

### Areas of application

Ready-mix of accelerated, cementitious special binder and light-weight aggregate made of expanded polystyrene for the production of early-ready, highly heat-insulating laying substrates. In combination with the MB Glass fibre mat (MB-GFM) and the MB Thin screed (MB-DES) as top layer, a load-bearing and light floor construction with early readiness for covering is created for all layer thickness ranges. In the case of uneven subfloors, an extension to granulate thickness of approx. 5 mm is possible without any problems. Pumpable with standard screed pumps.

### Suitable as

- MB Flat System (FLS 35/27) for loads in residential and commercial areas with all types of surface coverings,
- light levelling layer in bond,
- light levelling layer on separating layer,
- system component for rapid construction and renovation.

### Suitable with separating layer on

- concrete ceilings,
- wooden beam ceilings or wooden floorboards,
- all even and stable old substrates.

### Product advantages/features

Hydraulically hardening ready-mix of special binder and light-weight aggregate with largely shrinkage- and stress-free hardening. Very easy to work with due to its smooth consistency.

- deformation-free and low-stress,
- very quickly ready for covering,
- very easy to work,
- low density,
- water-resistant (note moisture resistance of the finishing compound),
- for bonded screeds and screeds on a separating layer,
- mixable and pumpable with common screeding techniques.

Accelerated hardening and drying, therefore very quickly ready for covering and highly heat-insulating, thus a problem solver for construction sites with tight deadlines. Also for the formation of sloping subfloors.



### Technical data

|                                      |                                                |
|--------------------------------------|------------------------------------------------|
| Container type                       | paper bag                                      |
| Delivery unit                        | 80 l/approx. 21 kg                             |
| Shelf life                           | min. 6 months                                  |
| Required water quantity              | 10 - 11 l/bag                                  |
| Density (cured)                      | approx. 350 kg/m <sup>3</sup>                  |
| Density (dry mortar)                 | approx. 260 kg/m <sup>3</sup>                  |
| Thermal conductivity coefficient     | 0.12 W/mK                                      |
| Thermal resistance                   | 0.42 m <sup>2</sup> K/W (5 cm layer thickness) |
| Load strength                        | 0.5 N/mm <sup>2</sup>                          |
| Colour                               | grey                                           |
| Consumption                          | approx. 2.6 kg/m <sup>2</sup> per cm thickness |
| Processing temperature               | + 5 °C to 25 °C at ground level                |
| Fire classification                  | A2-s1 according to DIN EN 13 501-1             |
| Processing time                      | approx. 30 minutes*                            |
| Accessible                           | after 12 hours*                                |
| Covering ready for MB-DES and MB-DEP | after 24 hours*                                |
| *at 20 °C, 65 % relative humidity    |                                                |

### Composition

Special cements, mineral aggregates, redispersible polymers and additives.

### Seal of quality & eco-labels

GISCODE ZP 1/poor in chromates according to EU-VO 1907/2006 (REACH)

### Subsoil preparation

Check the subsoil in accordance with the applicable standards and codes of practice and raise concerns in case of defects. Possible deformation of the underground must be completed as far as possible. Observe the product data sheets of the products used. Flatness tolerances must be observed according to DIN 18 202.

### MB-LES (MB Lightweight screed) in composite

Brush, sand or mill the subfloor depending on its condition, take up loose material and thoroughly vacuum the surface and prime it with commercially available undiluted dispersion primer. Apply self-adhesive edge insulation strip (min. 8 mm) to all rising building components.

### MB-LES (MB Lightweight screed) on separating layer

Install FLS edge insulation strips on all rising building components. Lay out MB-PEF (polyethylene foil) without folds and with sufficient overlap in the joint area and bond as a trough. Use self-adhesive expansion joint profile FLS for field and movement joints.

