

SYSTEM DATA SHEET

Sikafloor® PurCem® HS-21

Self-smoothing, medium to heavy duty, matt finish polyurethane cement hybrid flooring system

DESCRIPTION

Sikafloor® PurCem® HS-21 system is made with polyurethane cement technology and is part of the Sikafloor® PurCem® flooring range. The Sikafloor® PurCem® HS-21 system is especially designed to withstand chemical attack, high impact and can be used in wet and dry processing plants.

The system is composed of an highly durable polyurethane cement body coat, it has an aesthetic, easy to clean and smooth surface, providing medium slip resistance. Is typically installed at 4 to 6 mm thick.

USES

Sikafloor® PurCem® HS-21 may only be used by experienced professionals.

- Food processing plants, in wet or dry process areas, freezers and coolers, thermal shock areas
- Chemical plants
- Laboratories
- Workshops

CHARACTERISTICS / ADVANTAGES

- High chemical resistance. Resists a wide range of organic and inorganic acids, alkalis, amines, salts and solvents
- Good temperature resistance
- High mechanical and abrasion resistance
- Easy application
- Easy to clean and maintain
- Seamless, non taint, odourless
- Smooth, matt surface
- Tolerant to moisture in the substrate
- Very good life cycle cost performance

SUSTAINABILITY

- AgBB certificate
- Emission class M1
- GISCODE PU40/ZP1 (Polyurethan/cement hybrid)
- EPD

DGNB – New buildings and extensive renovations, version 2020 2.0.0 :

The system complies with requirements for indicator 20, quality level 4, according to criteria matrix for ENV1.2/Environmentally hazardous substances.

Documented by technical datasheet, safety datasheet and emission certificate (AgBB/M1).

Click here to see other documents:

[Sikafloor®-150](#)

[Sikafloor®-21 PurCem®](#)

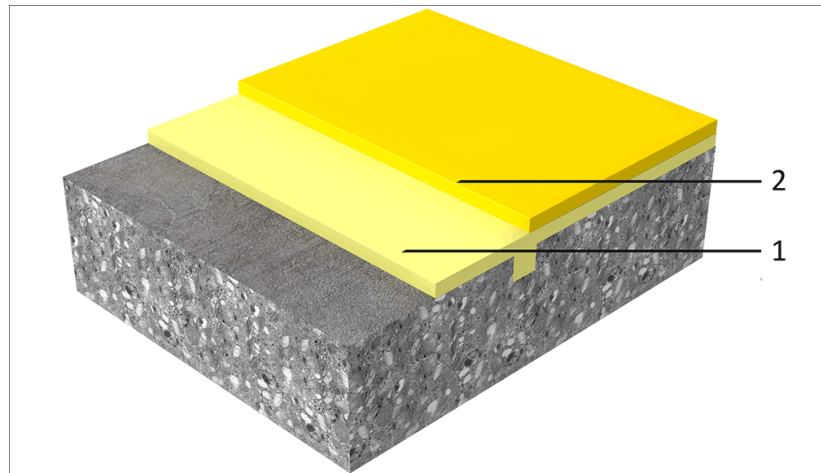
APPROVALS / CERTIFICATES

- Slip resistance DIN EN 16165, MPI, Test certificate No. 12 10552 - S/ 22

SYSTEM INFORMATION

System structure

Sikafloor® PurCem® HS-21



Layer	Product
1. Scratch coat	Sikafloor®-21 PurCem®
2. Body coat	Sikafloor®-21 PurCem®

As optional primers Sikafloor® -150/-161 + quartz sand 0.4–0.8 mm broadcast to excess can be used. Please refer to the individual Product Data Sheet.

Composition	Water-based polyurethane cement hybrid
Appearance	Smooth surface, matt finish
Colour	Agate Grey, Beige, Carmine Red, Dusty Grey, Golden Yellow, Marine Blue, Pebble Grey, Yellow Greene.
Nominal thickness	~ 4-6 mm
Volatile organic compound (VOC) content	Very low content of volatile organic compounds, it fulfils the stringent demands for indoor air quality and low VOC emitting products AgBB.

