



## **INSULATION RENDER, PLASTER, SCREED**



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

# METHOD STATEMENT

## BAUWER FLOOR SCREED

Eco-friendly thermal, acoustic and dehumidifying floor screed

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**PRODUCT DESCRIPTION:** Natural eco-friendly BAUWER FLOOR SCREED is an innovative high performance ready to mix thermal insulation floor screed for internal horizontal surfaces. BAUWER SCREED is supplied as dry pre-blended powder and it is based on cement, lime and naturally occurring volcanic glass called Perlite.

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

- formation of thermal insulation floor screeds;
- leveling the flooring underlayment with the thermal insulation effect;
- enhancing sound absorbing properties of the building constructions;
- formation of the thermal insulation layer in the under floor heating systems;
- thermal insulation of roofs and slabs.

### TECHNICAL DATA

Bag weight.....	12,00kg
Yield of mortar from 1 bag.....	35L
Pot life.....	2 hour
Density of dry material.....	405 kg/m <sup>3</sup>
Perlite (basic filler) thermal conductivity.....	0,034W/(m·K)
Thermal conductivity in dry condition.....	0,091 W/(m·K)
Index of shock noise reduction at thickness of 65 mm:	
- with concrete screeds:.....	18 dB
- with ceramic tiles:.....	14 dB
Bond strength.....	> 0.4 N/mm <sup>2</sup>
Compressive strength.....	>4.7N/mm <sup>2</sup>
Declared strength value.....	after 28 days
Filler fineness modulus.....	0.53
Water retention.....	> 70%
Mortar fluidity mark.....	P 12
Spread rate.....	1 bag will cover 1m <sup>2</sup> at 35 mm thickness.

The consumption rate is determined by an authorised contractor on the pre-treated surface under favourable working conditions. The actual consumption depends on the way the base layer is prepared and the contractor's experience.

**CLIMATIC CONDITIONS:** During the application of the mortar mix, and within further 72 hours, the temperature of the substrate and ambient air should not fall below +5 °C. Protection must be given to the thermal insulation layer against direct exposure to water until it has dried out completely. Do not apply the mortar mix to the sun heated surface.

**SURFACE PRE-TREATMENT:** The floor surface must be sound and prepared in the same manner as it is prepared for imbedding conventional cement screeds: dust, any foreign materials and paints should be removed. Be advised that the cement mortar mix should be applied to a pre-wetted surface, which is why the surface of the substrate should be well moistened a few hours before application of the mortar. If the surface has high water absorption capacity, it is recommended to apply a deep penetration primer to it. To increase the bond strength, all surfaces should be covered with the BAUWER rough scratch coat cement mortar. The mortar scratch coat is either sprayed using a spraying machine or applied manually with a besom or notched trowel, at least 16-24 hours before application of the mortar of screeds. Not less than 50-60% of the surface should be covered with a rough scratch coat of up to 8-11 mm thick.

**MIXING:** It is recommended to use an electric mixing drill (at least 1500 Watt and over 500 rev/min). The mixing nozzle should be not less than 100 mm. It is permitted to use a concrete mixing machine, however further re-mixing of the mass with an electric mixing drill is obligatory. The BAUWER mortar mix can be applied by hand using standard plastering tools as well as applied by plaster machines such as PFT G4, 5. The cement base of the BAUWER™ mortars during the shelf life subside down due to its heavy weight, and this is require thorough pre-mixing to achieve a homogeneous mixture. One 12 kg bag of dry mortar yields nearly 35 litres mortar. To prepare the mortar, you need a clean tub of at least 50 litres capacity. Pour **15-16** 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 to give it a homogeneous paste-like consistency. The content of lightweight fillers in the composition of the BAUWER SCREED mortar mix is considerable, which increases its preparation time in comparison with conventional cement mixes. It is not recommended to add water after the first mixing; at first you should increase the mixing time and intensity. Only after that, in case of need, you can add some additional water and re-mix the mortar. No admixtures are permitted.

**APPLICATION METHOD:** The screed mortar is applied and then leveled off on the pre-treated sound surface using standard plastering tools. The required thickness is ensured by the use of screed guides on the BAUWERSCREED mortar layer. The minimum thickness of the thermal and acoustic insulation mortar coating is 40 mm. The recommended thickness of a mortar layer in one application should not exceed 100 mm. If the mortar layer thickness in one application exceeds 100 mm, the drying shrinkage of up to 5% of the layer thickness can occur. Leave mortar coat to strengthen for 24-36 hours, then the screed guides can be removed, the holes left must be filled with the BAUWER SCREED mortar.

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

The under floor heating screed construction does not require additional reinforcement. The heating system is installed directly on the surface of the dry thermal insulation mortar.

To increase the performance characteristics, the surface, once dried (5-7days), is coated with cement-sand mortar layer of up to 40 mm thick or tiled with ceramic tiles.

**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.