

# Baumit Klima RK 39



- Product:** Factory prepared, cement-free, natural white dry powder lime mortar in accordance with EN 998-1. Universal lime based render for manual and machine application for external and internal use.
- Use:**
- Lime based rendering mortar for direct application onto all types of newly erected and existing standard masonry ( $\lambda \geq 0.14$  W/mK) in internal and external areas.
  - Suitable as a basecoat and plain finish topcoat in a two coat render system or as a basecoat to receive Baumit decorative topcoats, Baumit skimming plasters or tiles.
- Composition:** Sand, lime, hydraulic lime and hydraulic lime and additives to improve workability and adhesion.
- Properties:**
- A pure lime plaster which fulfils the physical and biological considerations within the built environment.
  - Moderate strength development of the lime binder produces a plaster coating free of stresses.
  - A healthier alternative to gypsum or cement based products.
  - Suitable for application in wet rooms.
  - Resistant to impact loading.
  - One material, from the basement to the roof.
- Technical Data:**
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| Designation:                                     | CS II (EN 998-1)   |
| Aggregate size:                                  | 0 – 3 mm   |
| Compression strength:                            | 1.5 – 5.0 N/mm <sup>2</sup>  |
| Thermal conductivity $\lambda, 10, \text{dry}$ : | $\leq 0.93$ W/mK (P = 90% tabulated)<br>$\leq 0.83$ W/mK (P = 50% tabulated)       |
| Water vapour diffusion resistance $\mu$ :        | ca. 10   |
| Capillary water absorption:                      | W 2 (EN 998-1)   |
| Water requirement:                               | ca. 10 - 11 l/35 kg sack   |
| Yield:   | ca. 1.7 m <sup>2</sup> /15 mm thickness  |
| Consumption:                                     | ca. 13 kg/m <sup>2</sup> /10 mm thickness  |
| TVOC 3d:   | < 300 $\mu\text{g}/\text{m}^3$   |
| Formaldehyde 3d:                                 | < 3 $\mu\text{g}/\text{m}^3$   |
| Minimum layer thickness:                         | 18 mm basecoat, 3 mm topcoat (external)<br>10 mm basecoat, 3 mm topcoat (internal) |
| Maximum layer thickness:                         | 20mm per coat  |
- Health and Safety:** A Material Safety Data Sheet is available on request.
- Storage:** Store in dry conditions and protected on pallets for up to 6 months.
- Quality Assurance:** Continual monitoring and inspection of the quality of all raw materials upon reception. The manufacturer has a TÜV tested and certified Quality Management System in accordance with the international standard EN ISO 9001 and a TÜV tested and certified Environmental Management System in accordance with the international standard EN ISO 14001.
- Packaging:** 35 kg sack, 1 pallet = 36 bags = 1260 kg



Substrate:

- Substrates must be sound, clean, dry, free from frost, dust efflorescence and not water repellent.
- Prepare smooth concrete or very low suction surfaces with a suitable Baunit contact mortar (e.g. Baunit HM 50).
- Prepare mixed masonry substrates and natural stone with a spatterdash coating.
- High suction substrates should be dampened with water using a mist sprayer. Do not saturate aircrete substrates.
- Preparation and levelling coatings must be fully cured, well keyed and compatible with the plaster system.
- Refer to Baunit technical support for further advice regarding substrate preparation.

Application:

**Mixing:**

Baunit Klima RK 39 can be mixed with clean water in a tub to a lump free, creamy consistency with an electric hand mixer. Automated continuous horizontal mixers may also be used. For small areas the mixed render can be manually applied. For larger areas the fresh render can be fed into a mortar pump for spray application.

Alternatively, mortar mixing pumps provide an all-in-one mixing and spraying solution.

**Basecoat render:**

The render is applied onto the substrate to the required thickness in one or two passes (fresh-in-fresh) depending on the degree of suction from the substrate and ruled off with a straight edge, filling in undulations to produce a flat and even render layer.

On hardening the surface is consolidated with a wooden/plastic float or scraped with a grid float in tight circular motions in preparation for Baunit decorative topcoat renders. The surface may also be finished with a sponge float for receiving a topcoat of Baunit Klima RK 39 (3 mm thick) or Baunit Kalkputz Klima Glätt (lime skim finishing plaster). The drying times (1 day/mm thickness) must be observed.

A maximum render thickness of 20 mm may be applied in a single application. Where necessary, greater thicknesses must be built up in multiple coats of at least 10 mm in thickness. Upon setting the surface of each additional coat is horizontally keyed with a plasterers comb to receive the following coat. Drying times between each coat (1 day/mm thickness) must be observed.

**Topcoat render:**

Baunit Klima RK 39 is applied on to the basecoat and smoothed out flat with a trowel or spatula to a thickness of 3 mm. Shortly afterwards the surface is lightly rubbed over with a fine sponge float in tight circular motions to produce a fine, plain finish. A paint finish is required for this topcoat render application.

The Baunit decorative topcoat renders are also suitable for application onto Baunit Klima RK 39. Refer to the relevant Product Data Sheets.

**Reinforcement coat:**

An additional reinforcement coat of Baunit contact mortar with embedded Baunit StarTex reinforcing mesh to a thickness of 3 - 5 mm applied over the cured Baunit Klima RK 39 basecoat render is recommended in the following circumstances:

- The substrate is comprised of mixed masonry or wood wool boards.
- The render system will be exposed to severe or very severe weather conditions.

Notes and General Information:

The air, material and background temperature must be above +5° C during application and curing. Where rapid dehydration occurs dampen the finished work at regular intervals with a water mist sprayer. High air humidity and low temperatures can prolong drying times considerably. Protect fresh plaster from direct sunlight. Protect other materials such as glass, ceramics or metal etc from contamination with appropriate coverings.

Baunit Klima RK 38 is not suitable as a basecoat for receiving tiles due to its low strength < 2 Nmm<sup>2</sup>.

Testing for TVOC and Formaldehyde emissions is carried out by the eco-Institut.

Our recommendations for applications which we give to support the purchasers/handlers from our experience, corresponds to current science and practice. The advice is non-binding, and forms no contractual, legal relationship and no additional obligations in the purchase contract. The advice does not release the purchaser from examining our products for their suitability for their foreseen uses. The general rules of construction equipment must be adhered to. We reserve the right to make changes which serve to provide technical progress and improve the product or its use. When such technical information appears, earlier information is no longer valid. You can find the most current information on our Internet pages. Only our current sales and supply conditions as well as provisions for the placement and use of our silos and mixing facilities apply for all business cases.