PRODUCT DATA SHEET
Sikafloor®-160

EPOXY EPO-ROK MORTAR SYSTEM

PRODUCT DESCRIPTION
A general service, two component, high solids, epoxy system for use as a primer, coating or as a binder for pigmented slurry/broadcast system or epoxy mortar.

USES
Sikafloor®-160 may only be used by experienced professionals.
It's formulated to restore and protect concrete floors from impact and abrasive traffic. Sikafloor®-160 is designed as a primer for Sikafloor epoxy and urethane coatings, as well as a binder resin for broadcast and troweled systems.

CHARACTERISTICS / ADVANTAGES
- Low VOC.
- Excellent penetration and adhesion.
- Multi-purpose use.
- 100% solids as supplied.
- Protects new concrete from abuse.
- Rejuvenates worn surfaces, to a smooth finish.
- Designed to take heavy loads.
- Formulated for easy application.
- Fast curing reduces downtime.
- Smooth and slip resistant surface possible (Optional)
  Use of Sikadur-506 RC Type Aggregate which contains 30% recycled basalt, Pre-Consumer Recycled Material.
- Meets the qualifications for acquiring LEED points.

APPROVALS / STANDARDS
- Flammability (Epo-Rok mortar system) (ASTM D-635):
  Self Extinguishing
- With Sikafloor-264, 264 Thixo Top coat (ASTM E-648 - 2017): Class I
- Sikafloor 340 or 315N Top coat: Class I
- Sikafloor 217, Sikafloor 510 Quartz Broadcast topcoat:
  Class I

PRODUCT INFORMATION

<table>
<thead>
<tr>
<th>Packaging</th>
<th>Component A: 5.00 US gal. (18.9 L)*</th>
<th>Component A: 50 US gal. (189 L)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Component B: 5.00 US gal. (18.9 L)</td>
<td>Component B: 50 US gal. (189 L)</td>
</tr>
<tr>
<td></td>
<td>Components A+B: 15 US gal. (56.7 L)</td>
<td>Components A+B: 150 US gal. (567 L)</td>
</tr>
<tr>
<td></td>
<td>Component C: 20 bags (50 lbs. each)</td>
<td>Component C: 200 bags (50 lbs. each)</td>
</tr>
<tr>
<td></td>
<td>* (2 units needed)</td>
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</tbody>
</table>

| Appearance / Color         | Neutral aggregates or pigmented with Sikafloor Epoxy Color Additive-N; 1 quart (1.0 L) size. Depending on the color chosen, 1 or 2 of color packs may be required per 5 gallon mix |

Product Data Sheet
Sikafloor®-160
May 2019, Version 03.02
020811020010000052
Shelf Life
2 years in original unopened container under proper storage conditions

Storage Conditions
Store dry between 40–90 °F (4–32 °C)

Solid content by weight
~100 %

Solid content by volume
~100 %

Volatile organic compound (VOC) content
13 g/L (A+B Combined)

TECHNICAL INFORMATION

Shore D Hardness
80 (ASTM D-2240)

Abrasion Resistance
110 mg (ASTM D-4060)

Compressive Strength
9,200 Psi (63.4 MPa) (ASTM C-579)

Flexural Strength
5,795 psi (39.95 MPa) (ASTM C-580)

Tensile Strength
2,176 psi (14.7 MPa) (ASTM C-307)

Tensile Adhesion Strength
> 350 psi (Concrete failure) (ASTM D-4541)

Indentation
0.23 % (MIL-PRF-24613)

Chemical Resistance
Please consult Sikafloor Technical Services.

Thermal Resistance
Pass (ASTM C-884)

Water Absorption
0.55 % (ASTM C-413)

APPLICATION INFORMATION

Coverage
Applied over relatively smooth concrete floors. Rough, worn or pitted concrete floors will require additional material.

<table>
<thead>
<tr>
<th>Size Unit</th>
<th>Sq. feet/unit</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 US gal unit (20 Bags)</td>
<td>448 ft² (41.6 m²)</td>
<td>1/4&quot; (6 mm)</td>
</tr>
<tr>
<td></td>
<td>600 ft² (52 m²)</td>
<td>3/16&quot; (4.8 mm)</td>
</tr>
<tr>
<td>150 US gal unit (200 Bags)</td>
<td>4,480 ft² (416 m²)</td>
<td>1/4&quot; (6 mm)</td>
</tr>
<tr>
<td></td>
<td>6,000 ft² (520 m²)</td>
<td>3/16&quot; (4.8 mm)</td>
</tr>
</tbody>
</table>

