Finishing and adhesive mortar

white lightweight adhesive and reinforcement mortar

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

- · with organic lightweight aggregate (EPS)
- · colour: natural white



Applications

- · for AKURIT thermal insulation systems
- · reinforcement plaster on WDP insulating plaster
- · reinforcement plaster for application on façades
- for gluing and attaching EPS, mineral wool and polyurethane insulation boards
- as thin-layer base plaster on cellular concrete according to Xella test guideline
- as thin-layer base plaster on GisoPlan Therm masonry

Properties

- · smooth and easy to process
- · tempered for better bonding
- · water-repellent
- · water-vapour permeable
- · colour: natural white
- very high yield

Composition

- · white cement in accordance with DIN EN 197-1
- calcium hydroxide in accordance with DIN EN 459-1
- mineral aggregates
- · organic lightweight aggregates (EPS)
- additives for regulating and improving workability and product properties

Substrate

Suitable substrates

- Masonry
- · normal concrete
- · Mineral and organically bound plasters
- · Intact, load-bearing wall or façade paintwork
- · GisoPlan Therm masonry
- · Xella aerated concrete masonry

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.
- The load-bearing capacity, particularly of old plaster and old paintwork, must be properly tested (e.g. by carrying out a pullout 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.
- 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 develop for a moment and then mix again.
- · Maturing time: Approximately 5 minutes
- Do not mix with other products and/or other substances.

Applying / Processing / Assembling

- 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: Apply reinforcement mortar with suitable tools in layer thickness according to ETICS approval and insert reinforcement mesh. Before reworking again, observe a rest time of at least 7 days, depending on the weather conditions.
- 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.
- Applying on old plaster: Apply the material with a plaster layer 3 to 10 mm thick. Embed a reinforcement mesh, if required.
 Leave for at least one day per mm of plaster thickness before applying any further coatings.
- Reinforcement plaster on GisoPlan Therm masonry blocks: Apply material in an application thickness of 6 - 12 mm. Insert mesh. Rest time before adding further layers at least 1 day per mm of plaster thickness.
- 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 base plaster on Xella aerated concrete masonry:
 Apply material over the whole area in a thickness of at least 8 mm onto the prepared masonry. Insert AKURIT GM reinforcement mesh, medium. Rest time before reworking with AKURIT VARIOSTAR 2 mm at least 8 days.
- 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 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.



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Drying / Hardening

- 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.
- 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 thin-layer mineral finishing plaster may be applied as finish plaster, without priming the subsurface first.
- In the case of silicate, silicone resin and emulsion plasters, an undercoat of SCHWENK Primer is recommended.

Tool cleaning

 Clean all tools and equipment with water immediately after use.

Notes

- When used as reinforcement mortar on wall bases, a subsequent suitable wall-base coating must be applied.
- Take into consideration the respective system permissions when using the product in thermal insulation composite systems.

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 12 months from the date of manufacture.

Quantity required / Yield

- · consumption:
- approx. 3.5 kg/m² for adhering
- approx. 4.4 kg/m² per 5 mm plaster thickness to reinforcement
- yield: app. 23 I fresh mortar per 20-kg-Bag
- yield: app. 1150 l fresh mortar per t

Technical Data

Product type	Lightweight plaster mortar LW
Category	CS II
Grain	0 – 1 mm
Water requirement	approx. 5.5 l per 20 kg/sack
Set mortar bulk density	approx. 0,85 kg/dm³
Compressive strength	1.5 - 5 N/mm²
Fire behaviour	A2
Adhesive tensile strength	≥ 0.08 N/mm²
Capillary water absorption	W _c 2 according to EN 998-1
Water vapour permeability µ	5/20 (table value EN 1745)
Thermal conductivity $\lambda_{\rm 10,dry,mat.}$ for P=50%	≤ 0.25 W/(mK)
Thermal conductivity $\lambda_{\text{10,dry,mat.}}$ for P=90%	≤ 0,27 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)

Disposel

- 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

