

SYSTEM DATA SHEET

Sikafloor® PurCem® HM-20

HIGH STRENGTH-TROWEL GRADE, HEAVY DUTY POLYURETHANE CEMENT HYBRID FLOORING SYSTEM

DESCRIPTION

Sikafloor® PurCem® HM-20 is made with polyurethane cement technology and is part of the Sikafloor® PurCem® flooring range. Sikafloor® PurCem® HM-20 is a trowel applied coloured modified polyurethane mortar screed resin suitable for floors subject to temperature shocks and heavy loading, abrasion and chemical exposure.

It has a textured aggregate surface providing medium to heavy profile slip resistance and is typically installed at 6 to 9 mm thick.

USES

Sikafloor® PurCem® HM-20 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

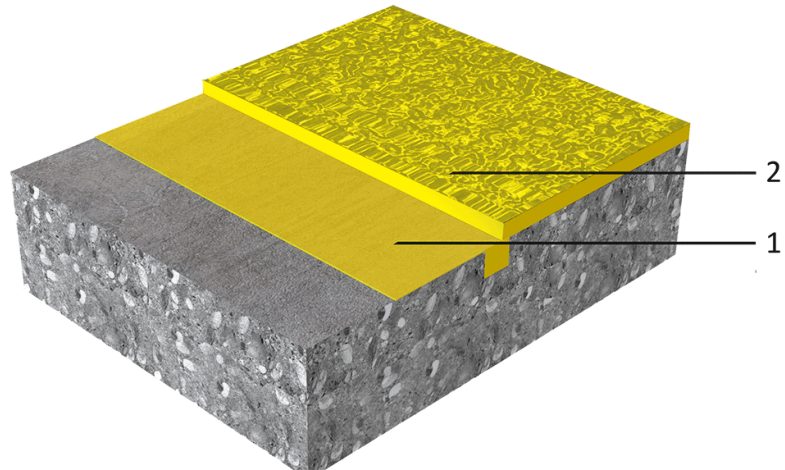
- High chemical resistance. Resists a wide range of organic and inorganic acids, alkalis, amines, salts and solvents
- Good resistance to high temperature changes
- Steam cleanable at 9 mm thick
- High mechanical and abrasion resistance
- Easy application. Normally, no concrete primer or sealer required
- Fluid consistency requires less labour to install than conventional heavy duty modified PU trowel grade screeds
- Easy to clean and maintain
- Seamless, non-taint, odourless
- Smooth, matt surface
- Tolerant to moisture in the substrate
- Very good life cycle cost performance

PRODUCT INFORMATION

Packaging	Please refer to the individual Product Data Sheet
Shelf Life	Please refer to the individual Product Data Sheet
Storage Conditions	Please refer to the individual Product Data Sheet

SYSTEM INFORMATION

System Structure **Sikafloor® PurCem® HM-20**



Layer	Product
1. Scratch coat + Lightly broadcast with Quartz Sand (0.3–0.9 mm)	Sikafloor®-21 PurCem® LP Sikadur®-501
2. Body coat	Sikafloor®-20 PurCem® LP

Composition	Water-based polyurethane cement hybrid
Appearance	Textured surface, matt finish
Colour	Red, Green, Cream, Yellow, Grey, and Light Grey
Nominal Thickness	~ 6–9 mm

TECHNICAL INFORMATION

Shore D Hardness	80–85	(ASTM D 2240)
Compressive Strength	28 days	~50 N/mm ² (BS EN 13892-2) at +23 °C / 50% r.h.
Tensile Strength	28 days	~4.3 N/mm ² (ASTM C 307) at +23 °C / 50% r.h.
Tensile Strength in Flexure	28 days	~9.5 N/mm ² (3 mm) (ASTM C 580) at +23 °C / 50% r.h.
Tensile Adhesion Strength	>1.5 N/mm ² (failure in concrete)	(EN1542)
Reaction to Fire	Class Bfl-S1	(EN 13501-1)
Chemical Resistance	Please refer to Sikafloor® PurCem® chemical resistance guide. Contact Sika technical service for specific information.	
Temperature Resistance	6 mm -25 °C to +80 °C	9 mm -40 °C to +120 °C

Sikafloor® PurCem® HM-20 is fully resistant to liquid spillage and discharge. Sikafloor® PurCem® HM-20 is designed to withstand thermal shock caused by steam cleaning when thickness is 9 mm.

Permeability to Water Vapour	0.148 g/h/m ² (6.1 mm)		(ASTM E-96)
Skid / Slip Resistance	SRV Dry	SRV Wet	(EN 13036- 4)
	70	65	

APPLICATION INFORMATION

Consumption	Layer	Product	Consumption
	1. Scratch coat + Lightly broadcast with Quartz Sand (0.3–0.9 mm)	Sikafloor®-21 PurCem® Sikadur®-501	~1.5–2.0 kg/m ² ~2.0–2.5 kg/m ²
	2. Body coat	Sikafloor®-20 PurCem®	~2.0 kg/m ² /mm

Consumptions are theoretical and do not include any wastage, additional material need due to porosity, substrate profile etc.

Product Temperature	Please refer to the individual Product Data Sheet
Ambient Air Temperature	+10 °C min / +30 °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 / +30 °C max
Substrate Moisture Content	Sikafloor® PurCem® HM-20 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	Full cure
	+10 °C	~24 hours	~48 hours	~7 days
+20 °C	~24 hours	~24 hours	~5 days	
+30 °C	~12 hours	~18 hours	~3–4 days	
+35 °C	~12 hours	~18 hours	~3–4 days	

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

MAINTENANCE

CLEANING

Please refer to Sikafloor®- Cleaning Regime.

FURTHER DOCUMENTS

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 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 for 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.
- Please refer to the latest Product Data Sheet of Sikafloor®-20 PurCem® LP for more information on the product and its limitations.

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.

Sika Kimia Sdn. Bhd.

Lot 689, Nilai Industrial Estate, 71800 Nilai

Negeri Sembilan D.K., Malaysia

Phone: +606-7991762

Fax: +606-7991980

e-mail: info@my.sika.com

Website: www.sika.com.my



SYSTEM DATA SHEET

Sikafloor® PurCem® HM-20

June 2018, Version 03.01

02081490000000014

SikafloorPurCemHM-20-en-MY-(06-2018)-3-1.pdf