Other applications are e.g. bonded lightweight screed on wooden joist ceilings, floor height levelling and slope or insulation layer levelling. Special measures are necessary on wooden subfloors. In damp rooms, the prescribed waterproofing must be taken into account.

### Processing

1. Processing in the mixing bucket: Pour half of the required amount of water into a suitable mixing bucket. Add MB Lightweight screed (MB-LES) and the remaining amount of water and mix to a homogeneous mass using a powerful electric hand mixer.
2. Processing in the screed pump: Pour the contents of two bags of MB Lightweight screed (MB-LES) into the mixer. Then add the required amount of water (approx. 22 litres) and mix for two minutes. Then pump to the installation site and work quickly. Pump only with kettle pressure. Do not use additional delivery pressure.
3. Only mix as much mortar as can be used within approx. 30 minutes. If work is interrupted, empty the mixer, pump and hoses immediately and clean with water. Apply mortar very quickly, spread evenly with a screed blade and level with a straightedge. Allow for very rapid hardening.
4. Best applied at 15 - 25 °C and relative humidity below 65 %. Low temperatures, high humidity and high layer thicknesses delay, high temperatures accelerate hardening, drying and readiness for laying. In summer, store in a cool place and use cold water.
5. The minimum room or processing temperature must be 10 °C.
6. Ready for covering: At 20 °C and max. 65 % relative humidity, MB Lightweight screed (MB-LES) for levelling compounds and thin screeds is ready for covering after 24 hours.
7. If, e.g. due to low application temperatures, the readiness for covering is to be determined by CM measurement, the procedure should always be in accordance with the BEB leaflet "Arbeitsanweisung CM-Messung" with the following adjustments:
  - Weighing: 10 g
  - Ready for covering achieved at: 10 CM-%

### Important notes

- Shelf life at least 6 months in original containers when stored in a dry place.
- Tightly close opened containers and use up the contents quickly.
- With the MB Flat System (FLS-35/27), continue building immediately after achieving readiness for covering with MB Thin screed (MB-DES or MB-DEP) using MB Glass fibre mat (MB-GFM).
- Moisture from the subsoil must be prevented by suitable measures (barrier primer).
- In addition to all relevant standards, guidelines and leaflets, the information below is recommended for special attention:
  - DIN EN 13 813 "Estrichmörtel und Estrichmassen"
  - DIN 18 353 "Estricharbeiten"
  - DIN 18 195 "Abdichtung von Bauwerken - Begriffe"
  - DIN 18 560 "Estriche im Bauwesen"
  - DIN 18 534 "Abdichtung von Innenräumen"
  - DIN 18 202 "Allgemeine Toleranzen im Hochbau"
  - ZDB leaflets:
    - "Rohre, Kabel und Kabelkanäle auf Rohdecken"
    - "Verbundabdichtungen"
    - "Beläge auf Zementestrich – beheizt"
    - "Beläge auf Zementestrich – unbeheizt"
    - "Beläge auf Calciumsulfatestrich"
    - "Außenbeläge"
  - BEB leaflet: "Beurteilen und Vorbereiten von Untergründen"
  - BVF leaflet: "Schnittstellenkoordination bei beheizten Fußbodenkonstruktionen".

### Occupational and environmental safety

Contains cement, low in chromate according to EU regulation 1907/2006 (REACH) - GHS CODE ZP 1. Cement reacts strongly alkaline with moisture, therefore avoid contact with skin and eyes, if necessary rinse immediately with water. In case of skin irritation or eye contact, seek medical advice. Wear protective gloves. Wear a dust mask when mixing. In hardened, dried state physiologically and ecologically harmless. The basic prerequisites for the best possible indoor air quality after floor covering work are installation conditions that comply with standards and well-dried substrates, primers and levelling compounds.

### Disposal

If possible, collect and reuse product residues. Do not allow to enter drains, water courses or the soil. Emptied, free-flowing paper containers can be recycled. Collect product residues, mix with water, allow to harden and dispose of as construction site waste.