste Catalogue depending on the origin: 17 01 01 (concrete) or 10 13 14 (concreteste and concrete slurries).

## General notes

This information sheet provides only general recommendations. Should you have any queries relating to a specific application, please contact our technical sales advisor or call our hotline: +49 541 601-601. Since natural raw materials are used, the values and properties described may vary somewhat. All of the details given are based on our current knowledge and experience and on the assumption that the materials are professionally applied and used for their normal purpose. All of the details are non-binding and do not release users from their duty to undertake their own tests to ensure suitability for the intended application. Due to the effects of different weather, processing and construction site conditions, no guarantee can be given for the general validity of all details. We reserve the right to make changes as a result of further development of the product and applications engineering. The general rules for construction engineering, the valid standards and guidelines, and the technical working guidelines must be observed. The publication of this technical data sheet renders all previous editions of this data sheet void. Please obtain the latest information from our website.