# Technical data sheet



# Merbenit FB50

Merbenit FB50 is an elastic SMP adhesive for parquet, wood and laminate flooring. Adheres on various substrates without adhesion promoter and is free of solvents.

### Product advantages

- One component
  Free of solvents, isocyanates and silicones
- Good ridge
- Universal and safe to use
- Impurities can easily be removed
- Water free, no swelling of the wood after laying
- Cures elastic, equalises the swelling and shrinking of the wood
- Impact sound reduction up to 14dB depending on parquet
- Reduction ambient noise value by over 50% compared to unglued parquet
- Odourless
- Ready to use, no mixing required
- Very low emission
- Shrinkage-free curing
- Inherently stable, no flowing away on inclined surfaces
- No need to additionally weigh down the parquet after bonding
- Compensation of small height differences by repeated application possible
- Long open time
- High bonding force, a primer is usually not required
- Suitable for floor heating systems

### **Technical data**

Shore-A-hardness, DIN 53505	30
Modulus elongation at 100%,	ca. 0.6 N/mm²
DIN 53504 S2	
Elongation at break, DIN 53504 S2	ca. 200%
Tensile strength, DIN 53504 S2	ca. 0.8 N/mm²
Consistency, DIN EN ISO 7390	good ridge,
	rationally trowelable
Tooling time	max. 60 min.
Curing rate after 24h	≥ 2.5 mm
Curing rate after 48h	≥ 3.5 mm
Density	$1.62 \pm 0.05 \text{ g/cm}^3$
Volume change, DIN EN ISO 10563	$\leq 2\%$
Temperature resistance after curing	- 40 °C to + 90 °C
Application temperature	+ 15 °C to + 25 °C
	Shall not exceed 75%
	relative humidity

All measurements were performed under normal conditions (23  $^{\circ}\mathrm{C}$  and 50 % relative humidity).

## Application

Suitable for flexible bonding of wood, precious wood, solid flooring, solid wood flooring, exotic parquet, laminate flooring, teak flooring based on PVC, aluminium and stainless steel, sheet metal, cork, linoleum flooring with textile back, bamboo flooring. Suitable for use on underfloor heating.

#### Substrate range

All coverings listed under application on: cement screed, anhydrite, liquid anhydrite, Terrazzo, Fermacell, particle board, concrete. On porous coatings direct bonding on tiles is possible. For materials with a tendency to stress cracking, preliminary tests are recommended.

# Technical data sheet Merbenit FB50

#### Substrate preparation

The substrate must be in accordance with the requirements of DIN 18356 "Working with parquet", hence plane, permanently dry, clean, free of cracks, tension and pressure resistant and professionally prepared for laying. Specific parquet requirements and preparations are to find in the technical product information of the parquet manufacturer.

#### Adhesion promoter

For indoor applications without moisture exposure adhesion promoter is not required. At high media and moisture exposure, the use of an appropriate adhesive promoter is recommended.

#### Processing

- Apply with a serrated spatula evenly to the ground, insert the elements immediately into the adhesive bed and knock on carefully. Remove adhesive marks immediately, for example with floor wax. Please follow the instructions of the parquet or laminate manufacturer, in particular the processing conditions and the suitability of the adhered screeds.
- Mosaic and prefinished parquets (8 mm strong, shorter than 40 cm):
- Recommended trowel TKB-tooth shape B2 Consumption: approx. 700 g/m<sup>2</sup>
- Solid parquet (max. dimensions 250 x 50 x 10 mm): Recommended trowel TKB-tooth shape B5 Consumption: 800 - 1000 g/m<sup>2</sup>
- Strip parquet, short prefabricated element (up to 100 cm), industrial parquet and wood plaster RE (thinner 40 mm): Recommended trowel TKB-tooth shape B3 - B5 Consumption 800 - 1000 g/m<sup>2</sup>
- Prefabricated parquet in plank shape (longer than 100 cm). Laminate coverings and solid wood flooring: Recommended trowel TKB-tooth shape B5 - B11 Consumption: 800 - 1150 g/m<sup>2</sup>
- The serrations above are guidelines, a final selection of the teeth may be taken only on construction site, depending on the levelness of the underground, length of the parquet elements and back side. In any case it is important to sufficiently wet the back side of the parquet.
- Loadable after 24 to 48 hours

### Instructions for direct bonding

- Cement screed (CS) for direct bonding: Aspirate grinded cement screed with an industrial vacuum cleaner. Do not use primer.
- Anhydrite based fluid screeds (AFS) for direct bonding:
- After current leaflet for AFS, grind it and aspirate carefully with an industrial vacuum cleaner. Do not use primer.
- Asphalt screed (AS) for direct bonding: Aspirate new, well sanded AS carefully with an industrial vacuum cleaner. Do not use primer. For old AS use a professional primer and then sprinkle during the fresh state fine quartz sand.

#### Colours

- cream white
  other colours on request
- other colours on reques

#### Packaging

- Buckets of 16 kg on palet of 33 units
- Barrels of 180 liter on palet of 2 units

# Shelf life and storage conditions

15 months from date of production

#### Work and environmental safety

Important information about work and environmental safety is available on the material safety data sheet.

# merz+benteli ag

Freiburgstrasse 616 CH - 3172 Niederwangen Tel. +41 31 980 48 48 Fax +41 31 980 48 49 info@merz-benteli.ch www.merz-benteli.ch Our information is based on experiences in lab and practice. Their publication occurs, however, without takeover of a liability for damages and losses which are to be put down to these information, as there the practical application conditions are lying outside of the enterprise's control. The user is not released from the necessity to carry out own attempts for the planned applications under practical conditions. Due to the different materials, processing methods and local factors onto which we have no influence, no guarantee – also in patent-legal respect – can be taken over. We recommend therefore sufficient own attempts. By the way we refer to our General Business Conditions. Technical changes reserved. Contents examined and released by merz+benteli ag, CH - Niederwangen/Berne

