BUILDING TRUST

SYSTEM DATA SHEET

Sikafloor® PurCem® VG

HIGH STRENGTH POLYURETHANE CEMENTITIOUS COVING MORTAR ENGINEERED WITH SIKAFLOOR -29 NA PURCEM CAN BE INSTALLED TO ANY HEIGHT FROM 1/8'' - 1/4'' (125 - 250 MILS) THICKNESS

PRODUCT DESCRIPTION

Sikafloor® PurCem® VG is a vertical grade, three-component, solid color, water dispersed polyurethane cement and aggregate mortar used for detailing, vertical and coving. It has a finely textured smooth aggregate appearance that provides excellent resistance to abrasion, impact, chemical attack and other physical aggression. System can be installed to any hight from 1/8'' - 1/4'' (125 - 250 mils) thickness.

USES

Sikafloor® PurCem® VG may only be used by experienced professionals.

- Sikafloor® PurCem® VG is primarily used for vertical application of cove on concrete substrates
- Typically used in food processing plants, wet and dry process areas, freezers and coolers, dairies, breweries, wineries, distilleries, laboratories, chemical process plants, pulp and paper plants, warehouses and storage areas.

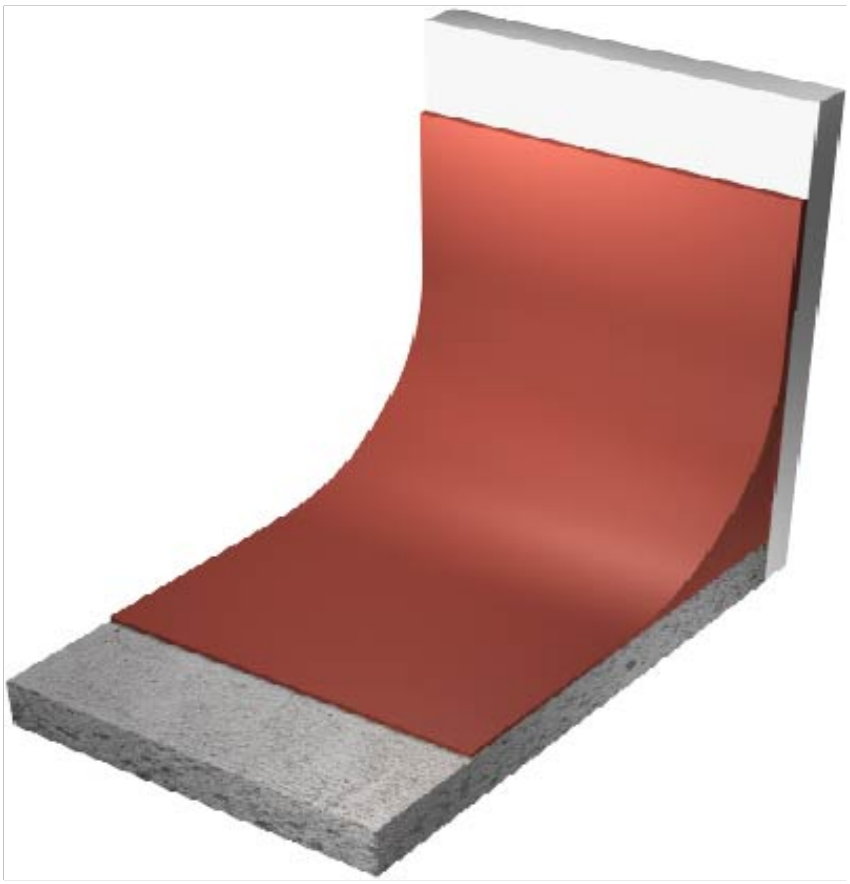
CHARACTERISTICS / ADVANTAGES

- Can be applied on green concrete, typically 7-10 days. Full 28 days cure time is not necessary.
- Can be applied over partially cured concrete substrates (> 4% mass (pbw –part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter surface moisture).
- Can be applied to concrete substrates where <100 % relative humidity is measured as per ASTM F2170.
- Substrate has tensile bond strength in excess of 218 psi (1.5 MPa). Substrate has tensile bond strength in excess of 218 psi (1.5 MPa).
- Resists a very wide range of organic and inorganic acids, alkalis, amines, salts and solvents. Consult Sika Technical Service for full details. Refer to the Sikafloor - 29 NA Purcem Chemical Resistance Chart.
- Similar coefficient of thermal expansion to concrete allowing movement with the substrate through normal thermal cycling. It will perform and retain its physical characteristics through a wide temperature range from -40 °F (-40 °C) up to 248 °F (120 °C).
- Steam cleanable at 1/8'' to 1/4'' (125 to 250 mils) thickness.
- Non-tainting, odorless.
- Behaves plastically under impact / deforms but will not crack or debond.
- High abrasion qualities result from its aggregate structure.
- Extra Expansion joints are not necessary; maintain and extend existing expansion joints up through the Sikafloor PurCem Flooring System.
- Minimal maintenance costs, superior life cycle cost advantage versus tile.
- Meets the requirements of USDA for use in food plants.

