



SPARTACOTE® Surface Build

DS-36644-0822

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

SPARTACOTE® Surface Build

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

SPARTACOTE Surface Build is a high solids, multi-purpose, self-leveling epoxy for decorative and protective applications. It offers excellent abrasion and chemical resistance.

Provided as a clear epoxy product it can be field tinted through the use of SPARTACOTE Universal Pigments.

Uses

- Healthcare facilities
- Educational facilities
- Single & multi-family residential
- Retail spaces
- Manufacturing plants
- Food & Beverage manufacturing
- Stadium & event spaces
- Pharmaceutical & research facilities
- Laboratories & clean rooms
- Commercial/Institutional kitchens

Advantages

- Multi-purpose, self-leveling epoxy
- High gloss finish
- Improved leveling and working properties
- Excellent chemical and abrasion resistance
- Acceptable for use in broadcast systems
- Clear epoxy base can be tinted with SPARTACOTE Universal Pigments
- USDA compliant (FDA/CFSAN U.S. Food Code 6.101.11 Surface Characteristics)

Suitable Substrates

- Concrete
- Tile
- SPARTACOTE Epoxy Floor Systems
- SPARTACOTE Urethane Cement Systems

Packaging

SPARTACOTE Surface Build is mixed at 2A:1B by volume.

- Part A: 9851-0005-A
3.3 gal (12.5L) in a 6 gal (22.7) pail
- Part B: 9851-0005-B
1.7 gal (6.4L) in a 3.5 gal (13.2L) pail

Approximate Coverage

SPARTACOTE Surface Build may be applied between 10.0 mils (0.25 mm) and 20 mils (0.50mm) WFT.

WFT	DFT	Coverage
10.0 mils (0.25 mm)	9.9 mils (0.25 mm)	160 ft ² /gal (3.9 m ² /L)
15.0 mils (0.38 mm)	14.9 mils (0.38 mm)	107 ft ² /gal (2.6 m ² /L)
20.0 mils (0.50 mm)	19.8 mils (0.50 mm)	80 ft ² /gal (2.0 m ² /L)

WFT = Wet Film Thickness

DFT = Dry Film Thickness

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

Approximate Coverage (Troweled Mortar)

Thickness	Coverage
3/16"-1/4" (4.8-6.4 mm)	60-65 ft ² /gal (1.5-1.6 m ² /L)

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 50°F (10°C) and 90°F (32°C)
- Ambient relative humidity must not exceed 90%
- Substrate temperature must be 5°F (3°C) 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, clothing and eye protection.
- Causes severe skin burns. 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. Rinse mouth do not induce vomiting. Call a physician immediately.
- Keep out of reach of children.

4. TECHNICAL DATA



VOC/LEED Product Information

12 g/L as intended for use

Physical Properties

Property	Test Method	Result
Adhesion	ASTM D7234	>300 psi (>2.1 MPa) Concrete Failure
Tensile Strength	ASTM D2370	3,500 psi (24.1 MPa)
Shore D Hardness	ASTM D2240	70
Abrasion Resistance	ASTM D4060	26 mg loss (CS-17)
Impact Resistance	ASTM D5420	>125 in-lb (>170 Nm)
Flexural Strength	ASTM D790	8,250 psi (56.9 MPa)
Mandrel Bend	ASTM D522	PASS
Gloss 60 Degree	---	120 gu

Working Properties

Property	Value
% Solids	~ 99% by vol.
Mix Ratio	2A:1B
Working Time	25-35 minutes
Min. Recoat Time	10 hours
Max. Recoat Time	5 days
Foot Traffic	24 hours
Vehicular Traffic	48 hours
Full Cure	7 days

Working properties based on 70°F (21°C) and 50% RH. Changes in ambient conditions may cause times to vary.

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.

5. INSTALLATION

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

Compatible SPARTACOTE Primers:

- SPARTACOTE PRIME-N-GO™ (DS 36651)
- SPARTACOTE General Primer (DS 622.6)
- SPARTACOTE WB Epoxy Primer (DS 085.8)
- VAPOR BAN™ ER (DS 35216)
- VAPOR BAN E (DS 36647)

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 utilizing either SPARTACOTE Fast Fix or SPARTACOTE Epoxy Fill Coat prior to the application of SPARTACOTE Surface Build.

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, surface must be allowed to completely dry prior to coating.

