Industrial Flooring

# Sikafloor® Quartzite 3600

**Description**

Sikafloor Quartzite 3600 is a high solids, multi-component, 3/16'' thick decorative epoxy floor resurfacing system. Application consists of a 1/8'' trowel layer of Sikafloor 110, followed by a quartz broadcast into Sikafloor 203 and topcoated with Sikafloor 215.

**Where to Use**

- Pharmaceutical plants
- Hospitals and health care facilities
- Educational facilities
- Laboratories
- Break rooms and lavatories
- Shower and locker rooms
- Prisons/correctional institutions
- Stadiums

**Advantages**

- Tough, durable and seamless floor finish
- Attractive permanent multicolored patterns
- Minimal to no maintenance costs
- High solids/low odor
- Variety of textures available
- (Optional) Integral cove base and curbs
- (Optional) Crack-bridging/waterproofing flexible membrane
- (Optional) UV stable topcoat

**Chemical Resistance**

Before applying for protection against specific chemical environments, consult the Sikafloor Chemical Resistance Guide for the top coat used or contact Sika Technical Service at 800-933-SIKA (7452).

## Typical Data

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| **Available Colors** | Please consult a Sika Broadcast Quartz Blend Color Selection Guide for standard colors. | |

The properties below are for the Sikafloor 110 Epoxy Mortar, for other component properties please refer to their individual Technical Data Sheets at www.sikafloorusa.com.

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| **Compressive Strength** | ASTM C-597 | 9,000 psi |
| **Tensil Strength** | ASTM C-307 | 2,050 psi |
| **Flexural Strength** | ASTM C-580 | 4,200 psi |
| **Flexural Modulus of Elasticity** | ASTM D-790 | 2.1 x 106 psi |
| **Hardness (Shore D)** | ASTM D-2240 | 86-89 |
| **Thermal Coefficient of Linear Expansion** | ASTM D-696 | 3.75 x $10^{-5}$ in/in/°F |
| **Bond Strength** | ACI COM #403 | 350-400 psi (pp. 1139-1141) |
| **Indentation** | MIL-D-3134F | None |
| **Abrasion Resistance** (CS-17 Wheel, gm load, 1000 cycles) | ASTM D-1044 | .08 gm max |
| **Flammability** | ASTM D-635 | Self Extinguishing |

**Above typical values based on 7 days cure @ 75 °F**

**Shelf Life:** 2 years in original unopened container under proper storage conditions. Store dry between 40° - 90°F (5°-32°C).

**Packaging:** The Sikafloor 105 Primer is packaged in kits as pre-proportioned batches. Each two batch unit consists of 2 short filled 5 gallon pails of Part "R" Resin and 2 one gallon cans of Part "H" Hardener which are packed together in a box. Each mixed batch contains 2.4 gallons, 4.8 gallons per two-batch kit. Sikafloor 110 is packaged in pre-proportioned units. Batch kits include 4-triple batches, (4 containers of Resin, 4 containers of Hardener and 12 bags of aggregate). BULK PACKAGING: Each 25-gal unit consists of one 5-gal pail of Part "H" Hardener, four 5-gal pails of Part "R" Resin and requires 44 bags of Epo-Rok aggregate. Each 275-gal unit consists of one 55-gal drum of Part "H" and four 55-gal drums of Part "R" and requires 480 bags of Epo-Rok aggregate. Sikafloor 203 and 215 is available in pre-proportioned 3 gallon kits, 15 gallon kits and 165 gallon kits.