SYSTEM INFORMATION

System Structure

Sikafloor® PurCem® VG System at 1/8''- 1/4'' (125 - 250 mils)



Description	Products	Thickness mils
Primer	Sikafloor®-31 NA PurCem*	8 -10
Mortar	Sikafloor®-29 NA PurCem	125 -250 with 1'' radius
Top Coat	Sikafloor®-31 NA PurCem*	8 -10
Options		
Primer**	Sikafloor®-161	8 -10

* To reduce cure time use Sikafloor®- PurCem® Fast Set
** Please consult with Sika representative for addtional options

Color	Available in standard PurCem colors.
Nominal thickness	1/8'' to 1/4'' (125 to 250 mils)
Minimum thickness	1/8'' (125 mils)
Volatile organic compound (VOC) content	Please refer to the individual Product Data Sheets.

TECHNICAL INFORMATION

Water Absorption	0.16%	ASTM C413 at 73°F (23°C) and 50% R.H
Shore D Hardness	80 - 85	ASTM D2240 at 73°F (23°C) and 50% R.H
Abrasion Resistance	CS-17/1,000 cycles/1,000 g -0.09 g loss H-22/1,000 cycles/1,000 g -4.01 g loss	ASTM D4060 at 73°F (23°C) and 50% R.H
Impact Strength	6.70 ft - lb (9.08 joules) at 1/8" (3 mm) of thicknesss	ASTM D2794 at 73°F (23°C) and 50% R.H
Indentation	~ 0%	MIL -PRF -24613 at 73°F (23°C) and 50% R.H
Compressive Strength	0.72 x 10-5 n/in/°F (1.3 x 10-5 mm/mm/°C)	ASTM D696 at 73°F (23°C) and 50% R.H
Tensile Strength	2.5 MPa (363 psi)	ASTM C307 at 73°F (23°C) and 50% R.H
Flexural Strength	8.1 MPa (1175 psi)	ASTM C580 at 73°F (23°C) and 50% R.H
	>254 psi (1.75 MPa) (substrate failure) Pull-off Strength	ASTM D4541 at 73°F (23°C) and 50% R.H
Microbiological Resistance	Resistance to Fungi Growth Rated 0 (no growth)	ASTM G21 at 73°F (23°C) and 50% R.H
	Resistance to Mold Growth Rated 10 (highest resistance)	ASTM D3273 at 73°F (23°C) and 50% R.H
Thermal Conductivity	Pass	ASTM C884 at 73°F (23°C) and 50% R.H
Coefficient of Friction	Steel 0.7 Rubber 0.8	ASTM D1894-61T at 73°F (23°C) and 50% R.H

APPLICATION INFORMATION

Coverage

Description	Products	Approximate Lin.ft./kit
Primer	Sikafloor®-31 NA PurCem*	1,344@8 mils
Mortar	Sikafloor®-29 NA PurCem	30@1/8'' & 1'' radius
Top Coat	Sikafloor®-31 NA PurCem*	1,260@1/8" & 1'' radius
Optional Primer	Sikafloor®-161	2,700@8 mils

*Sikafloor®- PurCem Fast Set Sq.Ft coverage per kit is equivalent to standard Sikafloor®- PurCem.

Ambient Air Temperature	Minimum/Maximum 40˚/85˚F (4˚/30˚C).
Substrate Temperature	Minimum/Maximum 40˚/85˚F (4˚/30˚C).
Pot Life	Please refer to the individual Product Data Sheets.
Waiting / Recoat Times	Please refer to the individual Product Data Sheets.

PRODUCT INFORMATION

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

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Surface should be clean and sound. Remove all dust, dirt, existing paint films, efflorescence, exudates, laitance, forms oils, hydraulic or fuel oils, brake fluid, grease, fungus, mildew, biological residues or any other contaminants which may prohibit good bond. Prepare the surface by any appropriate mechanical means, in order to achieve a profile equivalent to ICRI-CSP 3-6. The compressive strength of the concrete substrate should be at least 3,625 psi (25 MPa) and a minimum of 218 psi (1.5 MPa) in tension at the time of application.

Repairs to cementitious substrates, filling of blowholes,leveling of irregularities, etc. should be carried out using an appropriate Sika profiling mortar. Contact Sika Technical Service for a recommendation.

Edge Terminations
All free edges of a Sikafloor PurCem floor, whether at the perimeter, along gutters or at drains require extra anchorage to distribute mechanical and thermal stresses. This is best achieved by forming or cutting grooves in the concrete. Grooves should have a depth and width of 2 times the thickness of the Sikafloor PurCem floor. Contact Sikafloor Technical Service for more information and construction details.

If necessary, protect all free edges with mechanically attached metal strips. Do not featheredge, always turn into an anchor groove.

Expansion Joints
Expansion joints should be provided in the substrates at the intersection of dissimilar materials. Isolate areas subject to thermal stresses, vibration movements or around load-bearing columns and at vessel sealing rings. Refer to details at https://usa.sika.com/flooring.

Priming
Please refer to the individual Product Data Sheet for each component.

MIXING

Please refer to the individual Product Data Sheet for each component.

APPLICATION

Please refer to the individual Product Data Sheet for each component.

LIMITATIONS

Please refer to the individual Product Data Sheet for limitations.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

Please refer to the individual Product Data Sheets.

LEGAL DISCLAIMER

- **KEEP CONTAINER TIGHTLY CLOSED**
- **KEEP OUT OF REACH OF CHILDREN**
- **NOT FOR INTERNAL CONSUMPTION**
- **FOR INDUSTRIAL USE ONLY**
- **FOR PROFESSIONAL USE ONLY**

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling 1-800-933-7452.

Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Mexicana S.A. de C.V.
Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537