MB Thin screed
MB-DES

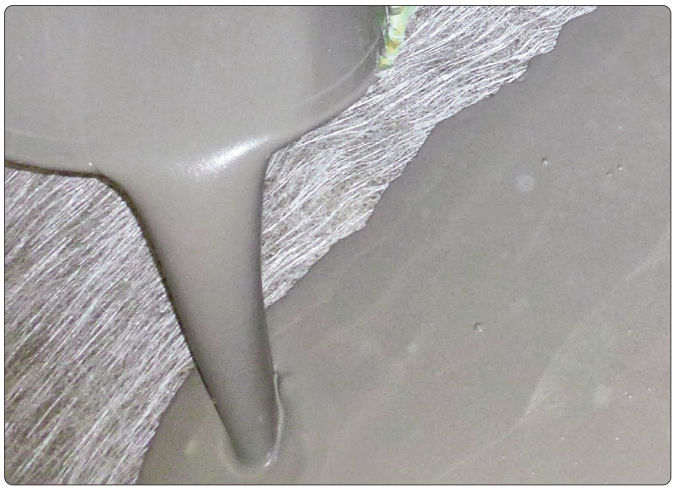
Areas of application
Self-levelling cement floor levelling compound for layer thicknesses up to 20 mm. Suitable for levelling, levelling and smoothing substrates. For producing even laying surfaces for subsequent tiling and natural stone coverings on standard interior substrates. Very good levelling properties for an even surface with increased demands on the laying substrate, e.g. for laying large-format tiles.

DGNB
Highest quality level 4 according to DGNB criterion ENV 1.2 Risks for the local environment.

LEED
Meets LEED requirements in IEQ Credit (4.1) Low Emitting Materials.

Suitable for/on
· the production of even, firm laying substrates for ceramic tiles, slabs and natural stone coverings, etc.,
· Residential and commercial areas with normal stress,
· Damp rooms (with subsequent bonded waterproofing) according to DIN,
· Calcium sulphate and cement screeds,
· Concrete,
· old tile, slab and terrazzo coverings,
· new mastic asphalt screeds (max. 5 mm layer thickness),
· old substrates with firmly adhering waterproof adhesive and filler residues.

Product advantages/features
The MB Thin screed (MB-DES) combines high strength with the best processing properties. The levelling compound is pumpable and produces a smooth and even surface.
· layer thickness range from 0 - 20 mm,
· very good flow,
· flowable and pumpable,
· fast setting,
· low stress,
· high compressive and flexural strength.



Technical data

Container type	paper bag
Delivery unit	25 kg
Shelf life	min. 9 months
Colour	grey
Mixing water	6,0 – 6,5 l per 25 kg bag
Processing time	approx. 20 – 30 minutes*
Accessible	after ca. 2 hours*
Covering ready	after ca. 12 hours*
Processing temperature	+ 5 °C to 25 °C at ground level
Fire classification	A1fl according to DIN EN 13 501-1
Compression strength class	C 30 according to DIN EN 13 813
Bending tensile strength class	F 6 according to DIN EN 13 813

*at 23 °C, 50 % 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)
· EMICODE EC 1 R PLUS/very low emissions

Subsoil preparation
The subsoil must be solid, dry, load-bearing, free of cracks and free of substances that impair adhesion. Check the subsoil in accordance with the applicable standards and data sheets and raise concerns in case of defects. Calcium sulphate screeds must be sanded and vacuumed, either by the screed layer as a finishing treatment or as a special service by the tiler. Brush, grind, mill or shot-blast surfaces with weak or unstable adhesion. Thoroughly vacuum off loose parts and dust. Select a suitable primer (e.g. primer FLS) depending on the type and condition of the substrate. Allow the primer to dry thoroughly. Observe the product data sheets of the products used.

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Processing

1. Pour 6.0 - 6.5 l of cold, clean water into a clean container. Sprinkle in bag contents (25 kg) while stirring vigorously and mix to a flowabel, lump-free mass. Use a mixer with a putty stirrer. Do not mix too thinly.
2. Spread the compound evenly on the primed substrate with a smoothing trowel or large-area squeegee. For thicker layers or when using the squeegee technique, the flow and surface can be improved by deaerating with the spiked deaerator roller. If possible, apply the required layer thickness in one operation.
3. Before placing the topsoil or another levelling layer, a cleaning sanding must be carried out.

Covering ready

· For ceramic tile coverings* after approx. 12 hours at 20 mm layer thickness
· For natural stone coverings*, wait for the trowel coat to dry completely (min. 24 hours) due to the risk of stains caused by moisture.

*at 23 °C, 50 % relative humidity

Consumption

Layer thickness	in combination with MB Lightweight screed (MB-LES)	as putty
1 mm	3.57 kg/m²	1.50 kg/m²
7 mm	25.00 kg/m²	10.50 kg/m²
15 mm	53.55 kg/m²	22-50 kg/m²

Important notes

· Shelf life at least 9 months in original containers when stored in a dry place. Tightly seal opened containers and use the contents quickly.
· Best applied at 15 – 25 °C and relative humidity below 75 %. 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.
· The minimum room or processing temperature must be 10 °C.
· For layer thicknesses over 5 mm on moisture-sensitive or unstable substrates (e.g. on calcium sulphate screeds or old adhesive residues) or bituminous substrates, obtain technical advice.
· Not suitable for use in underwater and permanently wet areas. In these cases, use MB Thin screed Pro (MB-DEP), obtain technical advice.
· Apply edge insulation bands FLS to rising building components and prevent the compound from running into the connection joints. Expansion and movement joints from the substrate must be taken over.
· In case of multi-layer application, prime the surface with primer FLS after the appropriate drying time and apply the next coat after drying. The following coat must not exceed the thickness of the first coat.
· Moisture from the subsoil must be prevented by suitable measures (barrier primer).
· Protect freshly applied surfaces from draughts, sunlight, heat and moisture. Cementitious filler layers tend to crack on soft or post-adhesive substrates. These soft or post-adhesive layers must therefore be removed as much as possible before levelling.
· Leaving such filler layers open for too long also promotes such cracking and should therefore be avoided.
· The MB Thin screed (MB-DES) can be mixed and pumped with continuously mixing screw pumps.
· In addition to all relevant standards, guidelines and leaflets, the information below is recommended for special attention:
  – DIN 18 352 “Fliesen- und Plattenarbeiten“
  – DIN 13 332 “Naturwerksteinarbeiten“
  – DIN 13 333 “Betonwerksteinarbeiten“
  – DIN 18 353 “Estricharbeiten“
  – DIN 18 195 “Bauwerksabdichtungen“
  – DIN 18 202 “Allgemeine Toleranzen im Hochbau“
– ZDB leaflets:
· “Beläge auf Zementestrich – beheizt“
· “Beläge auf Zementestrich – unbeheizt“
· “Außenbeläge“
· “Hinweise für die Ausführung von Verbundabdichtungen mit Bekleidungen aus Fliesen und Platten für den Innen- und Außenbereich“
– 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) - GISCODE 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.

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