

## BT – SPM Expanding mortar (fine) *sulphate resistant*

**Synthetic fibre reinforced, sulphate resistant repair mortar.  
Non-shrinking, fast setting repair mortar for cracks, voids and defects up to 80 mm depth.  
Very high initial and ultimate strength and stability.**

### Applications

BT – SPM Expanding mortar (fine) *sulphate resistant* is a repair mortar suitable for the filling of cracks, voids and defects in cement plaster, precast concrete elements, masonry etc. Due to its non-shrink setting properties and high resilience BT – SPM Expanding mortar (fine) *sulphate resistant* can be applied in layers of 5 to 80 mm thickness in a one-step process.

### Product characteristics

BT – SPM Expanding mortar (fine) *sulphate resistant* is a low expansion, synthetic fibre reinforced, cementitious dry mortar (mortar classification M30 according to DIN EN 998-2). The mortar is resilient, bonds well with the substrate and fully hardens, without any shrinkage, within a short period of time. Once set the mortar is highly durable and waterproof as well as resistant to the effects of frost and de-icing rock salt. Fire reaction classification A1 according to DIN 4102/EN 13501-0. The mortar is suitable for fire prevention and protection applications. Resistant to sulphate attack and similar degradation processes in waste water and sewage applications.

### Technical Data

Color:	grey
Maximum grain size:	approx. 1 mm
Processing temperature:	+5 to +30°C
Processing period (pot life):	approx. 35 minutes
Useful strength (at 20 °C):	after 12 hours
Ready for treatment (at 20 °C):	after approx. 2 days
Initial setting (at 20 °C):	after approx. 90 minutes
Mixing water requirements:	approx. 4.25 to 4.5 liters per 25 kg bag
Expansion / swelling (28 d):	approx. 0.1 mm/m
Flexural strength (28 d):	approx. 7 N/mm <sup>2</sup>
Compressive strength (28 d):	approx. 40 N/mm <sup>2</sup>

### Preparation of substrate

Mineral substrates must be absorbent, solid and stable. The substrate must be free from gypsum, bitumen, grease and oil, dust, paint and any potential separating layers. Cement paste layers, lime and primer coatings must be removed through milling or abrasive blasting. Substrate sections to be coated must be fully wetted or already be thoroughly moistened. The substrate should be wetted well in advance, so that the surface remains slightly damp at the time of treatment. Stagnant water must be removed from the substrate section to be coated.

**Instructions for use**

BT – SPM Expanding mortar (fine) *sulphate resistant* must be combined and mixed with water, using a suitable mixing device (forced action mixer or similar), until the mortar has achieved a plastic consistency. Following a curing interval of approx. 1 minute BT – SPM Expanding mortar (fine) *sulphate resistant* needs to be thoroughly mixed once more (without any further addition of water) until the required plastic consistency has been reached again.

By comparison: Properly mixed BT – SPM Expanding mortar (fine) *sulphate resistant* is slightly “drier” than masonry mortar. The pot life specified will only be reached through the repeated mixing procedure. BT – SPM Expanding mortar (fine) *sulphate resistant* can be applied using a trowel, spatula or suitable power tool. All specified values have been determined at a temperature of 20 °C. Stated periods of time will be reduced at higher temperatures and increase at lower temperature levels.

For the filling of cracks, voids and defects on vertical surfaces, requiring greater thickness or depth of layers, small quantities of BT – SPM Expanding mortar (fine) *sulphate resistant* should initially be applied and worked into the slightly damp substrate prior to the application and finishing of the ultimate thickness of layer required.

**Instructions for subsequent treatment**

Once applied to the substrate the BT – SPM Expanding mortar (fine) *sulphate resistant* should be protected against premature drying-out during the setting process. The relevant sections must be protected for a period of at least 24 hours against rain as well as intense penetration by sun and in particular against the potential effects of frost.

**Yield / coverage:** approx. 1.7 kg per liter of voids / cavities to be filled.

**Cleaning of tools**

Tools and soiled areas should be cleaned with water, immediately after use.

Once dried BT – SPM Expanding mortar (fine) *sulphate resistant* can be removed only mechanically.

**Storage:** to be stored in a cool and dry place. Shelf life approx. 12 months, if stored in the original packaging.

**Supply / trade units:** 25 kg bags / 42 bags per pallet

**Safety precautions**

The product contains cement – alkaline reaction with water. Possible irritations to eyes and skin. Please observe hazard warnings and safety instructions on packaging material and in safety data sheets.

**Notes**

Giscode ZP 1 / low-chromate according Regulation (EC) No 1907/2006 (REACH).

Substrates to which BT – SPM Expanding mortar (fine) *sulphate resistant* is to be applied should have at least a concrete grade B15 classification.

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