

BKM BB-2K

FloorCoating
technical data sheet

Article-No.: H-001-970
Article-No.: H-001-971

1kg can
8,5kg bucket

Product description

BKM BB-2K is a 2-component, highly reactive epoxy resin dispersion that can be used as a primer or in combination with BKM BB-F in various layer thicknesses in many areas.

Scratch coatings and leveling coatings based on BKM BB-2K are permeable to water vapor and can therefore also be used on substrates that are damp on the reverse side without the risk of detachment or osmotic blistering.

- Diffusible
- VOC-free
- Fast hardening
- Can be used on damp substrates
- Chemical resistant
- Variable layer thickness

Specification

Combi-build:	8,5 kg / 1 kg (12x1 kg/ Cart.)
Componente A:	6 kg / 0,705 kg
Componente B:	2,5 kg / 0,295 kg
Delivery form:	42 bldg./pal.
Mixing ratio:	2.4 : 1 wt.t.
Density comp. A:	1,02 kg/l
Density comp. B:	1,12 kg/l
Density, ready for processing:	1,05 kg/l
Viscosity:	5 dPa.s
Processing temperature:	+8 °C to +25 °C
Processing time¹⁾:	approx. 20 minutes

As a leveling compound in combination with BKM BB-F

Taber abrasion²⁾:	100-150 mg depending on MV
Shore D hardness³⁾:	75
Adhesive tensile strength:	approx. 3 N/mm ² on concrete
Walkable¹⁾:	after 6 hours
Fully loadable:	after 5 days
Diffusion resistance factor μ:	300 - 500 depending on MV
Anhydrite screeds:	< 0,5 CM%

¹⁾ At +20 °C and 60 % relative humidity.

²⁾ According to Taber CS 10 / 1000 U / 1000 g

³⁾ Shore D hardness according to DIN 53505
(after 28 days at +20 °C)

Application

When diluted with water, BKM BB-2K is suitable as a diffusion-open, well pore-filling primer for all mineral, absorbent substrates.

In combination with the filler mixture BKM BB-F, scratch filler, leveling and filling compounds can be produced for application in different layer thicknesses.

Application areas

- Concrete and screed surfaces
- Interior and exterior
- On ceramic substrates

Product application

Surface preparation

The substrate must be solid, clean, dust-free, absorbent, load-bearing and free from separating agents, corrosion-promoting components or other layers interfering with the bond. In principle, the substrate must be suitable for the coating system. The surface tensile strength must not fall below 1.5 N/mm².

Anhydrite screeds are not suitable as substrates.

The compressive strength of the substrate should be at least 25 N/mm².

The floor surface must be prepared by e.g. dust-free shot peening, diamond grinding, milling or other suitable measures. The grain structure must be exposed and all separating substances and loose constituents must be consistently removed. Substrates into whose surface aids (waxes) have been incorporated for smoothing must always be removed by milling and subsequent shot peening. Compatibility with old coatings must be checked; non-load-bearing layers and coatings must be removed completely.

In the case of existing fixed tile coverings, the surface must be removed by diamond grinding or milling. The glaze must be removed completely.

Processing without armored fabric

Components A + B are homogeneously mixed with a mechanical stirrer (300-400 RPM) for 2 minutes.

Subsequently, the mixed material is transferred to another container and stirred again.

The mixture is then diluted with a maximum of 50% water, depending on the absorbency of the substrate, and stirred once more.

The prepared primer can be applied with a suitable tool, avoiding the formation of puddles.

Processing with armored fabric

When using armored fabric, apply the primer undiluted.

The primer is generously applied, and then the armored fabric is embedded. Subsequently, another application of undiluted primer is applied 'wet on wet.'

It is important to ensure that the armored fabric is fully saturated and covered with primer across the entire surface.

The application of the BKM BB-F coating is only possible after the primer has completely dried to prevent the armored fabric from floating. Consumption should be determined in advance at a test site.

Floor coating

- without armored fabric and flat surfaces

After the primer has dried (approximately 6-12 hours), the surface can be coated with the BKM BB-2K + BKM BB-F. The coating is applied as a scratch coat with a thickness of 2mm - 2.5mm.

