

SilShield* SEC2400

silicone architectural coating

Product Description

GE SilShield SEC2400 is a high solids, silicone elastomeric coating for use in horizontal and vertical abovegrade waterproofing applications. SilShield SEC2400 silicone elastomeric coating can be used to provide a durable, long-term watertight, weatherproof barrier that is not susceptible to color fade, chalking or degradation from natural weathering.

Typical Performance Properties

- Silicone Durability Provides excellent long-term resistance to ultraviolet radiation, natural weathering, humidity, high and low temperatures with negligible change in color or elasticity.
- Primerless Adhesion To glass, concrete, stucco, masonry, urethane foam, wood, copper, EIFS, aluminum and many painted surfaces.
- Fast Skin-Over Achieves skin-over in 30 minutes and reaches tack free time in 2-4 hours.
- Ease of Application Easy to apply with brush, roller, or airless spray. High viscosity ensures that SilShield SEC2400 silicone elastomeric coating stays where applied without running.
- Silicone Compatibility Compatible with all GE silicone neutral-cure sealants and pre-cured silicone weatherstrip.
- System Warranty Achieve a complete warrantable weatherseal system when used in combination with GE UltraSpan* precured weather-strip and the GE SilPruf* family of sealants.
- Breathable Cured SilShield SEC2400 silicone elastomeric coating is vapor permeable.
- Excellent Color Retention Does not chalk or fade due to natural weathering and UV exposure, even dark colors.
- **Easily Cleaned** Surface is easily cleaned by pressure washing or with a soap and water mixture.
- Solvent Based Eliminates problems such as bloom, chalking, and washout. No limitations due to impending rain or application humidity conditions.

Momentive Performance Materials is an exclusive licensee of General Electric. Momentive Performance Materials provides versatile materials as the starting point for its creative approach to ideas that help enable new developments across hundreds of industrial and consumer applications.

We are helping customers solve product, process, and performance problems; our silanes, fluids, elastomers, sealants, resins, adhesives, urethane additives, and other specialty products are delivering innovation in everything from car engines to biomedical

devices. From helping to develop safer tires and keeping electronics cooler, to improving the feel of lipstick and ensuring the reliability of adhesives, our technologies and enabling solutions are at the frontline of innovation.



Exclusive Licensee

Typical Performance Properties (continued)

- **Low Temperature Storage** SilShield SEC2400 silicone elastomeric coating can be stored in unheated warehouses during the cooler months without the risk of freezing.
- VOC At just 70g/L, SilShield SEC2400 silicone elastomeric coating is significantly below the maximum VOC requirements for LEED Green Building Rating System Credit 4.1.
- **Color Flexibility** Available in nearly unlimited custom colors or select from the 70 pre-matched colors in our fan deck.

Basic Uses

SilShield SEC2400 silicone elastomeric coating is an architectural coating used as a waterproofing coating in vertical, horizontal and roof applications. SilShield SEC2400 silicone elastomeric coating can be used in horizontal and roof applications where there is no foot traffic. SilShield SEC2400 silicone elastomeric coating can be used as a primerless coating on concrete, stucco, masonry, urethane foam, wood, copper, EIFS, aluminum and many painted surfaces. While primerless adhesion is nearly always achieved, adhesion should always be verified by testing a small area prior to the beginning of the project.

Packaging

SilShield SEC2400 silicone elastomeric coating is available in 52-lb (23.6 kg) approx. 5.2-gal net plastic pails and 50-gal (190-L) 520-lb (236.4 kg) steel drums.

Colors

SilShield SEC2400 silicone elastomeric coating is made to order and tinted at the manufacturing facility. Colors can be selected from a pre-matched color fan deck or custom color matching can be performed to specific substrates or color chips. Selecting colors from the fan deck can improve the delivery time on samples and orders.

Limitations

SilShield SEC2400 silicone elastomeric coating is not recommended for use on walking surfaces and may contribute to a slipping hazard, particularly when wet. When used in a horizontal application, a drip edge should be considered to minimize visual effects from runoff. SilShield SEC2400 silicone elastomeric coating is also not recommended for use in locations subject to continuous water immersion. It may be difficult to achieve adhesion of non-silicone paints to overcoat SilShield SEC2400 silicone elastomeric coating. SilShield SEC2400 silicone elastomeric coating should not be applied to:

- Concrete surfaces which contain residue from oil or other bond breaking contaminants that may interfere with adhesion.
- Building materials which might bleed oil or solvents. These
 include but are not limited to: impregnated wood and certain
 vulcanized rubber gaskets or foams, tapes or failed sealants
 and caulking compounds.
- Totally confined spaces, as the coating requires ventilation to allow for evaporation of solvent and atmospheric moisture for completion of cure and generation of properties.
- Unprepared surfaces including but not limited to those which are wet, dusty, oily, mildewed, heavily chalked, blistered or otherwise structurally unsound.
- Surfaces where adhesion and coating appearance performance has not been verified by adequate testing.

Technical Services

Complete technical information and literature are available from Momentive Performance Materials, Inc.¹ Laboratory facilities and application engineering are available upon request from Momentive Performance Materials, Inc.¹

Specifications

Typical property values of SilShield SEC2400 silicone elastomeric coating as supplied and cured are set forth in the tables below. Typical product data values should not be used as specifications. Assistance with specifications is available by contacting Momentive Performance Materials, Inc.¹ at 1-800-255-8886.