As an alternative to mechanical surface prep, SPARTACOTE PRIME-N-GO may be used as a primer. See data sheet 36651 for detailed instructions and uses.

Concrete must be tested for moisture prior to installation of any coatings. The relative humidity (RH) of the slab must not exceed 75% as tested per ASTM F2170 or >3lbs/1000sqft/24hr per ASTM F1869. If moisture in the slab exceeds these limits, the use of VAPOR BAN™ ER or VAPOR BAN E is required prior to installing SPARTACOTE Surface Build.

Surface Preparation - Over existing tile

Refer to TDS 450: Installation Guideline for Installing SPARTACOTE over Existing Tiled Surfaces

Mixing

SPARTACOTE Surface Build is mixed at 2A:1B by volume.

Prior to mixing, stir individual components to disperse any materials that may have settled.

If tinting with SPARTACOTE Universal Pigments, mix pigments into the Part A prior to combining Parts A and B at a loading rate of 1 small unit per mixed gallon of resin (A+B) or 1 large unit per 5 gallons of mixed resin (A+B). Full kit will require (5) small units or (1) large unit. Add full contents of SPARTACOTE Universal Pigment unit directly into Part A. Scrape sides and ensure all pigment is removed from the jar. Mix pigment into Part A with a slow speed drill mixer to fully disperse the pigments until a uniform color and consistency is achieved, approximately 2 minutes. SPARTACOTE Universal Pigments are intended to be added in addition to the existing resin and will not adversely affect the base resin physical properties or mix ratio. No resin should be removed.

Combine 2 parts A with 1 Part B. Mix for 2-3 minutes with a slow speed drill until a uniform consistency and

appearance is achieved. Immediately after mixing apply product to properly prepared and primed substrate.

Application

SPARTACOTE Surface Build can be applied by brush, roller and/or notched squeegee. Suggested application thickness is 15 mils WFT (0.38 mm) mm or a spread rate of 107 ft²/gal (2.5 m²/L). Spread evenly over all primed surfaces and immediately backroll with a 3/8" nap non-shedding roller.

For broadcast systems, immediately following the backroll and while the material is still wet, broadcast media with either a mechanical sprayer or by hand in a "rainfall pattern" into the wet resin to refusal or rejection.

For improved UV stability, abrasion, stain resistance, and chemical resistance a topcoat is recommended. Consult a LATICRETE Technical Service Representative for best options.

To optimize intercoat 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.

Mixing (Trowel Down Mortar)

SPARTACOTE Surface Build may be mixed with aggregate to create a trowel down mortar.

IMPORTANT: Priming of the substrate is required prior to applying epoxy mortar to the ensure substrate adhesion.

For mixing trowel down mortar, it is recommended to use a concrete mixer. Begin by combining 85 fl.oz. Part A with 43 fl.oz Part B and mixing until a uniform color and consistency is achieved. Slowly add 60 lbs of SPARTACOTE Blended Quartz aggregate, mixing continuously until all material is wetted and a uniform consistency mortar is achieved.

Apply mixed mortar directly onto the primed concrete.

Application (Trowel Down Mortar)

SPARTACOTE Surface Build trowel down mortar should be spread evenly over the floor with a gauge rake or trowel to desired thickness. Suggested application thickness is 3/16" - 1/4" (4.8-6.4 mm). Finish with a power trowel (plastic blade for protection) or finishing trowel.

Coverage rates will vary depending on surface profile application thickness and degree of compaction during troweling.

For improved UV stability, abrasion, stain resistance, and chemical resistance a topcoat is recommended. Consult a LATICRETE Technical Service Representative for best options.

To optimize intercoat adhesion, appropriate re-coat times must be observed. Exposure of the coating to direct sunlight will considerably shorten the re-coat 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.

Storage

Store in a clean, dry environment out of direct sunlight between 40°F - 100°F (5°C - 38°C).

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:

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 on frequent and through cleaning utilizing a neutral pH cleaner. 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
- TDS 420: SPARTACOTE Floor Maintenance Guide
- DS 623.3: SPARTACOTE Epoxy Fill Coat
- DS 36651: SPARTACOTE PRIME-N-GO
- DS 622.6: SPARTACOTE General Primer
- DS 085.8: SPARTACOTE WB Epoxy Primer
- DS 35216: VAPOR BAN ER
- DS 36647: VAPOR BAN E
- DS 36641: SPARTACOTE Universal Pigments
- DS 087.2: SPARTACOTE Blended Quartz

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