

LATICRETE® SUPERCAP® SC500-PLUS

DS-57.2-0724

Globally Proven Construction Solutions



1. PRODUCT NAME

LATICRETE® SUPERCAP® SC500-PLUS

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

LATICRETE® SUPERCAP® SC500-PLUS is a pumpable and pourable, high strength, low alkali cement-based, premium self-leveling underlayment based on a proprietary mineral binder system that is used to finish interior concrete and level uneven floor surfaces. Apply it over concrete, exterior glue plywood and other types of sound flooring before installing wood, resilient, cork, sports flooring, ceramic, stone, carpet or other flooring systems. Floor covering adhesives that are suitable for concrete can be used on SUPERCAP SC500-PLUS.

Uses

- Commercial, retail (malls & shops)
- Health care, hospitals
- Education (schools & universities)
- Residential
- Hotels

Advantages

- Used with SUPERCAP high volume pumping equipment: 30,000 lbs. (13,607 kg) of self-leveling an hour
- High strength: 5400 PSI (37.2 MPa)
- Eliminates the need for power troweling concrete.
- Eliminates dust, staging material and noise within a building
- Can be installed for 1/8" to 3" (3 to 76mm)and tapered to zero at edges
- Self-drying formula Finished floor goods may be installed as soon as 16 hours after application
- Surface is walkable in 1 to 3 hours and may be open to wheel traffic within 72 hours at 70°F (21°C).
- Can be left open to normal trade's traffic for up to 12 months prior to installation of floor coverings.
- Inorganic-based formulation will not contribute to or harbor growth of mold or mildew.

Suitable Substrates

- Concrete (Interior Only)
- Vinyl Tile
- Wood
- · Ceramic Tile and Stone
- Cement Mortar Beds and Screeds
- Poured Gypsum Underlayment

Packaging

2,500 lb. supersack (1,043.3 kg)

- 7351-2500-21
- 1 per pallet
- Concentrate formula available contact LATICRETE

50 lb. bag (22.7 kg)

- 7351-0050-21
- 56 bags per pallet

Approximate Coverage

Super Sack:

 Per bulk sack of SC500 PLUS: 1050 ft² (102 m²) at 1/4" (6 mm) depth*

Bag:

Per 50 lb (22.7 kg): 21 ft² (2 m²) at 1/4" (6 mm) depth*

*Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions.

Shelf Life

Store in original, factory sealed container. Store off the ground in a dry area. Shelf life is 6 months from date of manufacture for bulk sacks. Shelf life is 12 months from date of manufacture for bags. Container should be kept tightly sealed when not in use.

Limitations

- Do not install LATICRETE SUPERCAP SC500 PLUS over Particle board, chipboard, hardboard (Masonite®), Luan panels, asbestos, gypsum-based patching materials, asphalt, coal tar, lightweight insulating concrete or any other dimensionally unstable materials.
- LATICRETE SUPERCAP SC500 PLUS is not recommended as a wear surface or for steel-wheeled traffic.
- For interior use only.
- Do not install when surface temperature is below 40°F (4°C) or above 90°F (32°C)
- Do not install over painted surfaces.
- Do not exceed recommended mixing ratio as indicated in mixing instructions. Over watering will weaken product properties.
- Never mix with cement or admixtures.
- Do not apply LATICRETE SUPERCAP SC500 PLUS over waterproofing or crack isolation membranes.
 Consult LATICRETE SUPERCAP Technical Services for proper installation over moisture mitigation systems.
- · Not for use in submerged applications

Cautions

Before using any LATICRETE SUPERCAP product:

- Check www.laticretesupercap.comfor any technical bulletins or updated information about the product and its application.
- Keep out of reach with children.
- Contact your local LATICRETE SUPERCAP Technical Sales Representative with any questions.
- Consult SDS for more safety information.
- Do not allow foot traffic on finished work until cured.
- Contains cement and silica sand. Causes severe skin burns and serious eye damage. Wear protective gloves and eye protection. In case of contact, flush thoroughly with water.
- Do not take internally. Silica sand may cause cancer or respiratory irritation. Do not breathe dust. Wear a respirator in dusty areas.

4. TECHNICAL DATA

Physical Properties

Specifications are subject to change without notification. Technical data shown in LATICRETE® SUPERCAP® product data sheets and technical data sheets are

typical but reflect laboratory test procedures conducted in laboratory conditions. Actual field performance and test results will depend on installation methods and site conditions. Field test results will vary due to variability of job site factors.

This product has a cradle-to-gate (with options)
 Product- Specific (Type III) Environmental Product
 Declaration. The PCR review, life cycle assessment
 and declaration were independently verified by UL
 Environment in accordance with ISO 14025, ISO
 14040 and ISO 14044.

Pour Depth	1/8" to 3" Average Depth (3 – 76 mm) Consult Technical Services for average depths over 3" (76 mm). Can be tapered to zero at edges.
Walkable	1 to 3 hours at 70°F (21°C)
Flexural Strength (ASTM C 1708) 28 Day Cure	1000 psi (6.9 MPa)
Compressive Strength (ASTM C 1708) 28 Day Cure	5400 psi (37.2 MPa)
Flammability	Flame Spread Index: 0
(ASTM E84-14)	Smoke Developed Index: 0
Set Time (ASTM C1708)	Initial @ 30 - 60 min. Final @ 60 - 120 min.
Installed Dry	2.7 lbs/ft² (12.7 kg/m²)
Weight per square foot	
@ ¹ / ₄ " (6mm)	

All results are averages and performed in lab conditions.

