

# akurit MEP-FLS

Lime cement fibre lightweight plaster rapid

## single-layer lightweight plaster type II, fibre-reinforced

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

- very high yield
- with accelerated (abbreviated) curing
- water-repellent
- with organic lightweight aggregate (EPS)



## Applications

- especially suitable for use on high-performance thermally-insulating substrates with low bulk density
- as base plaster for the acceptance of finish coats, coatings or paint
- as interior plaster for wet rooms, staircases, basements, bathrooms, garages and the like
- for external and interior use

## Properties

- vapour-permeable
- behaviour in fire A1 - non-flammable
- excellent stability under load
- very easy to apply
- low-stress hardening characteristics
- high degree of resistance to the formation of shrinkage cracks

## Composition

- Grey cement in accordance with DIN EN 197-1
- calcium hydroxide in accordance with DIN EN 459-1
- finely fractionated, crushed limestone sand
- organic lightweight aggregates (EPS)
- alkali-resistant fibres
- additives for regulating and improving workability and product properties

## Substrate

### Suitable substrates

- vertically perforated bricks
- Lightweight vertical coring bricks, unfilled or with insulating material filling
- Aerated concrete
- Lightweight concrete, pumice and expanded clay
- sand-lime bricks
- normal concrete

### Condition / Testing

- The subsurface must be even, dry, clean, load-bearing, absorbent and free of adhesion impairing residues, efflorescence and sinter skins.
- 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.
- Existing base plaster layers must have been roughened and have completely hardened.

### Pretreatment

- On smooth or poorly absorbent masonry, a spray application of akurit ZVP cementitious pre-spray mortar is required.
- In the case of concrete substrates, apply a mineral bonding bridge, such as akurit UNI-H or akurit MH grey, using the combed bed method.
- On highly absorbent plaster primer, apply fresh mortar wet-on-wet in 2 layers or, if necessary, pre-treat with akurit GAB absorption barrier.
- Always wait until the specified standing times have elapsed before applying subsequent layers.

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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.
- 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.
- 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

- Apply the material in layers 15 to 30 mm thick.
- On small, locally restricted areas, the maximum permissible thickness of the applied layer is 50 mm.
- On highly or varyingly absorbent substrates, apply two layers, wet in wet.
- Then smooth off the fresh plaster area with suitable tools, e.g. a floating rule, to make it perpendicular and flush.
- Always thoroughly roughen the entire surface of the intermediate layers once the surface has hardened sufficiently. Use a suitable tool such as a lattice plane.
- If the plaster is applied in layers, then allow an intermediate standing time of at least 1/2 day per mm of plaster thickness before applying the next layer.

### 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.
- If the weather conditions are unfavourable (e.g. driving rain, frost, strong sunlight and/or winds), then suitable protection measures must be taken, particularly in the case of freshly coated surfaces.
- Before applying one of our finish plasters, you must wait 1/2 day per mm of total plaster thickness.

### 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.
- In the case of indoor surfaces, a suitable coating may be applied.
- Not suitable for subsequent coating with solvent-based materials.
- Suitable as a base plaster beneath ceramic tiles and panels with a weight per unit area of up to 25 kg/m<sup>2</sup>, including adhesive.
- Additional measures for pretreating the substrate may be necessary, depending on the subsequent coating.

### Tool cleaning

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

### Notes

- On wall-base surfaces, use a wall-base plaster such as akurit SLP or akurit SLP-it.
- Carefully cover adjacent surfaces and components (e.g. windows, window sills, etc.). Wash off contamination immediately with water.
- If tiles are to be laid on the surface, then strike off the plaster surface evenly and cleanly using a rod/plasterer's float. Do not smooth or felt the surface of the plaster.
- Separate any neighbouring components from the plastered area.
- Any sintered skin on the surface must be removed after sufficient curing.
- In order to create perpendicular and flush corners and joints for the respective application area, use suitable plaster profiles. When selecting plaster bases and profiles, please observe DIN EN 13658 as well as the data sheet "Data sheet for planning and application of metallic plaster profiles outdoors and indoors", issued by the European trade association for plaster profile manufacturers.

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## 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 3 months from the date of manufacture.

## Quantity required / Yield

- consumption: approx. 8.5 kg/m<sup>2</sup> per 10 mm plaster thickness
- yield: app. 29 l fresh mortar per 25-kg-Bag
- yield: app. 1150 l fresh mortar per t

## Technical Data

<b>Product type</b>	Lightweight plaster mortar LW
<b>Category</b>	CS II
<b>Compressive strength</b>	1.5 - 5 N/mm <sup>2</sup>
<b>Grain</b>	0 – 1,2 mm
<b>Water requirement</b>	approx. 9,0 l per 25 kg/sack
<b>Set mortar bulk density</b>	approx. 0.9 kg/dm <sup>3</sup>
<b>Dynamic Young's modulus (E)</b>	2000 N/mm <sup>2</sup>
<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>	≤ 0.39 W/(mK)
<b>Thermal conductivity λ<sub>10,dry,mat.</sub> for P=90%</b>	≤ 0,43 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.