

PRODUCT DATA SHEET

Sikafloor[®]-430 DecoCem

SELF-LEVELING FAST CURING FIBER-REINFORCED CEMENTITIOUS MORTAR FOR HIGH DECORATIVE FLOORS, FOR INTERNAL USE



DESCRIPTION

Sikafloor[®]-430 DecoCem is a self-leveling, one component, fiber-reinforced, fast curing cementitious mortar with thickness from 5 to 30 mm for internal high decorative floors.

USES

Sikafloor[®]-430 DecoCem is designed for civil and commercial area on old and new concrete or tile substrate. The product can be used in stores, office, warehouse, shopping center, supermarket, restaurant and exposition area. Sikafloor[®]-430 DecoCem have a good aesthetic finish, therefore it can be used as a top coat.

CHARACTERISTICS / ADVANTAGES

- High mechanical strength
- Good abrasion resistance
- Self-leveling
- One component
- Suitable on concrete and tile support
- Application by hand or by machine
- Good aesthetic finishing
- The surface can be grinded if mixed with silica aggregates

APPROVALS / CERTIFICATES

- CT-C30-F5-AR0,5 according to EN 13813

PRODUCT INFORMATION

Packaging	25 kg bag
Appearance / Colour	Fine powder, light grey (~ RAL 7044)
Shelf life	9 month from date of production
Storage conditions	The product must be stored properly in original, unopened and undamaged sealed packaging, in dry and fresh condition. Protect from frost.
Maximum Grain Size	D _{max} ~ 1.4 mm

TECHNICAL INFORMATION

Abrasion Resistance	Class AR0,5 10 µm (BCA method)	(EN 13813) (EN 13892-4)
Compressive Strength	Class C30 24 h 7 d 28 d ~ 22 MPa ~ 28 MPa ~ 32 MPa	(EN 13813) (EN 13892-2)
All compressive strength values at +21°C and 60% r.h.		
Tensile Strength in Flexure	Class F5 24 h 7 d 28 d ~ 3 MPa ~ 5 MPa ~ 5.5 MPa	(EN 13813) (EN 13892-2)
All tensile strength in flexure values at +21°C and 60% r.h.		
Tensile Adhesion Strength	~ 2.5 MPa (A)	(EN 1015-12)
Reaction to Fire	A1fl	(EN 13501-1)

APPLICATION INFORMATION

Mixing Ratio	Water: 22 ± 1% If Sikafloor®-430 DecoCem is mixed with silica aggregate: Water: 16.5 ± 0.5%
Consumption	~ 1.75 kg/m ² /mm
Layer Thickness	Min. 5 mm - max. 30 mm If Sikafloor®-430 DecoCem is mixed with silica aggregate: Min. 25 mm - max. 40 mm
Ambient Air Temperature	+5°C min. / +30°C max.
Relative Air Humidity	Beware of condensation! The substrate temperature must be at least 3°C above the dew point to avoid condensation on the surface. If > 4% pbw moisture content, Sikafloor®-81 EpoCem® may be applied as a T.M.B. (temporary moisture barrier) system.
Pot Life	~ 20 min. at +20°C
Waiting Time / Overcoating	Sikafloor®-430 DecoCem can be overcoated with epoxy or poliurethane products of Sikafloor® range after about 48 h or when the moisture content is < 4% by weight. Sika advises measuring the moisture content by Sika®-Tramex meter or CM-measurement.
Applied Product Ready for Use	Foot traffic: ~ 3 h

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete

Concrete substrates must be mechanically prepared using abrasive blast cleaning to remove cement laitance, existing coatings and achieve a gripping profile. The surface must be clean, dry and free from laitance, dirt, grease, oil and any other form of surface contamination. Vacuum, blasting or similar techniques are ideally suited. High spots must be removed by e.g. grinding.

All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by vacuum.

Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed. Repairs to the substrate, filling of blowholes / voids and surface levelling must be carried out using appropriate products from the Sikafloor®, SikaDur® and SikaGard® range of materials. The concrete or screed substrate has to be primed or levelled in order to achieve an even surface. The selected method of preparation will depend on the surface condition, environmental constraints and availability of services. The method may be selected on the basis of trial areas, approved by the Contract Administrator.

The edges of the area affected by the intervention will have to be cut vertically (90 ° degrees) up to a minimum depth of 5 mm.

Tile

Ceramic or natural stone must be prepared mechanically by shot-blasting or grinding. Tiles not well adherent must be removed and repaired with epoxy screed consists of Sikafloor®-156 and quartz sand with a ratio resin: sand, 1: 8/1: 10.

Once prepared, tiles will be primed with Sikafloor®-156 + quartz sand 0.1-0.3 mm (30% by weight of the resin) and reinforced with a glass fiber mesh (as Sika® Thermocoat-2). Fresh resin will be broadcast to excess with quartz sand 0.4-0.7 mm. Once the product is hardened remove the excess of sand by vacuum.

MIXING

Gradually pour Sikafloor®-430 DecoCem in a pail containing the correct amount of water (see Mixing Ratio). Mix thoroughly for at least 3 minutes, until a uniform mix has been achieved. Wait for 1 minute and mix again for another 1 minute.

Mixing with aggregate

Pour Sikafloor®-430 DecoCem in a clean pail. Add 30% by weight of silica aggregate with grain size from 1 mm to 3 mm. Mix thoroughly for at least 1 minute. Gradually pour the correct amount of water (see Mixing Ratio). Mix thoroughly for at least 3 minutes, until a uniform mix has been achieved. Wait for 1 minute and mix again for another 1 minute.

Mixing tools

Mixing the material with a low speed machine (300-400 rpm) taking care not to incorporate air in the dough until its complete homogenization. Don't split the bag. Sikafloor®-430 DecoCem can be mixed and pump with machine like Putzmaister or Turbosol.

APPLICATION

Primer

Apply Sikafloor®-03 Primer before the application of Sikafloor®-430 DecoCem with a consumption of 100-150 g/m² (see the relative Product Data Sheet), otherwise apply Sikafloor®-156 with a consumption of 0.3-0.5 kg/m² depending on the absorbance of the substrate (see the relative Product Data Sheet) and lightly broadcast with quartz sand (0.4-0.7 mm or 0.3-0.5 mm).

Pour the cementitious self-levelling Sikafloor®-430 DecoCem on the surface and use a pin rake to spread it on the application area.

Apply Sikafloor®-430 DecoCem without breaks in order to achieve a seamless surface with homogeneous color.

Grinding of Sikafloor®-430 DecoCem with silica aggregate

When silica aggregate is added to Sikafloor®-430 DecoCem, after 2/3 days, it is possible to treat the surface by dry grinding using suitable machine in order to get natural stone finishing. Sikafloor®-430 DecoCem must be protect by suitable protective materials.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened material can only be removed mechanically.

IMPORTANT CONSIDERATIONS

- Do not apply Sikafloor®-430 DecoCem with impending frost, strong wind and rain.
- In case of floor application, pay attention to avoid fast drying. Protect the product against wind and sun for a few hours after the application.
- Do not add water after mixing
- Do not apply Sikafloor®-430 DecoCem on support with moisture humidity > 4%. In this case apply Sikafloor®-81 EpoCem.
- Do not apply Sikafloor®-430 DecoCem on wet surface.
- Do not apply Sikafloor®-430 DecoCem on substrate with rising moisture. In this case apply before a layer of Sikafloor®-81 EpoCem® as temporary moisture barrier.
- Do not apply Sikafloor®-430 DecoCem on metal substrate.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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