SPARTACOTE® FLEX SB 250

DS-36627-0822

Globally Proven Construction Solutions

1. PRODUCT NAME
SPARTACOTE® FLEX SB 250

2. MANUFACTURER
LATICRETE International, Inc.
1 LATICRETE Park North
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™ FLEX SB 250 is a two-part polyaspartic aliphatic polyurea for both decorative and protective applications. A reduced VOC version of our solvent borne polyaspartic, it is suitable for use in areas requiring <250 g/L. Self-priming, it may be applied directly to a variety of substrate including concrete, metal/steel and epoxy. SPARTACOTE FLEX SB 250 provides excellent impact, abrasion, and chemical resistance characteristics. It can be used either as a clear sealer, topcoat, or within seamless multi-build systems including SPARTACOTE Guard, SPARTACOTE Chip SPARTACOTE Quartz and SPARTACOTE Metallic systems.

SPARTACOTE FLEX SB 250 is UV stable and is suitable for both interior and exterior applications. It may be field tinted with SPARTACOTE Universal Pigments. Available colors include: black, dark blue, tile red, light grey, medium grey, dark grey, white, light beige, sand beige, dark beige, light brown, safety yellow and safety red. Custom colors are available upon request.

Uses
- Aviation hangers
- Shop floors
- Manufacturing facilities
- Parking decks
- Stadium and event spaces
- Garages

Advantages

- Self-Priming
- Excellent abrasion, impact and wear resistance
- Excellent chemical and stain resistance
- UV Stable; retains optical clarity of clear sealer/finish
- Short re-coat time: 1-2 hours
- Low temperature cure (-30°F/-34°C)
- Tolerant to 300°F (149°C) for random incidental heat contact
- Resistant to hot-tire pickup
- Creates a high traction surface with the introduced of traction additives
- USDA compliant (FDA/CFSAN U.S. Food Code 6.101.11 Surface Characteristics)

Suitable Substrates
- Concrete
- Tile
- Steel
- SPARTACOTE Polyaspartic Floor Systems
- SPARTACOTE Epoxy Floor Systems
- SPARTACOTE Urethane Cement Systems

Packaging
SPARTACOTE FLEX SB 250 is mixed at 1A:1B by volume

Kits
- 2 gal (7.6L) kit: 9101-0002-2
  1 gal (3.8L) Part A / 1 gal (3.8L) Part B

Individual Units
- Part A: 9103-0005-2
  5 gal (18.9L) in a 5 gal (18.9L) pail
- Part B: 9104-0005-2
  5 gal (18.9L) in a 5 gal (18.9L) pail

Approximate Coverage

WFT	DFT	Coverage
4.0 mils (0.10 mm)	3.0 mils (0.08 mm)	401 ft^2/gal (9.8 m^2/L)
5.0 mils (0.13 mm)	3.7 mils (0.09 mm)	321 ft^2/gal (7.9 m^2/L)
6.0 mils (0.15 mm)	4.4 mils (0.11 mm)	267 ft^2/gal (6.6 m^2/L)
7.0 mils (0.18 mm)	5.2 mils (0.13 mm)	229 ft^2/gal (5.6 m^2/L)
8.0 mils (0.20 mm)	5.9 mils (0.15 mm)	201 ft^2/gal (4.9 m^2/L)

WFT = Wet Film Thickness
DFT = Dry Film Thickness

- When using as a tinted base or mid coat apply at 8.0 mils (0.20 mm) WFT.
- When using as clear topcoat coating may be applied between 4.0 mils (0.10 mm) and 8 mils (0.20 mm) WFT.
- When using as a topcoat over chip or quartz broadcasts adjust estimates to account for additional required material.
- 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
- Do not thin or dilute product.
- Maximum application thickness in a single application is 10 mils (0.25 mm) WFT. Applying beyond the maximum thickness may result in clouding or milky areas.
- Not intended for use in areas that experience significant thermal shock on a continual basis.
- Please note that with all resinous coating systems, exterior full sun environments in warm climates may exhibit above average surface temperatures. This is especially true with darker finishes.

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 depending on the system employed are available at www.laticrete.com.
- Wear protective gloves, protective clothing and eye protection.
- Extremely flammable liquid and vapor. Keep away from heat/sparks/open flames/hot surfaces.
- Harmful if inhaled. Avoid breathing mist or vapors. Use only outdoors or in a well-ventilated area.
- Causes skin irritation. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.
- Causes serious eye irritation. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- May be fatal if swallowed and enters airways. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting.
- Keep out of reach of children.

4. TECHNICAL DATA

VOC/LEED Product Information
<250 g/L (as intended for use)

Physical Properties

Property	Test Method	Result
Adhesion	ASTM D7234	>300 psi (>2.1mPa) Substrate Failure
Tensile	ASTM D2370	2,760 psi (19.0 mPa)
Elongation	ASTM D2370	4.5%
Abrasion Resistance	ASTM D4060	8.9 mg loss/1000 cycles
Impact Resistance	ASTM D2794	>160 in-lb (18.1 Nm)
Shore D	ASTM D2240	33
Flexibility Mandrel Bend	ASTM D522	Pass - 4mm
Gloss 60 degree	---	>95 gu

Working Properties

Property	Value
Mix Ratio	1 Part A : 1 Part B by volume
% Solids	74% by weight
Working Time	20 - 25 minutes
Minimum Re-Coat Time	1-2 hours
Maximum Re-Coat Time	24 hours
Foot Traffic / Vehicular Traffic	2-4 hours / 24 hours

- Working properties based on 70°F (21°C) & 50% RH. Changes in ambient conditions may cause times to vary.
- Increases in temperature and/or humidity will shorten working time, dry time and recoat windows.

