Sikafloor® Quartzite® HDB System
TROWELLED EPOXY UNDERLAYMENT AND DECORATIVE, MULTICOLOURED QUARTZ FINISH

Description
Sikafloor® Quartzite® HDB System is a decorative, 5 mm (3/16 in) thick, two layer epoxy floor system. The first layer consists of a 3 mm (1/8 in) thick, trowel-applied heavy-duty epoxy underlayment used to re-profile rough or deteriorated concrete surfaces or to create thin-set slope changes in wet areas in order to provide positive slopes to drains. The second layer is a 2 mm (5/64 in) thick, broadcast and sealed epoxy floor, composed of multicoloured quartz aggregates finished with transparent top coats to produce a seamless and aesthetic finish. Final surface appearance options include: integral cove base, gloss, satin or matte surface sheen and variable surface texture to produce a range of slip-resistant finishes.

Where to Use
- Cafeterias and commercial kitchens.
- Supermarket food preparation areas.
- Hospitals and healthcare facilities.
- Pharmaceutical plants.
- Laboratories.
- Educational facilities.
- Showers and locker rooms.
- Prisons and correctional facilities.
- Arenas and stadiums.
- Offices and government buildings.

Advantages
- Heavy duty yet decorative finish.
- Permanently attractive, multicoloured patterns.
- Durable and seamless surface.
- Rejuvenates existing or protects new concrete.
- Resurfaces worn or rough floors to a uniform finish.
- Can be used to create thin set slopes changes in wet areas.
- Low odour / low VOC.
- Variety of surface textures available.
- Glossy aesthetic finish.
- Optional satin or matte surface sheen.
- Optional integral cove base and curbs.
- Optional crack bridging, flexible membrane available.
- Canadian Food Inspection Agency acceptance.

Technical Data

<table>
<thead>
<tr>
<th>Packaging</th>
<th>Sikafloor®-156A</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 L and 30 L (2.6 and 7.9 US gal.) units</td>
<td></td>
</tr>
<tr>
<td>Sikafloor® Aggregate PT</td>
<td></td>
</tr>
<tr>
<td>20 kg (44 lb) bag</td>
<td></td>
</tr>
<tr>
<td>Sikafloor®-2002</td>
<td></td>
</tr>
<tr>
<td>10 L and 30 L (2.6 and 7.9 US gal.) units</td>
<td></td>
</tr>
<tr>
<td>Sikafloor® Broadcast Quartz Aggregate</td>
<td></td>
</tr>
<tr>
<td>22.7 kg (50 lb) bag</td>
<td></td>
</tr>
</tbody>
</table>

| Colour | 12 standard colour patterns |
| (see Sikafloor® Quartzite Colour Guide) (custom colour blends available on request) |

| Yield | Primer |
| Sikafloor®-156A |
| 4 m²/L (160 ft²/US gal.) at 10 mils w.f.t. |

| Screed Mortar | Sikafloor®-156A |
| A + B + Sikafloor® Aggregate PT |
| (3.0:1.0 = 4 L) 2 x 20 kg Sikafloor® Aggregate PT |
| Yield = 5.5 m² at 3 mm thick (60 ft² at 1/8") |

| 1st Broadcast | Sikafloor®-156A |
| 2.6 m³/L (106 ft³/US gal.) at 15 mils w.f.t. |
| Sikafloor® Broadcast Quartz Aggregate |
| 3 kg/m³ (60 lb/100 ft³) |
Sikafloor® Quartzite® HDB System
CSC Master Format™ 09 67 26
QUARTZ FLOORING

9-482

**HOW TO USE**

**Surface Preparation**

All concrete surfaces must be clean and sound. Remove any dust, laitance, grease, oil, dirt, curing agents, impregnations, wax, foreign matters, existing coatings and deleterious material, from the surface by any appropriate mechanical means, in order to achieve a profile equivalent to ICRI-CSP 3.9. The compressive strength of the concrete substrate should be at least 25 MPa (3625 psi) at 28 days and at least 1.5 MPa (218 psi) in tension at the time of application of Sikafloor® 156CA primer.

**Mixing**

**Prime Coat - Screed Mortar Resin- Broadcast Binder and Top Coat**

Pre-stir each component separately. Into a clean and suitably sized mixing vessel, measure and empty Component B in the correct mix ratio to Component A (see individual Product Data Sheets for specific product mix ratio information). Mix the combined components for at least three (3) minutes, using a low-speed drill (300 - 450 rpm) to minimize entrapping air. Use an Exomixer® type mixing paddle (recommended model) suited to the size of the mixing container. 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. The combined Sikafloor® liquids should be uniform in colour and consistency. Mix only that quantity which can be used within its pot life.

**Screed Mortar**

Transfer the mixed Sikafloor®-156CA binder (Components A+B) into a suitable Kol-type mixer; incorporating a motor spun mixing pail and a shear angle mixing blade. Gradually add Sikafloor® Aggregate PT (Component C) to the binder to avoid excessive air entrapment. Once all ingredients are combined, mix continuously and thoroughly for three (3) minutes 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 blending of all components. Mix only that quantity which can be used within its pot life.

**Application**

**Prime Coat:** Apply the Sikafloor®-156CA primer using a squeegee and backroll to achieve uniform coverage. **Note:** Mortar must be placed onto wet primer, if the primer becomes tack-free, re-prime the substrate. Porous or extremely absorbent concrete may require additional primer.

