1. PRODUCT NAME
SPARTACOTE™ Surface Build Flake

2. MANUFACTURER
LATICRETE International, Inc.
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Bethany, CT 06524-3423 USA
Telephone: +1.203.393.0010, ext. 1235
Toll Free: 1.800.243.4788, ext. 1235
Fax: +1.203.393.1684
Website: laticrete.com

3. PRODUCT DESCRIPTION
SPARTACOTE Surface Build Flake is an epoxy coating designed for the broadcast of SPARTACOTE Blended Chip to create tough, durable, terrazzo-like seamless flooring finish. It must be pigmented with SPARTACOTE Surface Build Pigments.

Available SPARTACOTE Surface Build Pigment colors: Light Grey, Medium Grey, Black and Sand Beige

Uses
- Commercial/Institutional Kitchens
- Pharmaceutical & Research Facilities
- Laboratories
- Water Treatment Plants
- Educational Facilities

Advantages
- Chemical and abrasion resistance
- Provides unique multi-colored patterns
- Tough
- Broadcast system allows for ease of application
- durable and seamless floor

Suitable Substrates
- Concrete
- Tile
- SPARTACOTE Epoxy Floor Systems

Packaging
- 9811-0005-2 Full Kit: 5 gal (18.9L) Kit
- Part A: 2.7 gal (10.2L) in a 5 gal (18.9L) pail
- Part B: 1.7 gal (6.4L) in a 3.5 gal (13.2L) pail
- Surface Build Pigment: 0.6 gal (2.3L) pail - Sold Separately

Approximate Coverage

<table>
<thead>
<tr>
<th>WFT</th>
<th>DFT</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0 mils</td>
<td>9.9 mils</td>
<td>160 ft²/gal</td>
</tr>
<tr>
<td>(0.25 mm)</td>
<td>(0.25 mm)</td>
<td>(2.9 m²/L)</td>
</tr>
<tr>
<td>12.0 mils</td>
<td>11.9 mils</td>
<td>120 ft²/gal</td>
</tr>
<tr>
<td>(0.30 mm)</td>
<td>(0.30 mm)</td>
<td>(3.9 m²/L)</td>
</tr>
</tbody>
</table>

WFT = Wet Film Thickness
DFT = Dry Film Thickness

Coverage values are approximate and will vary based on surface condition, preparation methods and application technique.

Shelf Life
Factory sealed containers of this product are guaranteed to be of first quality for two (2) years.

Limitations
- Substrate temperature must be between 50ºF (10ºC) and 90ºF (32ºC)
- Ambient relative humidity must not exceed 90%
- Substrate temperature must be 5ºF (3ºC) above dew point
• Product is not UV Stable and intended for interior applications only

Cautions
• FOR PROFESSIONAL USE ONLY
• Thoroughly read all technical data sheets, application guidelines, warranty disclaimers and Safety Data Sheets (SDS) prior to use. Application guides are available at www.laticrete.com.
• Wear protective gloves, protective clothing and eye protection.
• Causes severe skin burns. May cause an allergic skin reaction. If skin irritation or rash occurs: get medical advice/attention
• Causes serious eye damage. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Call a physician immediately.
• Harmful if swallowed. If swallowed: Rinse mouth do not induce vomiting. Call a physician immediately.
• Keep out of reach of children.

4. TECHNICAL DATA
VOC/LEED Product Information
15 g/L (as intended for use)

Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesion</td>
<td>ASTM D7234</td>
<td>&gt;300 psi (&gt;2.1 MPa) Substrate Failure</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM C638</td>
<td>4900-5000 psi (34-34.5 MPa)</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>ASTM D790</td>
<td>3000-4000 psi (20.7-27.6 MPa)</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>ASTM D695</td>
<td>10000-11000 psi (69-76 MPa)</td>
</tr>
<tr>
<td>Abrasion Strength</td>
<td>ASTM D4060</td>
<td>23 mg weight loss (1000 cycles C17 Wheel)</td>
</tr>
</tbody>
</table>