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

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. Do not use Alcohol to clean prior to application.

Concrete must be mechanically profiled to an ICRI CSP-2. 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 fully dry prior to coating.

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

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 VAPOR BAN™ ER or VAPOR BAN E.

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

Surface Preparation - Metal/Steel
Clean the surface per SSPC-SP1. Surfaces to be coated must be free of grease, oils, cutting fluids and any other contaminants that may impede adhesion. Always check the surface for any bond inhibitors prior to application.

For Steel: Shot blast the surface per SSPC-SP 6/NACE 3

For Stainless/Galvanized: Shot blast the surface per SSPC-SP16.

After shot blasting, perform a second solvent wipe of the surface to remove any residual dust or debris. Immediately coat the surface.

Tinting with SPARTACOTE Universal Pigments
Best practice is to mix in gallon increments. Measure out appropriate amounts of parts A and B, observing 1A:1B by vol. mix ratio, prior to adding SPARTACOTE Universal Pigments

Required loading is (1) small unit per gallon of mixed resin (A+B) or (1) large unit per 5 gallons of mixed resin (A+B). 2 gal kits will require (2) small units. 10 gal mixes will require (10) small or (2) large units. White, Safety Yellow and Safety Red require doubling the loading level.

Once parts A and B are measure, add full contents of SPARTACOTE Universal Pigment unit(s) directly into Part A at the loading rate stated above. 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. Failure to properly mix pigments may lead to an inconsistent finish and reduced product performance.

Add part B to tinted part A and continue with mixing instructions below.

Mixing
Prior to mixing Part A and Part B, individually stir Part A for 2 minutes. Mix 1 Part A and 1 Part B (1:1) by volume using a clean, dry working vessel. Use a paddle mixer on slow speed for 2 minutes. Avoid overmixing or creating a vortex that could introduce air. Do not mix below the dew point, which will shorten the pot life. No induction time is required prior to use.

If a traction additive (e.g. SPARTACOTE GRIP Traction Additive) is to be incorporated, it is to be added after thoroughly mixing Part A and Part B.

Only mix as much product as can be applied in the stated working time.

Application
SPARTACOTE FLEX SB 250 may be applied by brush, roller, resin broom or squeegee. Suggested application thickness when used as a clear topcoat is 6 mils (0.15 mm) WFT or a spread rate of 267 ft^2/gal. Immediately following, while the coating is still wet, use a SPARTACOTE Roller Skin or other high quality 3/8" (9

mm) nap non-shedding roller to back-roll at 90 degrees from the original application direction to help ensure full coverage and uniform thickness. Use a brush or small roller around penetrations, columns, and any other obstructions. Periodically check mil thickness using a wet film thickness gauge. Do not allow the product to puddle or pool. Contact LATICRETE directly for specifics on effective application techniques.

For best results on tinted base or mid coats, apply product at 8 mils (0.20 mm) WFT or a spread rate of 201 ft^2/gal. Ensure a wet edge is maintained between mixes. Backroll immediately in a uniform fashion and allow any roller marks to settle and flow out. Disturbing the coating after backrolling may cause color inconsistencies and shade differences.

The material will be dry to the touch 1 to 2 hours after application, dependent on ambient temperature, slab temperature and humidity. Product may be re-coated within 2 to 24 hours following application. Light foot traffic is acceptable 2 to 4 hours following application and vehicular traffic is acceptable 24 hours after application.

If using as a topcoat over epoxy, it is critical that the epoxy not be let down with alcohol during installation or cleaned with alcohol prior to application. Always apply over epoxy within the manufacturer's recommended re-coat time.

Storage
Store in a clean, dry environment out of direct sunlight between 40°F - 100°F (5°C - 38°C). Once opened, product will react with moisture in the environment and begin to catalyze.

Cleaning
Use acetone or xylene to clean tools and equipment. Do not use Alcohol.

Notes
Maintaining a consistent storage temperature 24 hours prior to and up to application will maximize working time. Material should be conditioned in a cool, dry environment prior to applications.

Mock-ups and field test areas are required in order to validate performance and appearance relate 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. Additional coats, shading or evening application may be required.

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 dependence upon a good routine maintenance program designed specifically for the installed wear surface. SPARTACOTE polyaspartic and epoxy 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 cleaner. The frequency of washing will vary depending on floor usage type, traffic and age.

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
- TDS 450 Installation Guideline for Installing SPARTACOTE™ over Existing Tiled Surfaces
- DS 36651: SPARTACOTE PRIME-N-GO
- DS 35216: VAPOR BAN ER
- DS 36647: VAPOR BAN E
- DS 36641: SPARTACOTE Universal Pigments

US Patents: 6,833,424 & 7,169,876

LATICRETE International, Inc.
One LATICRETE Park North, Bethany, CT 06524-3423 USA • 1.800.243.4788 • +1.203.393.0010 • www.laticrete.com