Pot Life

<table>
<thead>
<tr>
<th>Material Temperature</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 °F (10°C)</td>
<td>~50 minutes</td>
</tr>
<tr>
<td>68 °F (20°C)</td>
<td>~25 minutes</td>
</tr>
<tr>
<td>86 °F (30°C)</td>
<td>~15 minutes</td>
</tr>
</tbody>
</table>

Cure Time

<table>
<thead>
<tr>
<th>Ambient &amp; Substrate Temperature</th>
<th>Foot traffic</th>
<th>Light traffic</th>
<th>Full cure</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 °F (10 °C)</td>
<td>~24 hours</td>
<td>~3 days</td>
<td>~10 days</td>
</tr>
<tr>
<td>68 °F (20 °C)</td>
<td>~12 hours</td>
<td>~2 days</td>
<td>~7 days</td>
</tr>
<tr>
<td>86 °F (30 °C)</td>
<td>~8 hours</td>
<td>~1 days</td>
<td>~5 days</td>
</tr>
</tbody>
</table>
APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surface must be clean, sound and dry. Remove dust, laitance, grease, curing compounds, bond inhibiting impregnations, waxes and any other contaminants. All projections, rough spots, etc. should be removed to achieve a level surface prior to the application. Concrete - Should be cleaned and prepared to achieve a laitance-free and contaminant-free, open textured surface by shot blasting or equivalent mechanical means (CSP-3 to CSP-4 as per ICRI guidelines). Sweep and vacuum any remaining dirt and dust with a wet/dry vacuum. Removing residual dust will help ensure a tenacious bond between the primer/coating and the substrate. Whenever “shot-blasting” is utilized, be careful to leave concrete with a uniform texture. “Over-blasting” will result in reduced coverage rates of the primer and/or subsequent topcoats. The “shotblast” pattern may show through the last coat, known as “tracking”. The compressive strength of the concrete substrate should be at least 3,500 psi (24 MPa) at 28 days and at least 215 psi (1.5 MPa) in tension at the time of application. For other substrates, please contact Sikafloor Technical Services.

Priming

Priming for concrete substrate is required. For wet in wet application: Prime with either Sikafloor®-160 or Sikafloor® 161 using a squeegee and back roll to provide uniform coverage. Avoid ponding. If primer becomes tack-free, re-prime the substrate.

For application over cured primer: Apply either Sikafloor®-160 or Sikafloor® 161 using a squeegee and back roll to provide uniform coverage and broadcast a 20 mesh quartz sand into the fresh primer. Avoid ponding.

Please refer to the individual most current and respective Product Data Sheet for specific and detailed information.

MIXING

Mixing Ratio - 2 : 1 by volume.

For bulk packaging, when not mixing full units, each component must be pre-mixed separately to ensure product uniformity. Note: If a small mix unit is needed, mix the following quantities: 64 oz of Component A (Resin) + 32 oz of Component B (Hardener) + 1 bag of Sikadur 506 (50 lbs) This mix would yield approximately 22 ft² at 1/4” (6 mm).

Clear Resin:

Premix each component separately to ensure product uniformity. Empty Component B (Hardener) in the correct mix ratio into Component A (Resin). Mix the combined components for at least 2 minutes using a low speed drill (300–450 rpm) and Exomixer or Jiffy type paddle suited to the volume of the mixing container to minimize entrapped air. Be careful not to introduce any air bubbles while mixing. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing. Transfer the mixed binder (components A+B) into a suitable mechanical mixer. Gradually add aggregate (Component C) to the binder. Once all ingredients are combined, mix continuously and thoroughly for 2 to 4 minutes to ensure complete mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the mortar. Immediately transfer the materials onto the floor or into a screed box for application.

Field Pigmented:

Premix each component separately to ensure product uniformity. If color is desired, the appropriate Sikafloor® Epoxy Color Additive-N is added to Component A at a rate of 1 quart per 5 mixed gallons (i.e. Components A+B). Mix Component A and Sikafloor® Color Additive-N for 30 seconds or until a uniform color is achieved with a low speed drill (300–450 rpm) and Exomixer or Jiffy type paddle suited to the volume. Empty Component B (Hardener) in the correct mix ratio to Component A (Resin) and mix for additional 2 minutes. Be careful not to introduce any air bubbles while mixing. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing. Transfer the mixed binder (components A+B) into a suitable mechanical mixer. Gradually add aggregates (Component C) to the binder. Once all ingredients are combined, mix continuously and thoroughly for 2 to 4 minutes to ensure complete mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the mortar. Immediately transfer the materials onto the floor or into the screed box for application.

Note: The color of the installed Sikafloor®-160 may vary in shades, due to the high consumption of natural...
Do not mix more material than can be applied within the working time limits (i.e. Pot Life) at the actual field temperature.

