

#### **BUILDING TRUST**

## PROVISIONAL PRODUCT DATA SHEET 2022-03-01

# Sikafloor®-4400 DecoCem

Self-leveling hybrid cementitious decorative flooring compound.



#### DESCRIPTION

Sikafloor®-4400 DecoCem is a self leveling pigmented decorative flooring compound. Based on hybrid active dry technology it provides excellent application properties combined with fast setting and very low shrinkage.

#### **USES**

Sikafloor®-4400 DecoCem may only be used by experienced professionals.

- The product can be used as a bonded decorative leveling compound for commercial and residential floors.
- Non-reactive technology and compliance with the lowest emission classes enables the use in areas with high demand on indoor air quality.

## **CHARACTERISTICS / ADVANTAGES**

- Excellent application properties and a perfect finish
- Quick drying and setting
- Good strength and abrasion resistance
- Low shrinkage, low tension
- Suitable for application on subfloor heating systems
- Contains pre-consumer recycled material

#### **SUSTAINABILITY**

VOC emission classification GEV-Emicode EC1PLUS, license number 13627/01.01.21.

Declaration of conformity with Model EPD "Modified mineral mortars, group 1.

Conformity with LEED v4 MRc 2 (Option 1): Building Product Disclosure and Optimization – Environmental Product Declarations.

Conformity with LEED v4 MRc 4 (Option 2): Building Product Disclosure and Optimization - Material Ingredients.

### **APPROVALS / CERTIFICATES**

Conforms to the requirements EN 13823

#### **PRODUCT INFORMATION**

Composition	Hybrid technology, containing calcium sulphate and cement, pigmented	
Packaging	20 kg bags	
Appearance and colour	Powder, pigmented, colours : ivory white, light grey, grey	
Shelf life	12 months	
Storage conditions	Original, unopened and undamaged sealed packaging, in dry conditions at temperature between +5 °C and +35 °C.	
Product declaration	EN 13813: Class CA-C35-F10-A12	

## **TECHNICAL INFORMATION**

Abrasion resistance	Class: A12. < 11 cm <sup>3</sup> / 50 cm <sup>2</sup>	(EN 13892-3)
Compressive strength	28 days ≥ 35 N/mm²	(EN 13892)
Tensile strength in flexure	28 days ≥ 10 N/mm²	(EN 13892)
Tensile adhesion strength	>1,0 N/mm² concrete failure (minimum pull off strength of the concrete substrate 1.0 N/mm²)	(EN 13982- 8)
Reaction to fire	A1 <sub>fl</sub>	

## **SYSTEM INFORMATION**

System structure	Layer	Product
	1. Substrate	Concrete, cement and calcium sulphate based sceeds
	2. primer	option 1: Sikafloor*-151/-161 lightly broadcasted or option 2: Sikafloor* -151/-161 with Sikafloor*-02 Primer
	3. coloured self-leveling compound	Sikafloor® - 4400 DecoCem
	4. protective sealer	Sikafloor® - 419 W
	alternatively other Sealer combination may be used. alternative 1: Sika® Level - 01 Primer + Sikafloor® - 304 W (Matt) alternative 2: Sikafloor® -169 + Sikafloor® - 304 W (Matt) Note: Other sealers lead to different properties as described refer to the system datasheet, Sikafloor® DecoCem CS-44	

## **APPLICATION INFORMATION**

Mixing ratio	4,1 - 4,3 L of water for 20 kg of powder	
Consumption	1,6 kg/m²/mm	
Layer thickness	5 - 10 mm	
Ambient air temperature	+ 10 °C min / + 30 °C max	
Relative air humidity	75 % max	
Substrate temperature	+ 10 °C min / + 25 °C max	
Substrate pre-treatment	Important:  To achieve a perfect decorative finish a pore free substrate is necessary.  Normal absorbent substrates: concrete, cement screeds, rapid cement and calcium sulphate screeds:  Option 1:  Prime the substrate with Sikafloor®-151 ~0.35 - 0.55 kg/m² lightly broadcasted with quarts sand (0,3- 0,8 mm) ~1 kg/m²  Option 2:  Prime the substrate with Sikafloor®-151 ~0.35 - 0.55 kg/m² and primer with Sikafloor® – 02 Primer ~0,13 kg/m² the next day.  Consumption is approximate depends on the substrate porosity.  note: Refer to your local Sika technical service for other substrate solutions.	
Pot Life	~20 min at 20 °C	
Waiting time to overcoating	Important: Be aware of scratching and staining the Sikafloor®-4400 DecoCem when it	

is not coated, wear special clean shoe protection.