Working Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Temperature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mix Ratio</td>
<td>---</td>
<td>Pre-measured units</td>
</tr>
<tr>
<td>Working Time</td>
<td>50°F (10°C)</td>
<td>90-100 minutes</td>
</tr>
<tr>
<td></td>
<td>75°F (24°C)</td>
<td>45-50 minutes</td>
</tr>
<tr>
<td></td>
<td>90°F (32°C)</td>
<td>20-30 minutes</td>
</tr>
<tr>
<td>Maximum Re-Coat Time</td>
<td>50°F (10°C)</td>
<td>120 hours</td>
</tr>
<tr>
<td></td>
<td>75°F (24°C)</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>90°F (32°C)</td>
<td>48 hours</td>
</tr>
<tr>
<td>Foot Traffic / Vehicular Traffic</td>
<td>---</td>
<td>24 hours min.</td>
</tr>
<tr>
<td>Full Cure</td>
<td>---</td>
<td>7 Days</td>
</tr>
</tbody>
</table>

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

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5. INSTALLATION

SPARTACOTE Surface Build Flake is not UV stable. When used as a base resin ensure that an appropriate system build and topcoat is utilized to meet application requirements. Consult a LATICRETE Technical Service Representative for best options.

It is recommended to prime all surfaces to be coated prior to application of SPARTACOTE Surface Build Flake. The use of a primer will increase adhesion to the substrate and reduce the occurrence of fisheyes, blistering, pinholes & outgassing. Ensure that proper re-coat windows are observed. See applicable primer technical data sheet for surface preparation requirements.

Compatible SPARTACOTE Primers:
• SPARTACOTE General Primer (DS 622.6)
• SPARTACOTE Oil Tolerant Primer (DS 622.9)
• SPARTACOTE WB Epoxy Primer (DS 085.8)
• LATICRETE® VAPOR BAN™ ER (DS 35216.0)
• SPARTACOTE Moisture Vapor Barrier (DS 087.5)

Surface Preparation - Concrete
Surfaces to be coated must be free of grease and any other contaminants that may impede adhesion. Always check the surface for any bond inhibitors prior to application. Any repairs must be addressed prior to application and should be repaired in accordance with ICRI standards. Substrate defects (voids, bugholes, divots, etc.) should be filled smooth with surrounding substrate surface with SPARTACOTE Epoxy Fill Coat (see technical data sheet DS 623.3 for application instructions) prior to the application of SPARTACOTE Surface Build Flake.

Concrete must be tested for relative humidity (RH) prior to installation of any coatings. The RH of the slab must not exceed 75% as tested per ASTM F2170. If RH measures 75% or greater, use LATICRETE® VAPOR BAN™ ER or SPARTACOTE Moisture Vapor Barrier.

Concrete must be mechanically profiled to an ICRI CSP-3 to 5. Ensure that all surface laitance is removed prior to coating. The prepared surface should have a tensile pull-off strength of 200 psi (1.4 MPa) or greater when tested in accordance with ASTM C1583. If wet grinding, allow surface to completely dry before coating.

Surface Preparation - Over existing tile
Refer to TDS 450: Installation Guideline for Installing SPARTACOTE over Existing Tiled Surfaces

Mixing
SPARTACOTE Surface Build Flake is designed to be used with SPARTACOTE Surface Build Pigments and is provided in pre-measured units. A full kit when mixed will yield 5 gal (18.9 L) of material. Add full unit 0.6 gal (2.3L) of SPARTACOTE Surface Build Pigments to Part A and mechanically mix separately for 1-2 minutes to fully disperse pigments. Mix pre-measured unit of pigmented Part A with premeasured unit of Part B for 2-3 minutes until a uniform color and consistency is achieved. Pour mix directly onto the primed concrete.

Application
SPARTACOTE Surface Build Flake may be applied by notched squeegee or SPARTACOTE resin broom. Suggested application thickness is 10-12 mils (0.25 - 0.3 mm) but can be applied up to a maximum thickness of 40 mils (1.0 mm). Spread evenly over all primed surfaces and backroll with a short nap or spiked roller to deaerate and help level. Immediately following the backroll and while the material is still wet broadcast flakes with either a mechanical sprayer or by hand in a “rainfall pattern” into the wet resin to refusal or rejection. See SPARTACOTE Blended Chip data sheet DS086.3 for approximate coverage rates.

