

# KÖSTER BTG System

# Technical guideline / Article number

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# CT

# Concrete coating system for balconies, terraces, and industrial floors

#### **Features**

The KÖSTER BTG System is a coating system for residential floors, balconies, terraces, garages, and industrial floors such as laboratories and workshops. It distinguishes itself through high abrasion and chemical resistance, UV stability and anti-slip characteristics. The system can be individualized through the use of KÖSTER Color Chips of varying colors which are available on request.

#### System components

KÖSTER EM-VS

2 component, water based epoxy resin coating for light to medium stress applications.

KÖSTER TS transparent

2 component, UV stable, abrasion and chemical resistant solvent based Polyurea sealant for balconies, terraces, garages, and industrial floors.

KÖSTER Color Chips

UV and chemically resistant broadcasting material for the decoration of water based and solvent free resins.

#### Field of application

The KÖSTER BTG System is a concrete coating system for residential floors, balconies, terraces, garages, and industrial floors such as laboratories, workshops, and stores.

### Substrate preparation

The substrate to be sealed must be sound and solid, free of dust, oil and grease as well as other bond inhibiting contaminants. Weak and/or contaminated substrates have to be removed down to a clean, sound and solid layer by scarifying, sandblasting or shot blasting. Rough substrates (e. g. due to scarifying grooves) are levelled using KÖSTER LF-BM mixed with silica sand (1:4). KÖSTER EM-VS can then be applied after approx. 12 hours.

The minimum adhesive tensile strength of the substrate must be 1.5 N / mm² and the residual moisture content of concrete must not exceed 4 % by weight. Where moisture from the substrate or a high pH is expected, KÖSTER VAP® 2000 should be installed according to the Technical Guideline.

#### Mixing

The components of KÖSTER EM-VS should have a temperature between + 15 °C and + 25 °C before mixing. They are mixed intensively using a mechanical stirring device (under 400 rpm) fitted with a KÖSTER Resin Stirrer until a homogeneous consistency is reached. To avoid mixing failures re-pot the material and mix again. Total mixing time is 2 minutes.

When installing KÖSTER EM-VS in the KÖSTER BTG System the material is thinned down with water. Mix up to 15% (1.2 liters per 8 kg package) into the A component before mixing.

#### **Application**

Immediately after mixing the KÖSTER EM-VS is spread evenly onto the substrate using an epoxy-grade short napped roller. The material is rolled in two directions at a 90° angle to another. Be sure that the material does not puddle, for example by flowing into or collecting in surface depressions. Immediately broadcast the color chips into the fresh surface per hand or with a suited mechanical device, making sure to distribute the KÖSTER Color Chips evenly. After cure the excess KÖSTER Color Chips can be vacuumed up and re-used. After 24 hours the area is coated with KÖSTER TS transparent using a short nap roller, (consumption approx. 200 g / m²).

Overlapping of coats should be kept to a minimum. Where scheduling or details cause an interruption to the coating work, the coated area should be masked with tape and the tape removed after a gelling time of approx. 1 hour. In this manner a clean seam is achieved.

# Consumption

KÖSTER EM-VS:

Approx. 200 to 300 g / m<sup>2</sup> per layer, two layers required

KÖSTER Color Chips

Approx. 300 g / m² (excess can be re-used)

KÖSTER TS transparent

Min. 100 g / m<sup>2</sup> as a sealer.

Min. 200 g / m<sup>2</sup> as a liquid tight coating applied in two layers.

# Cleaning of tools

Cleaning KÖSTER EM-VS:

Clean immediately after use with KÖSTER Universal Cleaner.

Cleaning KÖSTER TS transparent:

Clean immediately after use with KÖSTER PUR Cleaner.

KÖSTER Universal Cleaner X 910
KÖSTER Resin Stirrer IN 988
KÖSTER Dew Point Table

#### **Packaging**

KÖSTER EM-VS:

8 kg combi-package (6.4 kg A component and 1.6 kg B component)

KÖSTER Color Chips:

5 kg carton

KÖSTER TS transparent:

6 kg combi-package (4.0 kg A component and 2.0 kg B component)

1 kg combi-package (0.67 kg component A and 0.33 kg component B)

#### Storage

All system components are to be frost free at temperatures between + 5 °C and + 25 °C. In originally sealed packages the material can be stored for a minimum of 12 months.

### Safety

Avoid inhaling the fumes and skin contact. Wear protective clothing, gloves and goggles during processing and application of the material. Make sure the room is well ventilated. In case of skin contact, wash off the material immediately with lots of soap and water. In case of eye contact, flush eyes immediately and thoroughly with water or preferably an emergency eye wash bottle. Consult a physician. During processing and application of the material, do not eat, smoke, or handle open flames. The warnings and safety recommendations on the packaging and on the Material Safety Data Sheet and the regulations of relevant professional organisations must be observed and obeyed.

### Technical guidelines cited

KÖSTER EM-VS	CT 210
KÖSTER TS Transparent	CT 320
KÖSTER Color Chips	CT 429
KÖSTER VAP I 2000	CT 230
KÖSTER LF-BM	CT 160
KÖSTER PUR Cleaner	IN 900

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.