

SCM3500

silicone roof coating

Product Description

GE SCM3500 silicone roof coating is a high performing protective barrier for a variety of architectural surfaces and roofing substrates. Upon cure, SCM3500 forms a durable, breathable and weatherproof barrier that is highly resistant to degradation from UV and natural weathering.

Key Features and Typical Benefits

- **Silicone Durability** – Cured silicone rubber exhibits excellent long-term resistance to natural weathering including: extreme temperatures, ultraviolet radiation, rain and snow.
- **VOC Compliant** – High solids solvent-free formulation and low Volatile Organic Compounds content is well below the current limits of California’s relevant Air Quality Management Districts.
- **Ease of Use** – Can be applied with common airless equipment, roller or brush.
- **Versatile Application** – SCM3500 is a single component material that requires no mixing of separate components and can be applied by spray, roller or brush.
- **High Build Formulation** – Allows for single coat application and hangs on peaks without sagging.
- **Storage & Shelf Life** – SCM3500 can be stored in unheated warehouses during the cooler months without the risk of freezing. Shelf life is 18 months from date of manufacture when properly stored.

Typical Physical Properties – Supplied

Property	Value ⁽¹⁾	Test Method
Solids Content, Volume	90 ±2%	ASTM 2697
	Weight	91 ±2%
Tack Free Time	20-30 minutes	ASTM D3960
Skin-Over Time	10-15 minutes	WPSTM C-560
Viscosity	15,000 centipoises	ASTM D2196
Tensile Strength	204 psi (1.41 MPa)	ASTM D2370
Elongation	542%	ASTM D2370
Durometer Hardness Shore A	36	ASTM D2240
VOC	<24 g/L	EPA Method 24
Solar Reflectance ⁽²⁾	88%	ASTM C1549
Emittance ⁽²⁾	0.90	ASTM C1371
SRI Value ⁽²⁾	111	ASTM E1980
Permeance	9.3 perms	ASTM E96 (BW)
Tear Resistance	32 lbf/in.	ASTM D624
Low Temperature Flexibility	Pass	ASTM D522 (B)
Resistance to Wind Driven Rain	Pass	TT-C-555B

(1) Typical data are average data and are not to be used as or to develop product specifications.

(2) Values derived from testing of SCM3502 (white), weathering test in progress.

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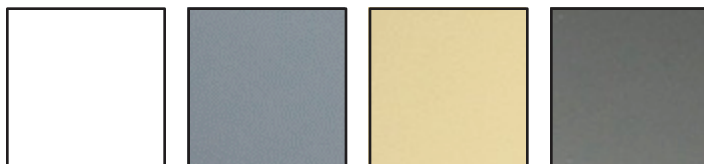


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Packaging & Colors

SCM3500 is available in nominal 5 gallon plastic pails and 55 gallon chimed steel drums. Weights shown below approximately correlate to 50 gallons and 5 gallons per container.

Grade	Color	Container (Lbs.)	Weight	Weight (Kg)
SCM3502	White	Steel drum	540.0	245.2
SCM3502	White	Plastic pail	54.0	24.5
SCM3504	Medium Grey	Steel drum	540.0	245.2
SCM3504	Medium Grey	Plastic pail	54.0	24.5
SCM3505	Tan	Steel drum	540.0	245.2
SCM3505	Tan	Plastic pail	54.0	24.5
SCM3508	Dark Grey	Steel drum	540.0	245.2
SCM3508	Dark Grey	Plastic pail	54.0	24.5



Technical Services

Additional technical information, literature, laboratory testing and application engineering are available upon request. Any technical advice furnished by Momentive Performance Materials (MPM) or any representative of MPM concerning any use or application of any coating is believed to be reliable but MPM makes no warranty, expressed or implied, of suitability for use in any application for which such advice is furnished.

Storage & Handling

SCM3500 should be stored in unopened containers and protected from exposure to direct sunlight and high heat. Do not open containers until ready for use and store containers below 109°F (43°C) to maintain full shelf life. SCM3500 generally can be stored in unheated warehouses during the cooler months without the risk of freezing.

SCM3500 reacts with atmospheric moisture to cure. Once containers are open and exposed to the atmosphere, a skin will form on the material over time. The formation of skin will be negligible in winter months but can form quickly (minutes) under hot and humid summer conditions. Cured skin that has formed on the top of the material must be removed or screened from the bulk material as it may contribute to pump clogging. Take appropriate precautions to cover open containers during use.

SCM3500 should be applied as received and dilution with solvent is not recommended. If settling in the package has occurred, stir or shake the material prior to use.

Relevant Standards and Approvals

ASTM D6694 – *Standard Specification for Liquid-Applied Silicone Coating Used in Spray Polyurethane Foam Roofing Systems.* Result: Pass

Cool Roof Rating Council (CRRC) – Licensed Seller ID 1200. SCM3502 (white) only. Rated Product ID – 0002.

UL 790 – *Flammability Characteristics* – SCM3500 carries Class “A” Non-Combustible and Class “B” Combustible credentials as tested under UL 790 procedures over spray foam and single ply roofing systems. Refer to the UL directory for specific information.

