

Technical sheet

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BT-Mal 111

Factory-prepared cement-lime
machine mortar for masonry



Field of application

It is intended for building load-bearing and partition walls made of cement blocks, bricks, stone, etc.

Characteristics

- High strength
- Simple installation
- Good workability

Composition

Cement, hydrated lime and fillers.

Technical data

Type of packaging	Paper bags
Quantity in one package	25 kg/unit
Unit per pallet	48 units/pallet
Aggregate condition	Tight
Color	Gray
Granulometric analysis (BAS EN 1015-1:2004)	0 - 4 mm
Bulk density (BAS EN 1015-10:2018)	~ 1500 kg/m ³
Volumetric mass in compacted state (BAS EN 1015-10:2018)	~ 2085 kg/m ³

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Bulk mass in the hardened state (BAS EN 1015-10:2018)	2327 kg/m ³
Adhesion to the concrete substrate (BAS EN 1015-12:2018)	≥ 0,9 MPa
Capillary water absorption (BAS EN 1015-18:2004)	0,0238 kg/m ² · min ^{0,5}
Compressive strength (28 days) (BAS EN 1015-11/A1:2008)	≥ 15 N/mm ² , M15 (BAS EN 998-2:2018)
Flexural strength (28 days) (BAS EN 1015-11/A1:2008)	5,56 N/mm ²
Chloride content (BAS EN 1015-17:2004)	<0,1 % (BAS EN 998-2:2018)
Air content (BAS EN 1015-7:2004)	5,8 %
Thermal conductivity (BAS EN 1745:2021)	0,83 W/mK
Water vapour permeability coefficient (μ)	15/35 (table value)
Initial shear bond strength (fvko)	0.2 N/mm ² (table value)
Potency time	120 min
Correction time	10 min
Consumption	The consumption value depends on the type and dimensions of the masonry blocks as well as the installation conditions and techniques.
Water requirement	14%
Layer thickness	min 10 mm; max 20mm
Reaction to fire	A1 (non-flammable)

Processing conditions

During processing and drying, the ambient temperature, i.e. the substrate must not be below +5 °C and above +30 °C.

Preparation of the substrate

Moisten dry, highly absorbent brick before installation. Frozen brick must not be installed.

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Preparation and installation of materials

Shake the contents of the bag BT-MAL 111 (25 Kg) in approximately 3.5 l of water and mix intensively in a concrete mixer until a homogeneous mass is achieved. The prepared mass must be installed within 2 hours.

Apply the mortar with a mason's trowel along the entire length of the wall while forming a depression in the middle of the layer. Place the brick on the layer of mortar and center it with a spirit level/vasservag and mason's string.

Cleaning tools

Immediately after finishing the work, hand tools should be washed with clean water. If the material hardens, it must be mechanically removed and disposed of according to regulations.

Handling of waste

Prevent uncontrolled discharge of material into sewers and waterways. Do not mix hardened residues with municipal waste, but dispose of them as construction waste in accordance with applicable local legal regulations.

Protection at work

Follow general instructions and regulations on occupational safety during construction work.

When performing work, wear adequate work clothes that ensure that the material does not come into contact with the skin.

Hand protection: protective impermeable gloves.

Eye protection: safety glasses with side protection.

For more information, see the product safety data sheet.

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Storage and transport conditions

Store in dry and well-ventilated areas. Keep bags tightly closed in a horizontal position, on pallets, protected from moisture. Store at a temperature of 0°C to 25°C. During transport, the product must be secured so that it does not move on the pallet and is not exposed to direct sunlight and moisture.

Expiry date

Originally sealed and stored as recommended, the product has a shelf life of at least 12 months.

Quality control

Testing and monitoring of product quality is carried out daily in the internal BT laboratory and periodically in authorized institutes and laboratories.

General notes

The technical instructions are based on our previous experience, with the aim of achieving optimal results when using the product. The information provided does not create any legal obligation, nor any additional obligations, and does not relieve the buyer of the responsibility to perform a prior test of the suitability of the material for a specific purpose.

If the contractor notices or suspects any functional or aesthetic defect in the product during the installation of the purchased material, he is obliged to stop further installation of the product in order to minimize any potential damage. He is also obliged to immediately file a complaint with the manufacturer, who will process the complaint as soon as possible.

Damage caused by incorrect product selection, improper use (failure to follow the instructions specified in this technical sheet) or unprofessional work cannot be the subject of a complaint.

This data sheet supersedes all previous editions. We reserve the right to any subsequent changes and additions.