APPLICATION

Mortar Application
Maintain all control joints and expansion joints through the screed where movement is expected. Place mortar onto the still uncured primed surface while still tacky or fully cured primer with 20 mesh quartz sand and spread using a steel trowel, gauge rake or if using a screed box, pull the box across the wet primer overlapping approximately 1 inch. The hand troweled or screed box applied material can then be power troweled. The power trowel will compact the material, remove voids and make the floor smooth and dense. (Excessive power troweling will cause blisters.) The finished surface should be relatively smooth, free of trowel marks and without any process areas. Finish using a clean steel finishing trowel or power trowel. Whenever Sikafloor®-160 does not abut a vertical surface, the mixed product should be troweled into a chase which is a special groove cut into the concrete floor during the preparation process. Areas around drains and elevation changes or terminations must maintain a minimum 1/4 in (6 mm) thickness. Sikafloor®-160 has a wet consistency. To finish areas inaccessible to a power trowel, use light “feathering” strokes with a hand trowel to smooth the surface. When Sikafloor®-160 has cured, the surface should be lightly ground or sanded to remove any burrs or surface defects then swept and vacuum.

Grout and Sealer Application
Grouting and sealing of Sikafloor® 160 is required. The following Sikafloor® products may be used, Sikafloor® 264, Sikafloor® 217 Thixo Lite or 264 Thixo Lite.

Please refer to the individual most current and respective Product Data Sheet for specific and detailed information.

CLEANING OF TOOLS
Clean all tools and application equipment with Thinner C immediately after use.Hardened and/or cured material can only be removed mechanically.

LIMITATIONS

Notes on Limitations:
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.).

Substrate Moisture Content: Moisture content of concrete substrate must be ≤ 4 % by mass (pbw – part by weight) as measured with a Tramex® CME/CMExpert type concrete moisture meter on mechanically prepared surface according to this product data sheet (preparation to CSP-3 to CSP-4 as per ICRI guidelines). Do not apply to concrete substrate with moisture levels > 4 % mass (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter. If moisture content of concrete substrate is > 4 % by mass (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter, use Sikafloor® 1610 or Sikafloor® 22NA or 24NA PurCem®. When relative humidity tests for concrete substrate are conducted per ASTM F2170 for project specific requirements, values must be ≤ 85 %. If values are > 85 % according to ASTM F2170 use Sikafloor® 1610 or Sikafloor® 22NA or 24NA PurCem. ASTM F2170 testing is not a substitute for measuring substrate moisture content. Use a Tramex® CME/CMExpert type concrete moisture meter as described above.

Material Temperature: Precondition material for at least 24 hours between 65 °F to 75 °F (18° to 24 °C)
Ambient Temperature: Minimum/Maximum 50/85 °F (10/30 °C)
Substrate Temperature: Minimum/Maximum 50/85 °F (10/30 °C). Substrate temperature must be at least 5°F (3°C) above measured Dew Point. Mixing and Application must adhere to Material, Ambient and Substrate temperatures listed above or a decrease in product workability and slower cure rates will occur.
Ambient Relative Humidity: Maximum ambient humidity 85 % (during application and curing)
Dew Point: Beware of condensation!
The substrate must be at least 5 °F (3°C) above the Dew Point to reduce the risk of condensation, which may lead to adhesion failure or “blushing” on the floor finish. Be aware that the substrate temperature may be lower than the ambient temperature.

Mixing: Do not hand mix Sikafloor materials. Mechanically mix only. Do not thin this product. Addition of thinners (e.g. water, solvent, etc.) will slow cure and reduce ultimate properties of this product. Use of thinners will void any applicable Sika warranty. Improper mixing procedure or incorrect mixing ratio may result in moisture sensitivity, whitening, slow cure, soft spots, and other defects.
  • RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.
  • 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 vapor drive.
• Certain physical and mechanical properties may vary depending on the type of aggregate and resin/aggregate ratio used. Sika does not warrant any performance characteristic for the finished product when used in conjunction with aggregates not provided by Sika.
• Freshly applied material should be protected from dampness, condensation and water for at least 24 h.
• 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.
• Any aggregate used with Sikafloor systems must be non-reactive and oven-dried.
• This product is not designed for negative side waterproofing.
• Typically not recommended for exterior slabs on grade where freeze/thaw conditions may exist
• Use of unvented heaters and certain heat sources may result in defects (e.g. blushing, whitening, debonding, etc.).
• Beware of air flow and changes in air flow. Introduction of dust, debris, and particles, etc. may result in surface imperfections and other defects.
• For professional use only by experienced applicators.

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

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.
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 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.

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