BAUWER

IMPROVE YOUR HOME

INSULATION RENDER, PLASTER, SCREED

BAUWER products are CE marked and conform to the standards EN 998 – 1:2010

METHOD STATEMENT

BAUWER LIME, External and Internal application

Eco-friendly thermal, acoustic and dehumidifying Render

PRODUCT DESCRIPTION: Bauwer Lime is a highly breathable ready to mix thermal insulation render for both internal & external use. It's based on the naturally occurring volcanic glass perlite. The binding ingredient is lime, which has a bactericidal and fungicidal effect. It is designed as a cement free solution for the insulation of solid stone and brick walls of traditionally built breathable or vapour permeable homes.

Bauwer Lime is used for thermal insulation, sound-absorption & fire protection. Bauwer Lime is light weight and highly breathable, which prevents condensation as well as protects the walls from fungus and mould growth. Thanks to the open-pore structure circulation draws air through the plaster channels, cleaning it from biological contaminants.

BAUWER LIME insulation render is used for:

- External and internal thermal insulation of masonry walls;
- Dehumidification thanks to breathability;
- Thermal insulation of inner and outer slopes;
- Formation of a sound absorbing layer on wall structures.

TECHNICAL DATA

Fire Classification	A1
Recommended layer thickness	15 - 50 mm
Minimum layer thickness	10mm
Porosity	70%
Thermal conductivity coefficient	0.074 W/m•K
Volumetric weight	375 kg/m^3
Package weight	≈10.5 kg
Mortar yield 25l bag	1m2 @ 25mm thickness

CLIMATIC CONDITIONS: The air temperature for two days before and during finishing work must be maintained at least +10°C around the clock, with relative humidity up to 60%. For rapid drying of the plaster, it is necessary to ensure sufficient ventilation of the area.

SURFACE PRE-TREATMENT: The mortar mix can be applied to strong substrates made of brick, aerated concrete, ceramic blocks, stone and other building materials. The surface must be prepared as it is for the application of conventional cement plaster and must free of any loose material. It should be noted that the application of

mortar mixes must be carried out on damp surfaces; therefore, the surface should be thoroughly moistened 2-3 hours before application. If the surface absorbs moisture heavily (aerated concrete, ceramic brick, concrete, etc.), it needs to be moistened multiple times or treated with deep-penetrating primer, e.g. Ceresit CT17 (2). Dense concrete surfaces that do not absorb moisture are treated with the Ceresit CT19 primer (3). If there is a combination of several materials from which the wall is constructed, the transition area from one material to another (for example, from aerated block to concrete) should be covered with a metal or alkali-resistant mesh with a density of 330 g/m², which ensures reinforcement of the base. To increase adhesion, a cement spray called Bauwer Basis must be applied to all surfaces. It can be applied mechanically or manually using a notched trowel. The spray should cover sharp, horizontal, uneven irregularities up to 11 mm high at least 80% of the surface (the slopes, external and internal corners, door openings are covered with Bauwer Basis 100%).

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MIXING: The contents of 1 bag of dry mixture yield about 25 liters of thermal insulation render. For this, pour 8.5-9 liters of water into a clean container with a volume of at least 40 liters, then pour all the contents of the bag without residue. It is prohibited to use the contents of the bag in parts. To avoid the formation of lumps, it is important to pour the mixture into the water, not the other way around. Wait for 3-5 minutes for the lime and filler to absorb the water and then mix vigorously with an electric mixer until a homogeneous viscous mass is obtained. It is recommended to use mixers with a power of at least 1500 W and a rotation speed of over 500 rpm. The mixing attachment should have a diameter of at least 100 mm. The readiness of the solution mixture can be checked using a trowel – if the mixture clings to the trowel in the inverted position, the mixture is ready for use. No admixtures are permitted.

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APPLICATION METHOD: The mortar mixture is applied in several layers using standard plastering tools. The required thickness of each layer is ensured by the installation of guides on the Bauwer Lime mortar mixture (10, 11). The recommended application thickness in one pass is no more than 30 mm. After removing the guides, the places where they were located need to be filled with the Bauwer Lime mortar mixture, after dusting off and moistening the grooves formed after the dismantling of the guides. If the consistency of the

mixture changes during work with the material, it is sufficient to mix the mortar mixture again with an electric mixer without adding water.

It is possible to use plastering machines PFT G4, PFT G5, Kaleta 4, Kaleta 5 for mechanised application of Bauwer Lime. Water consumption for screw pumps with a productivity of 20-22 l/min (D5-1.5, D7-2.5) is 150-200 l/hour, while for 30-35 l/min (D7-1.5, D6-2.5) it is 300-350 l/hour. Water consumption should be determined experimentally directly at the construction site. It is important that before starting the plastering machine, the hose for supplying the mortar mixture is pre-moistened with water.


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LEVELING THE SURFACE: The applied mortar mixture is levelled using guides with zigzag movements of the levelling rule (12). The mixture that remains on the working surface of the rule is removed with a trowel and applied to the unfilled areas, then levelled again. Unevenness at the corners, both external and internal, is levelled with a corner trowel (13). After the applied mortar mixture begins to set, when it does not squeeze out, any protruding unevenness is cut off with a trapezoidal rule. The plaster must be firmly bonded to the entire surface of the base and not peel off from it. This is checked by tapping the set layer. If weak spots are found, they should be replaced with a new mortar mixture.

IMPORTANT INFORMATION: To avoid micro-cracks on vertical surfaces of the mortar, they need to be reinforced and levelled using a fine lime putty (14) with alkali-resistant fiberglass mesh (mesh size of the alkali-resistant fiberglass mesh is 5x5 mm with a density of no less than 125 g/m²) (15) or by applying fiberglass mat as a reinforcing layer. As an example of finishing coatings for the thermal insulation mixture Bauwer Lime, we recommend considering the Polimin Ecoshtuk range (16) or similar. It is necessary to avoid contact of the mortar mixture with the eyes or skin. It is advisable to work in rubber gloves. In case of contact of the mortar mixture with the eyes or skin, they should be rinsed with water.

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STORAGE CONDITIONS: Dry building mixture Bauwer Lime should be stored in their original sealed packaging. The packaging should be protected from moisture and direct sunlight. The warranty shelf life is 9 months from the date of manufacture, which is indicated on the packaging. After the expiration date, the product should be disposed of in accordance with environmental standards. In case of using the product after the expiration date, the manufacturer does not guarantee the preservation of the quality and quantity indicators of the product and its safety. The acceptance of claims from consumers is carried out by the manufacturer of the product.