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## How to Use

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| **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 dressed off to achieve a level surface prior to the application. Concrete - Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by shot blasting or equivalent mechanical means. (CSP-3 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 and 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. It is also possible that the texture of the "shot-blast pattern" may show through the last coat. This is known as "tracking". The compressive strength of the concrete substrate should be at least 3500 psi (24 MPa) at 28 days and at least 250 psi (1.7 MPa) in tension at the time of application of Sikafloor 105 primer. |
| **System Coverage** | **Primer:** Sikafloor 105: approximately 480-600 sq. ft. per 2.4 gallon kit<br>**Mortar:** 1/8'' Sikafloor 110 Epoxy Mortar: 98-100 sq.ft./single triple batch kit<br>**Broadcast Coat:** Sikafloor 203: 80-100 sq.ft./gallon<br>**Colored Quartz:** 50 lbs./100 sq.ft.<br>**First Topcoat:** Sikafloor 215: 90-150 sq.ft./gallon<br>**Additional Top Coat (Optional):** Sikafloor 215: (200-250 sq.ft./gallon), Sikafloor 215 Satin: (400 sq.ft./gallon), Sikafloor 215 ST: (400 sq.ft./gallon), Sikafloor 510: (200-250 sq.ft./gallon), Sikafloor 315: (500 sq.ft./gallon), Sikafloor 340: (350-400 sq.ft./gallon), Sikafloor 310: (266-400 sq.ft./gallon) |
| **Cure Mechanism** | **Mortar:** Sikafloor 110: At 75°F (24° C), the coated area should be ready for foot traffic in 8 hours and light traffic in 24 hours. For heavy wheeled traffic and/or chemical spillages, allow a minimum of 72 hours cure.<br>**Broadcast Coat:** Sikafloor 203: At 75°F (24° C), the coated areas should be ready for foot traffic in 8-10 hours and light to medium traffic in 18-24 hours. For heavy-wheeled traffic and/or chemical spillages, allow a minimum of 48 hours cure.<br>**Topcoat:** Sikafloor 510: At 73°F (23° C), the coated areas should be ready for foot traffic in 12 hours, and light traffic in 24 hours. Full cure in 5 days. |
| **Mixing** | **Primer:** Sikafloor 105: Carefully empty the contents of the Part "H" Hardener entirely into the can of Part "R" Resin. Product should be mixed using a "Jiffy Mixer" and a slow speed drill (300-450 rpm) to minimize entrapping air. Mix until completely blended. This will take about 1-1/2 to 2 minutes. Be careful to mix the contents completely to avoid weak spots in the primer. During the mixing operations, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing. Mix only that quantity that can be used within its pot life.<br>**Mortar:** Sikafloor 110: Triple Kits (1 Pail Sikafloor 110 Resin, 1 Pail of Sikafloor 110 Hardener, 3 Bags of Sikafloor 110 Aggregate) The contents of the Part "H" Hardener is emptied entirely into the container of Part "R" resin. The combination is mixed with a low speed jiffy mixer for 2 - 3 minutes. Transfer the mixed binder (R+H) into a suitable mechanical mixer. Gradually add aggregates (component C) to the binder to avoid excessive air entrapment. Once all ingredients are combined, mix continuously and thoroughly for 90 seconds to ensure complete mixing. During the mixing operations, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing. Mix only that quantity that can be used within its pot life. NOTE: When using Neutral Sikafloor 110 aggregate first mix 6-12 oz. of Sikafloor Epoxy Color Additives per triple batch into the Part "R" Resin for 60-90 seconds. For bulk units, premix all pails of Part "H" Hardener and Part "R" Resin prior to mortar batching.<br>**Broadcast Coat and Topcoat:** Sikafloor 203 & 215: Carefully empty the contents of the Part "H" Hardener entirely into the can of Part "R" Resin. The Part "R" container is oversized to allow for easy mixing. Mix with a very low speed jiffy mixer, until completely blended. This will take about 2 to 3 minutes. Be careful not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in coating. During the mixing operations, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing. Mix only that quantity that can be used within its pot life. For bulk kits, mix ratio is 2 parts "R" to 1 part "H" by volume. Do not count Sikafloor Epoxy Color Additive in the volume ratio. |
| **Application** | **Primer:** Sikafloor 105: Using a flat squeegee and high quality 3/8" nap roller, apply Sikafloor 105 PRIMER evenly at the rate of approximately 480-600 sq. ft. per 2.4 gallon kit. Avoid leaving puddles in rougher areas.<br>**Mortar:** Sikafloor 110: The application of the Sikafloor 110 should begin right away over the "wet" primed surface. If the primer is allowed to become tack free, the surface must be reprimed before application. Place Sikafloor 110 onto the still uncured primed surface while still tacky and spread using a steel trowel, rake or screed box. If primer becomes tack-free, re-prime substrate. Finish using a clean steel finishing trowel or power trowel. The finished surface should be relatively smooth, free of trowel marks and without any process areas. |

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**Broadcast Coat:** Sikafloor 203: This product should be applied by first pouring a bead of material in the form of a ribbon on the surface to be coated. The material should not be left in the container too long because it will set faster thus reducing the pot life. Using a flat or notched squeegee, spread the poured Sikafloor 203 at a rate of approximately 80-100 sq.ft./gallon. Apply as evenly as possible, working from left to right, and then back. Back roll using a high quality 3/8" nap roller. Using a broadcaster, the colored aggregate is applied as evenly as possible over the freshly applied Sikafloor 203 at the rate of 100 sq. ft. per 50 lb. bag. Broadcasting by hand is acceptable, although the quartz should be broadcasted in a "rain fall" pattern. After cure, sweep and vacuum excess quartz.

**Topcoat:** Sikafloor 215: This product should be applied by first pouring a bead of material in the form of a ribbon on the surface to be coated. Using a notched squeegee, flat squeegee, or trowel spread the poured material at a rate of approximately, 90-150 sq.ft./gallon. Apply as evenly as possible, working from left to right, and then back. Back roll using a high quality 3/8" nap roller.

NOTE: Refer to specific product data sheets for optional top coats.

**Limitations**

- Minimum/Maximum substrate temperature: 60°F/85°F (15.5°C/30°C).
- Maximum relative humidity: 85%.
- Substrate temperature must be 5°F (3°C) above measured dew point.
- Conduct quantitative anhydrous calcium chloride testing in accordance with ASTM-F1869.

Maximum acceptable test result is 5 pounds per 1,000 $ft^2$ per 24 hours. Determine the surface moisture content by using an impedance moisture meter designed for use on concrete as detailed in ASTM E-1907. Acceptable test results shall be 4% by mass or less. If over, use Sikafloor EpoCem 81/82.

- Do not use on exterior, on-grade substrates.
- Terminate at shoulders cut into substrate, avoid feather-edging.
- Freshly applied Sikafloor 110, 203 and 215 should be protected from dampness, condensation and water for at least 24 hours.
- This product is not designed for exterior use, immersion, or any use where moisture can reach the underside of the coating.
- Do not thin this product. Addition of thinners will slow down the cure and reduce the ultimate properties of this product.

**Additional Info**

Sikafloor System Sheets describe a series of Sikafloor products installed in progression. For specific information on the individual products mentioned, including, Mixing, Application, Chemical Warnings, First Aid, Handling & Storage, and Clean Up, PLEASE REFER TO THE INDIVIDUAL PRODUCT'S TECHNICAL DATA SHEET, available at www.sikafloorusa.com. System sheets are updated periodically. To ensure the most current version is being used, visit Technical Resources on www.sikafloorusa.com. Proper material application is the responsibility of the user. Site visits made by Sika personnel are for making technical recommendations only and not for supervising or providing quality control. Before applying for protection against specific chemical environments, consult Chemical Resistance Guide or Sika Technical Service.



**Visit our website at www.sikafloorusa.com** **1-800-933-SIKA NATIONWIDE**

**Regional Information and Sales Centers.** For the location of your nearest Sika sales office, contact your regional center.

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