Sikafloor®-265
HIGH-SOLIDS, LOW-VOC, FLEXIBLE AND CRACK-BRIDGING, WATERPROOF EPOXY MEMBRANE OR COATING

Description
Sikafloor®-265 is a two-component, high solids and flexible epoxy designed for use as a seamless, waterproofing membrane or coating. This elastomer and polymer hybrid maximizes flexibility and elongation to provide excellent crack-bridging capabilities while providing thermal shock resistance. It can be used alone as a clear material or with the addition of Sikafloor® Epoxy Color Additive it can provide a pigmented membrane or coating. Sikafloor®-265 has been designed for slab-on-grade and suspended concrete substrates where a crack-isolation mechanism is required beneath Sikafloor® epoxy systems.

Where to Use
- Ideal for mechanical equipment rooms and floors in interior spaces where humidity and temperature are micro-controlled.
- Sikafloor®-265 is able to operate as a waterproofing and crack-isolation membrane. When applied at 40 mils and used beneath epoxy flooring systems, it provides a mechanism to separate epoxy flooring from cracking/movement of substrates.
- In offices and areas where raised access floors contain liquid lines and elastomeric waterproof protection is required to the underlying slab to protect computer rooms and similarly sensitive facilities below.

Advantages
- Economical.
- Ease of application.
- High solids.
- Flexible, bridges hairline cracks.
- Resistance to thermal shock.
- Clear or available in a wide range of colours.
- Meets USDA requirements for incidental food contact.
- Potential LEED® Canada Credits

Technical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot Life</td>
<td>40 min approx.</td>
</tr>
<tr>
<td>Waiting Time Between Coats</td>
<td></td>
</tr>
<tr>
<td>Primer to Primer</td>
<td>8 h min. / 48 hrs max.</td>
</tr>
<tr>
<td>Membrane / Coating to Primer</td>
<td>8 h min. / 24 hrs max.</td>
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<tr>
<td>Membrane / Coating to Membrane / Coating</td>
<td>12 h min. / 48 hrs max.</td>
</tr>
<tr>
<td>Cure Time</td>
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<tr>
<td>Foot Traffic</td>
<td>12 - 16 h</td>
</tr>
<tr>
<td>Light Traffic</td>
<td>24 h</td>
</tr>
<tr>
<td>Heavy Traffic / Chemical Spillages</td>
<td>72 h</td>
</tr>
<tr>
<td>Shore D Hardness ASTM D2240</td>
<td>40</td>
</tr>
<tr>
<td>Bond Strength ASTM D4541</td>
<td>3.5 MPa (520 psi) concrete failure</td>
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<td>Tensile Strength ASTM D638</td>
<td>7.2 MPa (1050 psi)</td>
</tr>
<tr>
<td>Tensile Elongation ASTM D638</td>
<td>125 %</td>
</tr>
<tr>
<td>Modulus of Elasticity ASTM D638</td>
<td>1697 MPa (246 100 psi)</td>
</tr>
<tr>
<td>Tear Strength ASTM D1938</td>
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<tr>
<td>Impact Resistance ASTM D2794</td>
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HOW TO USE

Surface Preparation

Concrete surfaces must be clean, sound and dry. Remove all dust, dirt, existing paint films, efflorescence, exudates, laitance, form 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 an open textured profile equivalent to ICRI / CSP 3.

Whenever “shot-blasting” is utilized, be careful to leave concrete with a uniform texture and not create tracking as this will be visible through coatings and in some cases thin section mortars. Over “blasting” will also result in reduced coverage rates and increased consumption of primers and/or subsequent topcoats.

All projections, rough spots, etc. should be ‘dressed-off’ to achieve a level surface prior to the application.

Repairs to cementitious substrates, filling of blowholes, leveling of irregularities, etc. should be carried out using an appropriate Sika® profiling mortar. Contact Sika Canada for recommendations.

Sweep and vacuum any remaining dirt and dust with a wet/dry vacuum. Removing residual dust will help ensure a tenacious bond between the Sikafloor® system and substrate.

The compressive strength of the concrete substrate should be at least 25 MPa (3625 psi) at 28 days and a minimum of 1.5 MPa (218 psi) in tension at the time of application of Sikafloor®-156 (where it is required) or Sikafloor®-265 where being applied directly onto the substrate.