TECHNICAL INFORMATION

Water absorption	0 %	(CP BM2/67/2)
Abrasion resistance	Class "Special" Severe abrasion resistance	(BS 8204 Part 2)
	AR 0.5	(EN 13892-4)
	Class A6	(EN 13892-3)
	< 900 mg (H-22/1000/1000)	(ASTM D 4060-01)
Resistance to impact	Class III (≥ 20Nm)	(ISO 6272)
	2 pounds/30 inches (3 mm thick)	(ASTM D 2784)
Indentation	0	(MIL – PFR 24613)
Compressive strength	>55 N/mm ² after 28 days at +23°C / 50% r.h.	(BS EN 13892-2)
Tensile adhesion strength	> 2.0 N/mm ²	(EN1542)
Reaction to fire	B _{fl} -s1	(EN 13501-1)
Chemical resistance	Please refer to Sikafloor® PurCem® chemical resistance guide. Contact Sika technical service for specific information.	

Temperature resistance	4 mm	6 mm
	-15 °C to +70 °C	-25 °C to +70 °C
The product is resistant to short term contact with temperatures of +90°C, mainly during the cleaning regimes.		
Capillary absorption	< 0.002 kg/(m ² ×h ^{0.5})	(EN 1062-3)
USGBC LEED Rating	Conforms Section EQ (Indoor Environmental Quality), Credit 4.2 Low-Emitting Materials Paints and Coatings. Calculated VOC content ≤ 50 g/l	
Coefficient of friction	Rubber:	0.5 (ASTM D 1894-61T)
	Steel:	0.3
Skid / slip resistance	R 10	(DIN 51130)
	SRV Dry	SRV Wet
	70	60 (EN 13036- 4)

APPLICATION INFORMATION

Consumption	Layer	Product	Consumption
	1. Scratch coat	Sikafloor®-21 PurCem®	~1.0–3.0 kg/m ²
	2. Body coat	Sikafloor®-21 PurCem®	~1.9 kg/m ² /mm
Consumptions are theoretical and do not include any wastage, additional material need due to porosity, substrate profile etc.			
Material temperature	Please refer to the individual Product Data Sheet		
Ambient air temperature	+10 °C min / +40 °C max		
Relative air humidity	80 % max		
Dew point	Beware of condensation! The substrate and uncured floor must be at least 3 °C above dew point to reduce the risk of condensation or other disturbance of the surface on the floor finish.		
Substrate temperature	+10 °C min / +40 °C max		
Substrate moisture content	Sikafloor® PurCem® HS-21 can be installed on substrates with higher moisture content. The substrate needs to be visibly dry and have an adequate pull-off strength min 1.5 N/mm ² . No ponding water. Check for rising moisture.		
Applied product ready for use	Temperature	Foot traffic	Light traffic
	+10 °C	~20 hours	~34 hours
	+20 °C	~12 hours	~16 hours
	+30 °C	~8 hours	~14 hours
			Full cure
			~7 days
			~4 days
			~3–4 days

Note: Times are approximate and will be affected by changing ambient conditions and substrate conditions

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.

FURTHER INFORMATION

Please refer to:

- Sikafloor® PurCem® Method Statement
- Sika® Method Statement Mixing and Application of Flooring Systems
- Sika® Method Statement Surface Evaluation & Preparation

- Sikafloor® PurCem® Product Data Sheets

IMPORTANT CONSIDERATIONS

- Always ensure good ventilation when using Sikafloor® PurCem® products in a confined space, to prevent excessive ambient humidity.
- Freshly applied Sikafloor® PurCem® products, must be protected from damp, condensation and direct water contact (rain) for at least 24 hours.
- Always allow a minimum of 48 hours after product application prior to placing into service in proximity with food stuffs.

- Products of the Sikafloor® PurCem® product range are subject to discolouration when exposed to UV radiation. Extent depends on colour. There are no measurable losses of any properties when discolouration occurs and it is a purely aesthetical matter.
- Products can be used outside provided the change in appearance is acceptable by the customer. In some slow curing conditions, soiling of the surface may occur when opened to foot traffic, even though mechanical properties have been achieved. It is advised to remove dirt using a dry mop or cloth. Avoid scrubbing with water for the first three days.

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.

MAINTENANCE

CLEANING

Please refer to Sikafloor®- Cleaning Regime.

LOCAL RESTRICTIONS

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

LEGAL NOTES

Any information or suggestions for use concerning Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

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SYSTEM DATA SHEET
 Sikafloor® PurCem® HS-21
 July 2022, Version 05.01
 020814900000000008

SikafloorPurCemHS-21-en-DK-(07-2022)-5-1.pdf