ASTM E84 – *Standard Test Method for Surface Burning Characteristics of Building Materials.* Result: Class A (Flame Spread Index 10, Smoke Developed Index 185).

Miami Dade NOA – 13-1119.01

Florida Building – FL 16878

Florida Power and Light

CAL FIRE

California Title 24 Compliant

FM Global

Installation Considerations

Surface Preparation

SCM3500 can be applied to itself as well as a variety of roofing materials and substrates including: single ply membranes (TPO, PVC, EPDM, CSPE, and hypalon), spray-applied polyurethane foam, metal, concrete, and common parapet/coping materials. Asphaltic substrates such as; modified bitumen, smooth BUR, and granulated cap sheet which may require bleed blocker. Surfaces to which SCM3500 is to be applied must be clean, dry, structurally sound and free of loose particles, dirt, dust, oil, frost, mildew and other contaminants. Damage to the underlying roof system, such as cracks, openings, holes, etc. should be properly repaired prior to application. Saturated substrates must be removed and repaired appropriately. Users of SCM3500 should verify that suitable adhesion can be attained to all existing roofing materials to be coated prior to large scale application of the coating. It is recommended that a test patch be cleaned and coated with SCM3500 to verify the effectiveness of the cleaning method and adhesion to the surface(s).

Application Guidelines

Care should be taken to avoid overspray onto adjacent building materials, vehicles, plants, etc. Overspray can be cleaned up before it has cured by wiping alternately with solvent and dry rags. Cured material can be removed from surfaces with a razor blade, or scrubbed off with steel wool or synthetic abrasive pads and solvent. To control overspray, avoid spraying in winds that may cause drift. Surfaces not intended for coating should be masked or covered.

SCM3500 should be sprayed or rolled ensuring uniform build and thorough coverage and is typically applied in one coat. If applying in multiple coats, allow adequate time between each coat for the coating to cure before applying additional coat. Final cured film thicknesses must be free of voids, pinholes, cracks or blisters.

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Application Temperature

SCM3500 can be applied throughout the year as long as the substrates being coated are completely dry. Frost and/or moisture will interfere with adhesion. Lower temperatures will lengthen the skin over, tack free and ultimate cure time and may require an overnight cure in winter months to allow the top coat application to proceed (film build may not be sufficient to allow walk over). Higher temperatures will accelerate the cure rate and decrease the open time of the coating. Under summer conditions time to top coat may be as short as 1 hour. Do not apply SCM3500 when substrate surface temperatures exceed 176°F (80°C).

Application Equipment

SCM3500 can be applied by spraying, rolling or brushing. SCM3500 works with most commercially available spray application equipment that can deliver a minimum of 3,300 psi at the spray tip for at least 2.2 gallons per minute. Always use components rated for the required pump pressure. Hoses should be vapor lock type for prevention of moisture contamination. Contact MPM technical services for equipment recommendations.

Cleanup of spray equipment containing uncured material may be accomplished by flushing with mineral spirits or toluene. DO NOT USE water or alcohol based solvents.

SCM3500 cures by reacting with moisture, thus it should not be left in pumping equipment and hoses for prolonged periods unless equipment contains moisture lock hoses, fittings and seals. Equipment without moisture lock hoses, fittings and seals may transmit sufficient moisture vapor to gradually form cured material on hose walls and at unsealed connections. This can cause increased operating pressures and flow restriction.

Application

Coating Vertical Surfaces

When coating vertical wall surfaces, other than parapets and walls associated with the roofing system, GE SEC2400 SilShield* silicone architectural coating is suggested. Contact an MPM representative for additional information.

Customer Evaluation

Customers must evaluate MPM products and make their own determination as to fitness of use in their particular applications.

Limitations

SCM3500 is not intended nor recommended:

- For use on pedestrian, deck or frequent traffic bearing surfaces.
- Cold storage roofing application without vapor barrier, cryogenic tank applications, or continuous water immersion service.

SCM3500 should not be applied to:

- Unprepared surfaces including but not limited to those that are wet, dusty, oily, mildewed, heavily chalked, blistered or otherwise structurally unsound.
- Building materials that might bleed oil or solvents. These include, but are not limited to, certain vulcanized rubber products, tapes, failed sealants, some caulking compounds and asphaltic/mastic materials unless appropriate preparation or primers are used. Consult MPM technical services for primer recommendations.
- Surfaces where adhesion has not been verified by testing.

Precautions

- Inclement weather may negatively affect uncured SCM3500 by displacement of uncured material; therefore, application of coating should not proceed if heavy rain, hail or snowfall is impending or expected within 24 hours of application.
- SCM3500 requires atmospheric moisture for propagation of cure thus it is not suitable for use in totally confined spaces.

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage

Customers considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Material Safety Data Sheets are available at www.ge.com/silicones or, upon request, from any Momentive Performance Material representative. Use of other materials in conjunction with Momentive Performance Materials sealants products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.



SCM3502 (white) only



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