Priming

Where two (2) coats of Sikafloor®-265 are being applied to a total d.f.t. of 40 mils, ie at 20 mils d.f.t. per coat, to produce a waterproof membrane, a primer is not typically required. If a single coat application of Sikafloor®-265 is being applied at 40 mils d.f.t., a primer is necessary.

The primer required is Sikafloor®-156, a two-component, high solids and low-viscosity epoxy which penetrates and seals porous surfaces and produces an adhesion promoting and pinhole-free substrate for subsequent Sikafloor® systems (Refer to Product Data Sheet for full information).

Apply primer by squeegee at a rate of 4 m²/L (160 ft²/US gal.) over dry concrete, to achieve a uniform thickness of 10 mils w.f.t. The product must then be backrolled into the surface to be coated to ensure complete and uniform coverage. Coverage will vary depending on the porosity of the prepared floor. Ensure that the primer is pore- and pinhole-free and provides a surface that will allow uniform and complete coverage of the entire substrate by the following Sikafloor®-265.

It is important to apply subsequent coats of the primer or Sikafloor®-265 within 8 to 24 hours (under normal curing conditions; see Properties above). If the primer is allowed to cure longer for than the 24 hours before subsequent coating takes place, the primed surface should be sanded/abraded to remove all gloss and produce a uniform, matte appearance. There should be no gloss present on the floor after subsequent vacuuming and/or solvent wiping before proceeding.

Mixing

Mix Ratio: Components A:B 1:1 by volume (A x 1 : B x 1).

Mixing will be affected by temperature; precondition materials for at least 24 hours to 18 to 30 °C (65 to 86 °F) before use. Ensure that all surface preparation is complete and both mixing and application equipment are in good working order, before starting to mix.

Pre-stir Components A and B separately, making sure all solids, including pigments, are evenly distributed and uniform consistencies are achieved within each individual Component.

Where a pigmented coating is required add the appropriately coloured Sikafloor® Epoxy Color Additive to the clear Component A (resin), using 0.95 L (1 US qt.) of additive per 5.68 L (1.5 US gal.) of Component A, and mix for at least two (2) minutes until a uniform colour is achieved.

Empty Component A (resin) into a suitably sized and clean pail and blend by adding Component B (hardener) while mixing using a very slow speed drill (200 - 350 rpm) and Exomixer®- or Jiffy-type mixing paddle (recommended), suited to the dimensions of the mixing container and keep the mixing paddle in the mix to minimize air entrapment. Blend thoroughly for at least two (2) and up to three (3) minutes until a uniform and consistent material is produced. During the blending operations and observing good safety practices, ie turning off and removing revolving parts, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete blending of (Components A + B). Note: Do not attempt to attend to unmixed material that may gather on the sides of the mixing container while mechanical or electrical parts are in motion.

Due to the difference in viscosity between Component “A” Resin and Component “B” Hardener, care must be taken to ensure that both components are thoroughly mixed together in order to avoid weak or partially cured spots in the coating.

Important: Mixing attempted at material and ambient temperatures below 18 °C (65 °F) will result in a decrease in product workability. Also, since this product does not require an induction time, it should be used immediately after mixing.
**Application**

Prior to application, measure and confirm substrate moisture content, ambient relative humidity, ambient and surface temperature and dew point. During installation, confirm and record above values at least once every 3 hours, or more frequently whenever conditions change (e.g. ambient temperature rise/fall, relative humidity increase/decrease, etc.).

Sikafloor®-265 should be applied by first pouring a bead of material in the form of a ribbon on the prepared/primed surface. This material should not be applied by roller into kit container or paint tray. Using a serrated squeegee or notched trowel spread, the material at a rate of approximately 2 m²/L (80 ft²/US gal.), applying as evenly as possible. The fluidity of the mixed material will result in it flowing, once poured and spread, so should not require back-rolling in most cases. Application must be undertaken immediately material is mixed and any finishing required, carried out in a timely manner.

Apply subsequent coats of Sikafloor®-265 or other Sikafloor® products within 48 hours (under normal curing conditions 23 °C [75 °F], 50 % R.H.). If the recoat window is missed, the surface should be sanded/abraded to remove all gloss and produce a uniform, matte appearance. There should be no gloss present on the floor after subsequent vacuuming and/or solvent wiping before proceeding.