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

Refer to TDS 230S LATICRETE SUPERCAP Substrate Preparation and Primer Guide for more detailed surface preparation instructions.

PRIMING

All surfaces must be primed prior to every LATICRETE SUPERCAP application. LATICRETE Primer Plus is a concentrate and must be diluted with clean potable water. Dilution ratio varies depending on the substrate. See DS 056.0 and TDS230S LATICRETE SUPERCAP Substrate Preparation and Primer Guide for more detailed dilution, approximate coverage and application instructions.

Note: Keep primed surface clean. Do not allow any foot traffic onto surface.

MIXING

Super Sacks – Pre-condition LATICRETE SUPERCAP SC500 PLUS to approved application temperature (air temperature between 50–90°F (10–32°C). LATICERETE SUPERCAP SC500 PLUS is blended by qualified LATICRETE SUPERCAP Applicators in the mobile blending unit that mixes LATICRETE SUPERCAP products onsite at street level to manufacturer specifications.

Bags – SC500 PLUS should be mixed with 4.0-4.5 quarts $(3.8-4.3 \, \text{L})$ of water per 50 lb $(22.7 \, \text{kg})$ bag. Do not over water. For manual application, add product to water and mix for 2-3 min with a heavy duty drill $(650 \, \text{rpm})$ to obtain a lump free mix. Please consult with a LATICRETE representative to verify equipment compatibility when pumping. A flow test should always be performed to ensure that the mix is homogeneous and free from separation. The ideal flow range for SC500 is 10" to 12" when using a large flow ring or 5" to 6" using small flow ring.

APPLICATION

Substrate temperature must be a minimum 40°F (4°C) during application and air temperature maintained between 50–90°F (10–32°C). Protect areas from direct sunlight. If required to meet design tolerances, survey surface using a digital or electronic leveling device and apply level pegs as required. Adequate ventilation should be provided to ensure uniform cure. Pump or pour blended material onto substrate at an average thickness ranging between 1/8" to 3" (3–76 mm) for all surfaces. Material can be tapered to zero at edges.

Wood substrates require a minimum thickness of 3/4" (19 mm). Immediately following placement lightly smooth the surface and pour lines. When not using level pegs the use of a gauge rake will assist in controlling material depth. Do not expose LATICRETE SUPERCAP SC500 PLSU to rolling dynamic loads, such as forklifts or scissor lifts, for at least 72 hours after installation. Proper application is the responsibility of the user. Field visits by LATICRETE SUPERCAP personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

FLOORING INSTALLATION (Bold References are Hyperlinks)

 Immediately before installation of flooring, as recommended by flooring and adhesive manufacturer and in accordance ASTM F2873 - Installation of Self-Leveling Underlayment & Preparation of Surface to Receive Resilient Flooring, the selfleveling surface may require preparation including cleaned of all loose material by scraping, sanding, vacuuming, and primer application or a combination thereof.

- Conduct surface review including porosity tests, surface temperature, bond testing (Mat Bond Test), and other surface evaluation as required by flooring and adhesive manufacturer and in accordance with the National Floor Covering Association (NFCA) Floor Covering Reference Manual. Also identify and report any concerns for delaminated or loose areas, surface profile and surface flatness to project manager / General Contractor for additional surface prep, correction, adjustment before starting installation of floor covering materials.
- Always test performance, suitability, and compatibility
 of finished floor systems prior to their application.
 Conduct bond testing in accordance with flooring and
 adhesive manufacturer and ASTM F3311 Mat Bond
 Evaluation of Performance and Compatibility for
 Resilient Flooring.
- In good drying conditions (ambient air temperature 65 75°F (18 24°C) / 40 60% RH) finished floor covering may be installed 16 hours after installation of SC500 PLUS.
- Non-moisture sensitive tile and stone can be applied once self-leveling underlayment is walkable, approximately 1 to 3 hours.
- Lower temperatures, higher RH, poor ventilation, and thicker self-leveling application will extend self-leveler dry time.
- SUPERCAP self-leveling products are not a vapor barrier and will allow passage of moisture vapor. Prior to installing SUPERCAP self-leveling products, the concrete must be tested for moisture conditions. If the concrete moisture conditions exceed the floor covering manufacturer's requirements for the finished flooring a moisture mitigation epoxy must be applied before installing SUPERCAP self-leveling products. Use VAPOR BAN E, VAPOR BAN ER or VAPOR BAN Primer ER prior installing SUPERCAP self-leveling products.
- Steel-wheeled traffic is not recommended as it can cause damage to the surface. Important when installing floor finishes such as VCT, LVT or sheet vinyl. Which require extremely flat surfaces.

Note: For use under decorative coatings or sealers see TDS234S – LATICRETE® SUPERCAP® Decorative Coating System Guide, or TDS 423 - Installing a SPARTACOTE™ Resinous Floor System over a Cement Self-Leveling Underlayment

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:

• 1 Year Product Warranty (US) (English)

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 Iaticrete.com.