	. Before overcoating Sikafloor®-4400 DecoCem allow: ~12 hours Note: Times are approximate and will be affected be changing ambient and substrate conditions, particularly temperature and relative humidity.
Applied product ready for use	Foot traffic ~2 hours at +20 °C.)  Note: Time will be affected by changing substrate and ambient conditions, layer thickness and water content.

#### **BASIS OF PRODUCT DATA**

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

#### **FURTHER INFORMATION**

Please refer the Method Statement / application manual of the full system Sikafloor® DecoCem CS-44.

#### **IMPORTANT CONSIDERATIONS**

- Do not apply on substrates with rising moisture. If rising moisture can occur, an effective damp proof membrane must be applied in compliance with the relevant national standard.
- To minimize colour deviations use Sikafloor®-4400 DecoCem with same batchnumber on one floor or room.
- By application, circumstances and the by natural material characteristics slight colour differences can happen and is normal for a mineral floor.
- Sikafloor®-4400 DecoCem must be protected with a seal-coat to avoid excessive staining and make easy cleaning possible.
- During construction works the Sikafloor®-4400 Deco-Cem must be protected against liquids and wear.
- Subsequent seal-coat can enhance the colour of the Sikafloor®-4400 DecoCem.

#### **ECOLOGY, HEALTH AND SAFETY**

#### **APPLICATION INSTRUCTIONS**

#### SUBSTRATE QUALITY / PRE-TREATMENT

#### SUBSTRATE QUALITY

The cementitious substrate must be sound and of sufficient with compressive strength (≥ 20 N/mm²) with a minimum pull off strength of 1.0 N/mm².

Substrates must be clean, dry and free of all contaminants such as dirt, oil, grease, polish, coatings, water soluble and water-resistant adhesives, varnish, laitance, surface treatments and loose friable material. Remove separation and sinter layers.

#### SUBSTRATE PREPARATION

- Prepare substrates, separation and sinter layers mechanically by selecting and using abrasive blast cleaning, grinding or planing / scarifying equipment for the type of substrate.
- The final texture of the substrate must be open textured and gripping.
- Remove weak cementitious and levelling layers.

- Surface defects such as blow holes and voids must be fully exposed using the surface preparation equipment.
- Use products from the Sikafloor®, Sikadur® and Sikagard® range of materials to level the surface or fill cracks, blow holes and voids. Contact Sika Technical Services for additional information on products for leveling and repairing defects.
- Products must be cured before applying with Sikafloor®-4400 DecoCem
- Use industrial vacuuming equipment to remove all dust, loose and friable material from the application surface before applying the product.
- Provide a pore free surface before applaying the Sikafloor®-4400 DecoCem
- Edge and movement joints must be brought through to the finished surface and must be protected so the product will not flow into the joint.
- For the best colour homogenity every mix should have equal amount of water, mix and application times
- Use an isolating strip to prevent product bonding onto vertical surfaces, i.e. pipes, ducts, conduits, walls, columns etc.

#### **MIXING**

- Do not add more than 4,3 litres of water to 20 kg of nowder
- Do not mix or blend with OPC cements or other bind ors

Use an electric single with helical disc-shaped mixing paddle (<600 rpm).

Pour clean water into a clean mixing container. Mix the water slowly while gradually adding the right amount of powder

Mix continuously for at least 2 minutes to achieve a uniform mix.

To allow entrained air to escape and mature, do not mix for  $^{\sim}2$  minutes.

Mix for a further ~10 seconds.

Note: Mixing procedure should go in a continuous process, with minimized waiting times applying the product to the wet edge of the previous mix placed on the floor.

#### **APPLICATION**

- Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.
- Before application, confirm substrate moisture content, relative air humidity, dew point, substrate, air and product temperatures.
- To reduce the risk of cracking, protect freshly applied



product from high ambient temperatures, direct sunlight and draughts.

Pour the mixed product onto the substrate. Spread the product evenly using a, trowel, screed rake or pin-leveller (pin-rake) to the required thickness and smooth with smoothing trowel, surface blade. Wet-in-wet application with applying the product to the wet edge of the previous mix placed on the floor. The use of a spikeroller is not recommended.

#### **CLEANING OF EQUIPMENT**

Clean all tools and application equipment with water immediately after use.

#### LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

#### **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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