**Screed Mortar:** Maintain all control joints and expansion joints through the screed where movement is expected. Place Sikafloor®-156CA screed mortar onto the wet Sikafloor® 156CA primer and spread to an appropriate thickness using a large wood float, rake or screed box. Allow loose mortar to stand for a few minutes to permit entrapped air to escape. Using a float or stainless steel finishing trowel, uniformly compact and smooth the surface. Screed around drains, at elevation changes or terminations must be folded into squared and keyed recesses to maintain a minimum 3 mm (1/8 in) thickness. **Note:** Do not feather edge.

**1st Broadcast:** When the screed mortar has cured sufficiently to allow foot traffic, lightly abrade the surface to remove surface imperfections, then vacuum the area to remove all traces of dust and loose particles. Apply a neat broadcast binder-coat of Sikafloor®-156CA by squeegee and backroll immediately with a roller to provide a uniform surface. Broadcast pre-blended Sikafloor® Broadcast QuartzAggregate into the wet Sikafloor®-156CA binder, to “saturation”. Broadcast in a manner so that the aggregate falls vertically into the binder. Allow the 1st broadcast layer to cure sufficiently to be able to resist foot traffic, without damaging the surface, before proceeding with the second broadcast application.

2nd Broadcast

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sikafloor®-156CA</td>
<td>binder</td>
</tr>
<tr>
<td>2.0 m³/L (80 fl/US gal.)</td>
<td>20 mils w.f.t.</td>
</tr>
</tbody>
</table>

Sikafloor® Broadcast Quartz Aggregate

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sikafloor®-2002</td>
<td>binder</td>
</tr>
<tr>
<td>2 - 4 m³/L (80 - 160 fl/US gal.)</td>
<td>10 - 20 mils w.f.t.</td>
</tr>
</tbody>
</table>

**NOTE:** Yield and coverage figures provided above do not allow for surface profile, porosity or wastage.

**Shelf Life** 2 years for resins in original unopened packaging. Store dry between 5 and 32 °C (41 and 89 °F).

**Service Temperature (min. / max.)** 0 °C / 50 °C (32 °F / 122 °F)

**Cure Time at 23 °C**

- Foot Traffic: 12 hours
- Light Traffic: 3 days
- Normal Traffic: 7 days
- Chemical Exposure: 7 days

**Properties at 23 °C (73 °F) and 50 % R.H.**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shore D Hardness ASTM D2240</td>
<td>85</td>
</tr>
<tr>
<td>7 days</td>
<td>Bond Strength ASTM D4541</td>
</tr>
<tr>
<td>6 days</td>
<td>Tensile Strength ASTM D638</td>
</tr>
<tr>
<td>91 days</td>
<td>Compressive Strength ASTM C579</td>
</tr>
<tr>
<td>5 days</td>
<td>Flexural Strength ASTM C580</td>
</tr>
<tr>
<td>8 days</td>
<td>Flammability ASTM D635</td>
</tr>
<tr>
<td>2 hr boil</td>
<td>Water Absorption ASTM D570</td>
</tr>
</tbody>
</table>

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.
2nd Broadcast: Remove excess aggregates from the 1st broadcast layer by sweeping up, followed by vacuuming until the surface is free of all loose particles and dust. **Note:** When necessary, lightly abrade the surface to remove imperfections after sweeping up aggregate and before final vacuuming. Apply a neat broadcast binder coat of Sikafloor®-156™ using a squeegee and backroll immediately with a roller to provide a uniform surface. Broadcast pre-blended Sikafloor® Broadcast Quartz Aggregate into the wet binder to “rejection”. Broadcast in a manner so that aggregate falls vertically into the binder. Allow the 2nd broadcast layer to cure sufficiently to be able to resist foot traffic, without damaging the surface, before proceeding with the top coat.

**Top Coat:** Remove excess aggregates from the 2nd broadcast layer by sweeping up, followed by vacuuming until the surface is free of all loose particles and dust. **Note:** When necessary, lightly abrade the surface to remove imperfections after sweeping up aggregate and before final vacuuming. Apply Sikafloor®-2002 top coat using a non-marking squeegee or flexible steel trowel, followed by backrolling to provide a uniform texture and gloss finish.

**Note:** The final surface texture and glossy appearance of the finished floor is highly dependant upon the specific application rate of the Sikafloor®-2002 top coat. Application at 10 mils will produce a medium texture with good gloss; application at 20 mils will produce a fine texture with a high gloss appearance.

**Optional Top Coats:** can be applied to change the surface sheen; Sikafloor®-317 will produce a matte appearance, Sikafloor®-318 will produce a satin finish. Sika Canada strongly recommends that a test area be applied to confirm specific top coat selection and application rates required to produce the desired final appearance.

**Clean Up**
Clean all tools and equipment with Sika® Epoxy Cleaner. Once hardened, product can only be removed mechanically.

**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.

**Limitations**
- Sikafloor® Quartzite® HDB System is best installed by experienced applicators. Consult Sika Canada for advice and recommendations.
- Not suitable for use on exterior, slab-on-grade concrete substrates.
- Minimum / Maximum substrate temperature 10 °C/30 °C (50 °F/86 °F).
- Maximum relative humidity during application and cure: 85 %.
- Substrate temperature must be 3 °C (5.5 °F) above the measured dew point.
- Moisture content of the substrate must be < 4 % when coating is applied or use Sikafloor®-81 EpoCem® as an underlying moisture/vapour control measure.
- Do not apply to porous surfaces where moisture vapour transmission will occur during application.
- Do not hand mix Sikafloor® materials ; mechanical mix only.
- Protect from dampness, condensation and water contact during the initial 24 hour cure period.
- Surface may discolour in areas exposed to constant ultraviolet light.

**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 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 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 4A9

Other locations
Toronto
Edmonton
Vancouver

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

Certified ISO 9001 (CERT-0102780)
Certified ISO 14001 (CERT-0102791)