KI 7

DATA SHEET

Fibre reinforced lime/cement base coat plaster with water-repellent properties, for exteriors and interiors

EN 998-1

COMPLIANT WITH EUROPEAN STANDARD EN 998-1 GP-CSII-W1

Interior/Exterior

Sack

Silo

Spray

Composition

KI 7 is a dry mortar made from Portland cement, lime, graded sands, water-repellent material, synthetic fibres and additives to improve workability and adhesion. The particular formulation of KI 7 makes it particularly suitable for exterior applications in that it has high water-repellent properties yet still maintains its permeability to water vapour. Furthermore shrinkage is reduced thanks to its fibres. The low internal absorption of water of the plaster considerably increases its durability, since water is the major carrier of deteriorating agents within any kind of material exposed to the outside.

Supply

- In bulk in silo
- Special bags with moisture protection from approx. 25kg

Use

KI 7 is used as a base coat plaster on bricks and honeycombed bricks, concrete blocks, rough concrete, expanded clay etc. For special underlays you need to follow the instructions of the supplier. KI 7 is indicated as the ideal external foundation for mineral-based wall coverings and for IP 10 finishing plaster available in 1 mm gradings.

The advantages of greater water resistance:

- Longer durability of the plaster
- Dry walls and consequently better heat insulation
- Greater dimensional stability and consequently lesser tendency for cracks to form
- Less rising damp due to capillary action

Substrate preparation

The wall must be free from dust dirt, salt deposits etc.. Any traces of oils, fats, waxes, etc. must be removed beforehand. Smooth concrete surfaces must be dry and previously treated with bonding agents such as SP 22.

Joints between different elements must be reinforced with special alkali-resistant fibreglass mesh; the mesh must not be attached directly to the masonry, but should be embedded in the surface area of the plaster. To obtain high quality plastering and avoid excessive consumption of material, the brickwork should be carried out with particular care; the joints between the bricks must be filled effectively, any holes or cracks in the wall must be sealed beforehand and door and window frames must not protrude more than a few millimetres. To ensure the walls are plumb, use corner guards or screeds on the corners and vertical guides on the walls.

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Partner KlimaHaus CasaClima®

Mixing

KI 7 is applied using plaster sprayers, such as FASSA, PFT, PUTZKNECHT, PUTZMEISTER, TURBOSOL and the like. It is applied in a single layer up to a thickness of 20-30 mm, by spraying from the bottom towards the top and then it is straightened with H floats or plaster knives with horizontal and vertical strokes to obtain an even surface. For greater thicknesses, the plaster must be applied in a series of layers, at least 1 day apart, always remembering to roughen the underlying layer. After mixing with water, the mortar must be applied within two hours. Surface work on the plaster (with a float or notched trowel etc.) can be carried out from 1.5 to 4 hours after application according to the ambient conditions and the type of surface.

For exteriors a plastic or wooden float should be used in order to obtain a uniform and compact surface, suitable for thick finishing wall coatings. When wall finishing is carried out using "Malta Fina", you need to significantly delay smoothing operations with a float due to the poor water absorbing properties of the plaster.

Warnings

- Product for professional use.
- Always consult the safety data sheet before use.
- The fresh render must be protected against frost and quick drying. As the hardening of the plaster depends on the hydraulic setting of the cement and the air setting of the lime, a temperature of +5°C is suggested as a minimum value for application and for obtaining proper hardening of the mortar.
- During the summer, on surfaces exposed to the sun, the plaster should be wetted for a few days after application.
- Application in strong winds can cause the formation of cracks and "burning" of the render. In these conditions suitable precautions should be adopted (protection of indoor spaces, application of the plaster in two layers, carefully floating the surface, etc.).
- The use in exteriors of rough finishes, such as wall coatings or IP 10, limits the formation of hairline cracks to a greater extent than smooth finishes such as "Malta Fina", etc..
- For application on particular substrates (wood-cement panels, mesh, certain types of insulating walls etc.) we cannot guarantee results with no cracks. Please contact our Technical Service for advice on the method for limiting such problems. Nevertheless, it is advisable to consult the instructions of the supplier of the substrate.
- For renovation works on different kinds of substrates and with different plaster thicknesses, please contact our Technical Department to choose the most suitable product cycle.
- Paint, coverings and wallpaper etc. must only be applied after the plaster has completely dried and cured.
- Aerate the rooms thoroughly after application until the mortar is completely dry, avoiding excessive changes in temperature in the rooms.

KI 7 it must be used in its original state without the addition of foreign materials.

Storage

Keep dry for a period not exceeding 12 months. Once the product has expired, it must be disposed of in accordance with current legislation.

Quality

KI 7 is subjected to accurate and constant checks in our laboratories. The raw materials used are rigorously selected and controlled.

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Technical Data

Specific gravity of the powder	approx. 1,400 kg/m³
Minimum thickness	10 mm
Granulometry	< 1.5 mm
Mixing water	22-24 %
Yield	approx. 12.8 kg/m² with 10 mm thickness
Density of hardened plaster	approx. 1,530 kg/m³
Compressive strength after 28 days	approx. 2.5 N/mm²
Modulus of elasticity after 28 days	approx. 3,000 N/mm²
Water vapour diffusion resistance factor (EN 1015-19)	μ ≤ 14 (measured value)
Capillary water absorption coefficient (EN 1015-18)	W1 c ≤ 0.40 kg/m²·min0.5
Thermal conductivity coefficient (EN 1745)	λ = 0.55 W/m·K (tabulated value)
Compliant with standard EN 998-1	GP-CSII-W1
The performance values listed above are obtained by mixing the product with 23% water in a controlled temperature and humidity environment (20±1°C and 60±5% RH)	

The above information refers to laboratory testing; it is possible that in practical applications on site these may differ considerably according to the conditions in which the material is applied. In any case the user must check that the product is suitable for the intended application, taking all responsibility for its use. Fassa reserves the right to make technical modifications without notice.

Technical specifications regarding the use of Fassa Bortolo products for structural or fire prevention applications will only be officially valid if provided by Fassa Bortolo's "Technical Service" and "Research, Development and Quality System". If necessary, contact Technical Service in your country of reference (IT: area.tecnica@fassabortolo.com, ES: asistencia.tecnica@fassabortolo.com, PT: assistencia.tecnica@fassabortolo.com, FR: bureau.technique@fassabortolo.fr, UK: technical.assistance@fassabortolo.com).

Please note that for the aforementioned products, the assessment is required by the appointed professional, in accordance with regulations in force.