**Clean Up**

Clean all tools and equipment immediately with Sika® Epoxy Cleaner. Once cured, product can only be removed mechanically. Wash hands and skin thoroughly with hot soapy water or use Sika® Hand Cleaner towels.

**Limitations**

- Sikafloor®-265 is best installed by skilled and experienced applicators. Consult Sika Canada for advice and recommendations.
- Minimum / Maximum substrate temperature: 15 °C / 30 °C (60 °F / 85 °F).
- High temperature and high humidity will reduce pot life and accelerate curing.
- Maximum ambient relative humidity: 85 %.
- Do not apply to concrete if measured air or substrate temperature is within 3 °C (5 °F) of surface temperature calculated dew point (substrate temperature can be lower than the ambient temperature). This will reduce the risk of condensation, which can lead to adhesion failure or blushing of the floor finish.
- Substrate Moisture Content: Moisture content of concrete substrate must be < 4 % by mass (pbw – part by weight) as measured with Tramex® moisture meter (as per ASTM F2659) on mechanically-prepared concrete surface according to this datasheet (see Surface Preparation section).
- If moisture content of concrete substrate is 4 - 6 % by mass (pbw – part by weight) as measured with Tramex® moisture meter (ASTM F2659), use appropriate moisture tolerant Sikafloor®-1610 NA primer. Where it exceeds 6 %, use Sikafloor®-81 or 82 EpoCem® as a temporary moisture barrier during application.
- Just prior to application, confirm substrate moisture content, ambient relative humidity, and dew point. During installation, confirm above values at least two times every six (6) hours.
- Do not apply to porous surfaces where significant moisture vapour transmission (out-gassing) will occur during application.
- Do not apply to polymer modified cement mortars (PCC) that may expand when sealed with an impervious resin.
- Do not apply to cracked or unsound substrates.
- Do not apply Sikafloor® to concrete substrate containing aggregates susceptible to ASR (Alkali Silica Reaction) due to risk of natural alkali redistribution below the Sikafloor® product after application. If concrete substrate has or is suspected to have ASR (Alkali Silica Reaction) present, do not proceed. Consult with design professional prior to use.
- Do not use on exterior, on-grade substrates; for interior use only.
- Do not apply to surfaces where moisture vapour can condense and freeze.
- Apply the primer, where a single coat of Sikafloor®-265 is being installed, to the prepared surface using a squeegee and back roll to provide uniform coverage. Ensure that the coating is pore- and pinhole-free and provides uniform and complete coverage of the entire concrete substrate. If necessary, apply additional coats of primer to achieve a pore/ pin-hole free surface.
- Precondition material for at least 24 hours to between 18 to 26 °C (65 to 80 °F) before use to assist application and achieve the best results.
- On no account should this product be thinned. Addition of thinners (eg solvent or water) will retard the cure, reduce the ultimate properties of this product and void any applicable Sika warranty.
- Do not mix Sikafloor® materials by hand: mechanical mix only.
- It is recommended, when installing over concrete substrates, to install Sikafloor®-265 during steady or declining ambient temperatures to minimize the risk of concrete outgassing. Concrete outgassing may result in pinholing of the Sikafloor®-265.
- Do not apply while ambient and substrate temperatures are rising, as pinholes may occur. Ensure there is no vapor drive at the time of application. Refer to ASTM D4263, may be used for a visual indication of vapour drive.
- Freshly applied Sikafloor®-265 should be protected from dampness, condensation and water for at least 24 hours.
- This product is not designed nor intended for negative side waterproofing.
- Colour uniformity cannot be completely guaranteed from batch to batch (numbered) of Sikafloor® Epoxy Color Additive. Take care when using Sikafloor® products to draw from inventory in batch number sequence, do not mix batch numbers in a single floor area.
- Will discolour over time when exposed to sunlight (UV) and under certain artificial lighting conditions. UV resistant, light stable topcoats are available where ultimate clarity or colour retention is required.
- Sikafloor®-265 does not possess measurable chemical resistance values in itself and requires overcoating with a Sikafloor system or topcoat in order to provide such.
Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

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, within their shelflife. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or 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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

SIKA CANADA INC.
Head Office
601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A0

Other locations
Toronto
Edmonton
Vancouver

1-800-933-SIKA
www.sika.ca

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Certified ISO 14001 (CERT-0202791)