



INSULATION RENDER, PLASTER, SCREED



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

METHOD STATEMENT

BAUWER STANDARD, Internal application

Eco-friendly thermal, acoustic and dehumidifying Render

PRODUCT DESCRIPTION: Natural eco-friendly BAUWER Standard is an innovative high performance ready to mix thermal insulation plaster for internal use. It's based on cement, lime and naturally occurring volcanic glass called Perlite. It's used for thermal insulation, sound-absorbing as well as fire protection. Along with the insulating and sound absorbent properties, BAUWER Standard is light weight and breathable, which prevents condensation as well as protects the walls from fungus and mould growth.

BAUWER STANDARD insulation render is used for:

In addition to levelling uneven walls you will get the following advantages:

- internal thermal walls insulation;
- dehumidification thanks to breathability;
- thermal insulation of inner and outer slopes;
- formation of a sound absorbing layer on wall structure;
- formation of acoustic insulation layer between floor joists;
- thermal insulation of roofs and floors.

TECHNICAL DATA

Yield of mortar from 1 bag.....	25L
Spread rate.....	1bag will cover 1m ² at 25 mm thickness
Bag weight.....	9,00kg
Pot life.....	up to 4 hours
Density of dry material.....	320 kg/m ³
Perlite (basic filler) thermal conductivity.....	0,034W/(m·K)
Thermal conductivity in dry condition.....	0,081 W/(m·K)
Average sound absorption coefficient at frequency of 0.8-8 kHz.....	0.72-0.77
Vapour diffusion.....	4.8 +/- 1.5
Bond strength.....	0.45N/mm ²
Compressive strength.....	2.19 N/mm ²
Declared strength value.....	after 28 days

CLIMATIC CONDITIONS: During preparation and application of the mortar mix, and within further 24 hours, the temperature of the substrate and ambient air should not fall below +5 °C. Do not apply the mortar mix to the sun heated surface. When possible, protection must be given to the mortar against direct exposure to water and sunlight within the first 24 hours after the application.

SURFACE PRE-TREATMENT: The mortar mix can be applied to sound substrates of brick, concrete, ceramic blocks and other building materials. The surface must be prepared in the same manner as it is prepared for traditional cement plaster application: it should be clean and free from any dust, grease or loose materials, paints should be removed before BAUWER application.

It is critical that the Bauwer mortar should be applied to a pre-wetted surface, which is why the surface has to be well moistened 2-3 hours before application of the mortar. If the surface has high water absorption capacity (aerated concrete, ceramic bricks, dry cement, etc.), it is important to wet it several times or apply a deep penetration primer. To increase the bond strength, it is recommended to cover the surface of a substrate with the rough scratch coat (cement mortar for increasing adhesive qualities). The scratch coat is either mechanically sprayed using a spraying machine or applied manually with a besom or notched trowel. Not less than 50-60% of the surface should be covered with thickness 8-10mm, especially for smooth surface substrates, like concrete or applications with several layers of Bauwer Standard.

MIXING: One bag of dry mortar mix yields nearly 25 litres of the thermal and acoustic insulation mortar. To prepare the mortar you need a clean tub of at least 30 litres capacity. Pour 11-12 litres of water into the tub, empty the content of the bag into it. It is forbidden to use the content of the bag in parts. Mix the mortar intensively with an electric mixing drill until a homogeneous binding mixture is obtained. It is permitted to use a mortar mixing machine, however further re-mixing of the mass with an electric mixing drill is obligatory. The content of lightweight fillers in the composition of the BAUWER STANDARD mortar mix is considerable, which increases its preparation time in comparison with conventional cement mixes.

After the first mixing it is recommended to increase the mixing time and intensity. Only after that, in case of need, you can add a small amount of water and re-mix the mortar. Avoid adding too much water to yield over 27-28 litres of the mortar mix as this will weaken the mix and affect the mechanical properties of the thermal insulation mortar.

When applied over vertical surface the mortar consistency should not be liquid or flowing. To test for readiness, pick up a small amount of mortar with a trowel, then turn the trowel upside down. If the mortar is of a proper consistency, it will adhere to the blade of the trowel. No admixtures are permitted.

APPLICATION METHOD:

The mortar mix is applied in several coats using standard plastering tools. The required thickness is ensured by the use of guides on the BAUWER STANDARD mortar layer. The recommended thickness of BAUWER STANDARD mortar in one application should not exceed 40-50mm. Every layer applied thereafter should be done at least after 4 hours.

1. With the guides in place, wet the application surface with water. It is critical that the Bauwer mortar should be applied to a pre-wetted surface, which is why the surface has to be well moistened 2-3 hours before application of the mortar

2. Apply the BAUWER to the wall by hand using a stainless steel trowel or using a plaster spraying machine, such as PFT G4, 5.

3. Once the area between the guides has been filled, run a straight edge up against the rail guides in an upward short left to right sawing motion to remove any excess BAUWER to achieve a flat even finish.

The surface of previous layer does not need to be well finished; a rougher surface will in fact provide a good key on which to apply the next layer.

4. Ensure the current layer surface is well wet before applying the next layer.

5. After a couple of hours, return to remove the wooden guides and fill in those areas with Bauwer STANDARD, wet the area if required.

If the mortar consistency changes during the application, just re-mix the mortar with an electric mixing drill without adding water.

6. Leave the final BAUWER STANDARD applied coat for the one day to strengthen.

7. It is recommended that applied BAUWER STANDARD insulation coat is reinforced and then levelled with BAUWER FINISH to provide a smooth finish.

8. Next day the surface of BAUWER STANDARD applied coat should be well moistened before BAUWER FINISH application.

9. Prepare BAUWER FINISH mortar: pour not less than 5 litres of water into a clean tub of at least 15 litres capacity; empty the content of the BAUWER FINISH bag into it. The mortar is mixed with a high speed electric mixing drill until a homogeneous mixture is obtained. The mortar mix should then be left for 3-5 minutes for maturing. If required, add a small amount of water and re-mix the mass.

10. Apply a layer of BAUWER FINISH to the surface area by hand using a stainless steel trowel with pressure in an upward motion.

13. Run a stainless steel trowel over the area to finish.

The BAUWER FINISH thickness should be 2.5 to 3.5mm.

14. When the BAUWER FINISH layer has dried out, uneven areas can be sanded to correct any surface irregularities

15. The external BAUWER FINISH can be painted or wall paper applied

CRITICAL INFORMATION: It is recommended to use an electric mixing drill (at least 1500 Watt and 500 rev/min). The mixing nozzle should be not less than 100 mm. The cement base of the BAUWER™ dry pre-blended powder during the shelf life subside down due to its heavy weight, and this is require thorough pre-mixing to achieve a homogeneous mixture. To reinforce and level a plastered surface, it is recommended to apply the thermal insulation BAUWER FINISH over it. The inner thermal insulation layer may be coated with gypsum putty to produce a smooth surface finish. Be advised that it is critical to coat the cement mortar surface well with deep penetration primer to separate the cement-based mortar layer and gypsum putty.

HEALTH AND SAFETY: The mix contains cement that in contact with water produces alkali. Avoid contacts of the mortar with the eyes or skin. Use rubber gloves when working with the material. In case of contact with eyes or skin, rinse or wash with plenty of water.

STORAGE TERM AND CONDITIONS: The BAUWER™ dry mortar mixes should be stored in their original unopened packaging. Bags should be protected from water penetration and direct sunlight. The guaranteed shelf life is 18 months from manufacture date indicated on the package.