




KÖSTER LF-BM

Technical Data Sheet CT 160

Issued: 2020-10-02

- Analysis report (H 5882 FM-II) from the Environmental Institute of Bremen; 2012; fulfills the requirements of the AgBB after 3 and 7 days
 - Test report (2300/104/15)-5/2015-Br/Mü) from the MPA Braunschweig from 27.4.2015; Testing and classification of the building material class according to DIN 4102-B2

Universal epoxy primer and bonding agent with excellent adhesion to all mineral substrates

	KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 13 CT 160 EN 13813:2002 KÖSTER LF-BM
	Synthetic resin for internal uses
Reaction to fire	B2
Release of corrosive substances	SR
Water permeability	NPD
Wear resistance	≤ AR 0.5
Bond strength	≥ B 2.0
Impact resistance	≥ IR 1
Sound insulation	NPD
Sound absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD
Dangerous substances	NPD

Substrate

All surfaces must be thoroughly cleaned and stripped down to a stable substrate before the application of KÖSTER LF-BM. Normal concrete surfaces can be cleaned by sandblasting. High-strength concrete or vacuum-smoothed concrete with extremely smooth and very dense surfaces requires shot blasting as surface preparation. The aggregate embedded into the concrete has to be visible on the surface. All surfaces to be coated must be sound and solid, dry, free of dust, loose particles, oil, grease, and other adhesion inhibiting substances. The adhesive tensile strength of the substrate must be at least 1.5 N / mm².

Application

The A and B components are mixed thoroughly at least 3 min. with a mechanical stirring device (below 400 rpm) until a homogeneous consistency is achieved.

To avoid defects due to insufficient mixing, repot the material after mixing for two minutes and mix for a further minute.

Features

KÖSTER LF-BM is a solvent free universal epoxy binding agent which bonds excellently to all mineral substrates.

It is resistant to high mechanical stresses and can be filled with kiln dried silica sand.

Technical Data

Consistency	approx. 1500 mPa.s (+ 20 °C)
Mixing ratio (by weight)	2 : 1 (A : B)
Pot life at:	
+ 12 °C / + 23 °C	60 / 40 min.
+ 30 °C / + 40 °C	21 / 15 min.
Spec. gravity	1.1 g / cm ³
Application of next layer	after approx. 12 hours
	It develops its full mechanical and chemical resistance after 7 days (at + 23 °C and 65 % relative humidity).
Color	yellowish, transparent
Application temperature	min. + 5 °C
Compressive strength	approx. 60 – 70 N / mm ² dep. on filler material
Flexure tensile strength	approx. 30 N / mm ²
Adhesive tensile strength	approx. 6 N / mm ²

Fields of Application

KÖSTER LF-BM can be used as a primer for mineral substrates and for preparing filling compounds for the subsequent coating with epoxy resins. Silica sand filled mortar is suitable for exterior use and can be applied directly without priming as a levelling compound for rough surfaces. It can be used as a casting resin for fixing masonry anchors, metal posts, etc.

The well conditioned and unfilled material is spread evenly using a rubber squeegee and intensively worked into the substrate using a short napped roller. The freshly coated surface can be broadcast with kiln dried silica sand, 0.4 – 0.8 mm, covering the whole area taking care not to apply an excess amount.

In cases of strongly absorbent substrates, a second priming layer or alternatively a troweled on levelling priming layer may be necessary.

Scrape-levelling compounds or spreadable levelling mortars are applied using a trowel or scraper and are also broadcast using kiln dried silica sand. Screeds are laid using guide rails, trowels, straight edges or walk-behind trowels.

Attention: The filler materials must be kiln dried. They must be added to the A-component only. Only then the B-component is mixed in. The maximum grain size should not exceed 1/3 of the layer thickness. During application, there must be a temperature difference to the dew point of at least +3 °C.

Consumption

Approx. 0.3 - 0.5 kg/m² as primer; as mortar additive according to formulation

Scrape-leveling compounds

1 : 1 filled with silica sand (grading curve 0.2 – 0.8 mm or 0.06 – 0.36 mm);
 consumption: 0.75 kg KÖSTER LF-BM / m² per mm layer thickness, plus silica sand.

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. Specifications made by our employees or representatives which exceed the specifications contained in this technical guideline require written confirmation. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times. The warranty can and is therefore only applied to the quality of our products within the scope of our terms and conditions, not however, for their effective and successful application. This guideline has been technically revised; all previous versions are invalid.

Levelling mortar

1 : 1.5 to 1 : 2.6 filled with fire-dried silica sand (grading curve 0.06 – 0.36 mm), minimum layer thickness 3 mm; consumption: 0.5 – 0.7 kg KÖSTER LF-BM / m² per mm layer, plus silica sand.

Screed

1 : 6 to 1 : 9 filled with silica sand (grading curve 0.06 – 0.36 mm (33 %) and 0.35 – 1.6 mm (67 %)); consumption: 0.3 – 0.5 kg KÖSTER LF-BM / m² per mm layer thickness, plus silica sand.

The screed is applied into the previously applied priming coat "fresh on fresh".

In case a top coating is required, the fresh screed is broadcast with silica sand (recommended grading curve 0.06 – 0.36 mm) in order to achieve a good adhesion between layers.

Suggested formulation:

- 1 kg KÖSTER LF-BM
- plus 2 kg fine silica sand
- and 4 kg of silica coarse sand.

Per cm layer thickness and m² this is:

- 1 part = approx. 2.7 kg KÖSTER LF-BM
- 2 parts = approx. 5.4 kg fine kiln-dried sand
- 4 parts = approx. 10.8 kg coarse kiln-dried sand

Drainage mortar

As drain mortar, per 25 kg quartz sand (grading curve 2 – 3 mm) add 1 kg of KÖSTER LF-BM. The material must be installed in a minimum layer thickness of 4 cm. The above mentioned mixture when compacted builds a layer thickness of approx. 1.6 cm.

Cleaning

Clean tools immediately after use with KÖSTER Universal Cleaner.

Packaging

CT 160 001	1 kg combipackage
CT 160 006	6 kg combipackage
CT 160 025	25 kg combipackage

Storage

Store the material frost-free at temperatures between + 5 °C and + 25 °C. In originally sealed packages it can be stored for a minimum of 12 months.

Safety

Wear protective gloves and goggles when processing the material. Observe all governmental, state, and local safety regulations when processing the material.

Related products

KÖSTER EM-VS	Prod. code CT 210 008
KÖSTER LF-VL	Prod. code CT 271
KÖSTER TS transparent	Prod. code CT 320
KÖSTER Color-Chips	Prod. code CT 429
Quartz Sand 0.35 - 1.50 mm	Prod. code CT 481
Quartz Sand 0.20 - 0.80 mm	Prod. code CT 482
Quartz Sand 0.06 - 0.36 mm	Prod. code CT 483
Quartz Sand 0.7 - 1.2 mm	Prod. code CT 485
Quartz Sand 1.0 - 2.0 mm	Prod. code CT 486
Quartz Sand 2.0 - 3.0 mm	Prod. code CT 487
Quartz Sand 0.4 - 0.8 mm	Prod. code CT 488
KÖSTER Universal Cleaner	Prod. code X 910 010

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