

# akurit UNI-FS

Universal fibre finishing plaster

## fibre-reinforced finishing and reinforcement plaster

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

- system product on WDP
- colour: natural white



## Applications

- reinforcement plaster with mesh insert
  - for facade renovation
  - on all normal and lightweight plasters
- reinforcement plaster on WDP insulating plaster
- thin-layer bond plaster for felt-float finishing on concrete
- textured finish coat on base plaster and as second layer when using as reinforcement plaster
- for reinforcing and bonding of base insulation panels
- not suitable for thermal insulation composite systems
- for external and interior use

## Properties

- fibre-reinforced
- high yield
- excellent adhesive properties
- water-repellent
- very easy to apply
- mineral
- colour: natural white
- Fire behaviour A2-s1, d0 according to EN 13501-1

## Composition

- white cement in accordance with DIN EN 197-1
- calcium hydroxide in accordance with DIN EN 459-1
- mineral aggregates
- alkali-resistant fibres
- additives for improving bonding to the subsurface
- additives for regulating and improving workability and product properties

## Substrate

### Suitable substrates

- old load-bearing plaster surfaces
- Lime, lime cement or cement base plasters
- Lightweight plasters with a compressive strength  $> 1.5 \text{ N/mm}^2$
- normal concrete
- light and highly heat-insulating substrates, e.g. lightweight bricks, aerated concrete and lightweight concrete

### 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.
- The load-bearing capacity, particularly of old plaster and old paintwork, must be properly tested (e.g. by carrying out a pull-out test or cross-cut test).

### Pretreatment

- Non-load-bearing coatings must be completely removed.

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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.
- When machine-processing: Adjust the amount of water accordingly to obtain a workable consistency.
- 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 rest for a moment and then mix again, adding more water, if required, to achieve the right consistency for applying.
- Do not mix with other products and/or other substances.

### Applying / Processing / Assembling

- Reinforcement plaster with mesh insert for facade renovation: Apply material in a plaster thickness of 3 - 10 mm, locally limited on individual areas 15 mm. Inlay reinforcement mesh. Rest time before adding further layers: at least 1 day per mm of plaster thickness.
- Reinforcement plaster with a mesh inlay on base plaster: Apply the material with a plaster thickness of 3 to 8 mm. Embed a reinforcement mesh. Leave for at least 7 days before applying any further coatings.
- Insulating plaster filler: Apply material over the whole area in a thickness of at least 8 mm onto the prepared insulating plaster surface. Insert AKURIT GM reinforcement mesh, medium. Embed reinforcement arrows on all corners and masonry openings beforehand. Rest time before adding further layers at least 1 day per mm of plaster thickness. The total plaster thickness incl. finish coat must be at least 10 - 12 mm for adequate weather protection.
- Thin-layer bond plaster: Apply the material with a plaster thickness of 3 to 5 mm, strike off evenly and then felt finish after it has hardened sufficiently.
- Plaster bonding bridge: Apply the material with a broad toothed trowel, e.g. 8 x 8 mm. The mortar in the grooves must be at least 2 mm thick. The subsequent plaster layer can be applied as soon as the bonding bridge has hardened sufficiently. Take care to avoid the formation of a "sinter skin" and to roughen the bonding bridge surface (with a coarse broom, for example) after it has started to harden. Alternatively, you can work "wet in wet".
- Bonding insulation panels: Apply the adhesive over the entire surface using the combed bed method or with a line of adhesive around the panel edges and daubs across the surface. (Adhesive coverage: at least 40%). Further work on the bonded insulation panels can be carried out after sufficient standing time has elapsed and the mortar has hardened. After 2 days to 3 days at the earliest.
- Reinforcement of insulation panels (not ETICS): Apply material with appropriate tool in a layer of 3 - 6 mm. Inlay reinforcement mesh. Wait at least one week before adding further layers.
- Inlaying reinforcement mesh: Pull the reinforcement mesh tight and inlay crease-free in the top third of the plaster layer. The individual fabric strips must overlap one another by approx. 10 cm and be covered with reinforcement mortar.

### Processing time

- approx. 2 hours
- The stated times apply for a temperature of +20°C and relative humidity of 65%.
- Mortar that has already started to harden must never be thinned down with additional water, remixed or applied.

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## Drying / Hardening

- Protect from drying out too quickly as a result of sun, wind or draughts.
- The drying and hardening process will be slowed down by low temperatures and/or high air humidity and accelerated by high temperatures and/or low air humidity.

## Subsequent coating / workability

- All types of mineral finishing plaster and organically bound plasters, such as silicate, silicon resin or emulsion plasters, may be applied as finish plaster.
- A coat of silicate, silicone resin or emulsion paint is possible as a base and final coat.
- Only use outdoors in combination with a water-repellent final coat.

## Tool cleaning

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

## Notes

- Carefully cover adjacent surfaces and components (e.g. windows, window sills, etc.). Wash off contamination immediately with water.
- In interior rooms, start up the heating system slowly to increase the room temperature gradually.

## Packaging

- 25 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 12 months from the date of manufacture.

## Quantity required / Yield

- consumption: approx. 5.5 kg/m<sup>2</sup> per 5 mm plaster thickness
- yield: app. 23 l fresh mortar per 25-kg-Bag
- yield: app. 900 l fresh mortar per t

## Technical Data

<b>Product type</b>	Lightweight plaster mortar LW
<b>Category</b>	CS II
<b>Grain</b>	0 – 1 mm
<b>Water requirement</b>	approx. 8.0 l per 25 kg/sack
<b>Set mortar bulk density</b>	approx. 1.1 kg/dm <sup>3</sup>
<b>Compressive strength</b>	1.5 - 5 N/mm <sup>2</sup>
<b>Fire behaviour</b>	A2
<b>Adhesive tensile strength</b>	≥ 0.3 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 (concretewaste and concrete slurries).

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## 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.