Floor coating

- with armored fabric and/or uneven surfaces

When applying the coating on uneven surfaces (e.g., varying slopes of the substrate), there is a risk that the coating may flow from the raised areas into the depressions, resulting in incomplete coverage of the armored fabric. Additionally, voids may have formed under the armored fabric after priming, allowing material to flow into them during the curing of the coating, preventing complete coverage of the armored fabric.

Therefore, the coating is applied in two layers of scratch coating, each with a thickness of 2.5mm.

After the primer has dried (approximately 6-12 hours), the surface is coated with the BKM BB-2K + BKM BB-F in the first layer of scratch coating with a thickness of 2.5mm. After the complete drying of the first layer, the second layer of coating, also with a thickness of 2.5mm, can be applied.

Consumption

Primer: approx. 0,15 kg/m²

Scraper filler, leveling and filling compound in combination with BKM BB-F

Consumption per m² and mm layer thickness

Scratch filler + leveling compound 0 - 3 mm

MV 8,5 kg + 20 kg approx. 0,55 kg BKM BB-2K + approx. 1,3 kg -BKM BB-F

Flow compound

MV 8,5 kg + 40 kg 3 - 8 mm approx. 0,37 kg BKM BB-2K + approx. 1,8 kg -BKM BB-F

Filler

MV 8,5 kg + 60 kg approx. 0,28 kg BKM BB-2K + approx. 2 kg -BKM BB-F

Chemical resistance*

Test medium	Resistance			
	24 Hours	3 Days	7 Days	28 Days
Acetic acid 10%	•	•	•	•
Sodium hydroxide 5%	•	•	•	•
Ethanol	•	•	•	•
Xylene	•	•	•	•
Hydrochloric acid 5%	•	•	•	•
Sulfuric acid 5%	•	•	•	•
Diesel oil	•	•	•	•

* The chemical resistance depends on the concentration, temperature and exposure time. Contamination must be removed immediately.

Even with positive chemical resistance, changes to the surface, such as loss of gloss or discoloration, may occur. However, this does not affect the functionality of the material used.

Comments

- The processing and curing temperature (material, substrate and ambient air temperature) must be between + 8 °C and + 25 °C.
- The relative humidity must not exceed 80 %. The substrate temperature must be at least 3 °C above the dew point temperature.
- Increased temperatures accelerate the setting process, low temperatures delay it.
- Unfavorable drying conditions may lead to surface irritation of the leveling compound.
- Ensure adequate ventilation during curing and drying of the material.
- Exposure to sunlight must be expected to cause yellowing of the coating. In this case, a UV-resistant paint coat is recommended as a topcoat.

Packaging unit

Tin bucket

Occupational safety

Further information on safety during transport, storage and handling can be found in the current safety data sheets.

Storage

Frost-free and cool, 12 months

Ecology

The following applies to all systems: Only return empty containers to the recycling partner Zentek. Material residues can be disposed of according to EWC key no. 08 01 11 (paint and varnish waste containing organic solvents or other hazardous substances).

Legal notice

The above information, in particular the suggestions for processing and use of our products, are based on our knowledge and experience under normal circumstances, provided that the products have been stored and applied correctly. Due to the different materials, substrates and divergent working conditions, a guarantee of a working result or a liability, regardless of the legal relationship, cannot be justified on the basis of these instructions or verbal advice, unless we are accused of intent or gross negligence in this respect. In this respect, the user must prove that all knowledge necessary for a proper and promising assessment by BKM was provided to BKM in writing, in time and in full. The user must check the suitability of the products for the intended application. We reserve the right to make changes to product specifications.

Proprietary rights of third parties must be respected.

The latest product data sheet applies and must be requested from us. The responsibility for the successful application of our products lies with the user, as the use is beyond our control. However, we ensure the quality of our products in accordance with our conditions of sale and delivery, without guaranteeing the success of their application. Our data sheets represent advice based on our best knowledge, but no obligation can be derived from them. Our written consent is required to guarantee properties and application possibilities that go beyond the information recorded in the data sheets.

Further information can be found at:

www.bkm-mannesmann.de