Once the broadcast coat has cured, begin removing excess media chip. With an electric leaf blower proceed to blow all the excess/non-adhered chip into piles or towards a corner. Carefully clean up the excess chip and re-box it as it can be used again on future projects. Using a 12-14” (30.5 -35.6 cm) metal floor scraper proceed to scrape the surface in 3 opposing direction (north/south, east/west, diagonal) ensuring the entire floor receives a uniform scrape. This procedure is critical to a quality finished floor. A poor scrape will result in an uneven finished texture and excess material usage on the top coat. Clean all the chip debris by blowing it into piles with the leaf blower. Clean up the debris and dispose of it in the trash (The scraped chip cannot be re-used on the next job). Blow the floor a second time to ensure all remaining chip debris is off the floor and surface is clean and ready for the top coat.

A grout/top coat is required and will provide improved UV stability, abrasion, stain resistance, and chemical resistance. Consult a LATICRETE Technical Service Representative for best options.

To optimize inter-coat adhesion, appropriate recoat times must be observed. Exposure of the coating to direct sunlight will considerably shorten the recoat times. If recommended recoat times are exceeded, consult a LATICRETE Technical Service Representative; sanding or abrasive blasting may be required.

With all epoxies after priming and before each additional coat, examine the surface for amine blush (oily film). If present, remove by cleaning the surface with acetone.

Notes
Mock-ups and field test areas are required in order to validate performance and appearance related characteristics (including but not limited to color, inherent surface variations, wear, anti dusting, abrasion resistance, chemical resistance, stain resistance, coefficient of friction, etc.) to ensure system performance as specified for the intended use, and to determine approval of the coating system.

Variability in job site conditions (including but not limited to surface preparation, sunlight, humidity, dew point, temperature, etc.) during application of SPARTACOTE products may lead to fisheyes, blistering, pinholes, wrinkling, or outgassing of air in the concrete and are not product defects. Double priming, shading or evening application may be required.

Cleaning
Use acetone or xylene to clean tools and equipment.

6. AVAILABILITY AND COST
Availability
LATICRETE materials are available worldwide.

For Distributor Information, Call:
    Toll Free:          1.800.243.4788
    Telephone:     +1.203.393.0010
For on-line distributor information, visit LATICRETE at laticrete.com

Cost
Contact a LATICRETE Distributor in your area.

7. WARRANTY
See 10. FILING SYSTEM:
• DS 230.13: 1 Year Product Warranty

8. MAINTENANCE
The long-term performance, appearance, and life expectancy of wear surface products are critically dependent upon a good routine maintenance program designed specifically for the installed wear surface. SPARTACOTE™ floor coating systems are nonporous, causing dirt and contaminants to remain on the surface. The use of properly placed walk-off mats, inside and outside, will help increase the life of the floor. Recommend maintenance program consist of frequent and thorough cleaning utilizing a neutral pH). The frequency of washing will vary depending on floor usage type, traffic, and age. Please Refer to TDS 420 “SPARTACOTE Floor Maintenance Guide” available at www.laticrete.com for more information.
9. TECHNICAL SERVICES

Technical Assistance
Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 1235
Telephone: +1.203.393.0010, ext. 1235
Fax: +1.203.393.1948

Technical and Safety Literature
To acquire technical and safety literature, please visit our website at laticrete.com.

10. FILING SYSTEM

Additional product information is available on our website at laticrete.com. The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty
- DS 623.3: SPARTACOTE Epoxy Fill Coat
- DS 622.6: SPARTACOTE General Primer
- DS 622.9: SPARTACOTE Oil Tolerant Primer
- DS 085.8: SPARTACOTE WB Epoxy Primer
- TDS 420: SPARTACOTE Floor Maintenance Guide
- DS 623.4: SPARTACOTE Surface Build Pigments
- DS 35216.0: LATICRETE VAPOR BAN ER
- DS 087.5: SPARTACOTE Moisture Vapor Barrier
- DS 086.3: SPARTACOTE Blended Chip