Typical Properties – Supplied

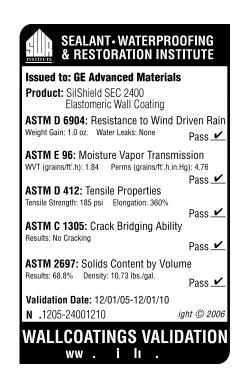
Property	Value	Test Method
Specific Gravity (lb/gal)	10.12 (1.21 g/ml)	WPSTM P-15
Density (lb/gal)	10.45 (1.25 g/ml)	WPSTM P-14
Solids Content, % by volume	66	WPSTM C-19
Solids Content, % by weight	80	WPSTM C-19
Tack Free Time, hours	2	WPSTM E-86
Skin Over Time, mins	30	
Viscosity, centipoises	9000	WPSTM C-560
Volatile Organic Content (VOC, g/L)	70	EPA Meth. 24
Volatile Organic Content (VOC, wt%)	3.5	EPA Meth. 24

Typical Properties – Cured

Property	Value	Test Method
Tensile Strength, psi	200	ASTM D-412
Elongation %	400	ASTM D-412
Crack Bridging, mm	1.59 ¹ /16 inch) max	
Moisture Vapor Transmission	7.62 Perms	ASTM D-1653
Moisture Vapor Transmission	4.67 Perms	ASTM E-96

Applicable Standards

SilShield SEC2400 silicone elastomeric coating carries SWRI validation for ASTM D6904 resistance to wind driven rain, ASTM E96-moisture vapor transmission, ASTM D412-tensile properties, ASTM C1305-crack bridging ability, ASTM D2697-solids content by volume.



SilShield* SEC2400 silicone architectural coating

Installation

Surface Preparation

Surfaces should be clean, dry, structurally sound and free of loose particles, dirt, dust, rust, oil, frost, mildew and other contaminants. All adjacent areas should be cleaned so as not to stain the new coating. Cracks and holes should be filled and sanded smooth if greater than 1.59mm (1/16 inch) wide. Cracks can be repaired with GE SilPruf* silicone sealants. The surface may have to be power washed to remove dirt.

- For remedial concrete surfaces, if efflorescence and chalk is present, the surface may need to be treated with an efflorescence inhibiting masonry primer.
- For painted surfaces, old, non-adhered paint should be removed back to the original surface and cleaned prior to coating with SilShield SEC2400 silicone elastomer coating.
- New concrete and masonry surfaces should be allowed to cure for a minimum of 30 days after which the surface should be cleaned by wire brushing loose areas from the wall.
- In all cases, the surface should be rinsed via pressure washing thoroughly and allowed to dry prior to coating application.
- All non-porous substrates (steel, aluminum, galvanized metal) should be cleaned with an appropriate solvent.

Prior to project start-up, the installer should verify that acceptable adhesion is attained with the cleaning procedures used or recommended. A test patch should be coated prior to beginning the job to verify the effectiveness of the cleaning process and adhesion to the surface. Before applying SilShield SEC2400 silicone elastomer coating, be sure that at least two hours of adequate temperature and humidity remain before the onset of inclement weather.

Application Temperature and Humidity

Ambient temperature should be above 50°F. Lower temperatures will lengthen the skinover, tack-free, and ultimate cure-time.

Film Thickness

On vertical surfaces, SilShield SEC2400 silicone elastomeric coating should be applied in a 2-coat process to deliver a minimum Dry Film Thickness (DFT) of 10 mils ($250\mu m$). Each coat should be applied at 6-8 wet mils to obtain a minimum DFT of 5 mils ($127\mu m$). Keep in mind during the drying process the DFT is approximately 30% less then the applied wet film thickness. Subsequent coats may be applied when the previous coat is dry to the touch or is firm enough to resist disturbance when rolling or brushing (approximately 2 hours for 6-8 mils, longer time may be required for thicker coats). On horizontal surfaces, SilShield SEC2400 silicone elastomeric coating may be applied in one coat up to a DFT of 15-20 mils (381-508 μm).

Coverage

Coarse textured or porous substrates may require a lower coverage rate to achieve the required DFT. Actual coverage rates should be verified on a mockup. Thicknesses less than the recommended DFT of 10 mils (250 μ m) may result in insufficient strength and sunlight blocking to assure satisfactory performance of the coating and is therefore not recommended. Thicknesses less than 10 mils (250 μ m) may result in a nonuniform color and is not recommended.

Substrate Surface Roughness Examples



Application Methods

SilShield SEC2400 silicone elastomeric coating can be applied using rollers, power rollers, brushes, or power sprayers. Phenolic core rollers are recommended. Rollers should be solvent resistant and have a nap of 3/4 to $1^{1}/2$ -inch (19 mm to 38 mm) in order to achieve the recommended coverage. Please contact a technical representative for power roller and power spraying recommendations. Clean-up of equipment containing uncured material may be accomplished by flushing with mineral spirits. SilShield SEC2400 silicone elastomeric coating should not be left in pumping equipment and hoses for prolonged periods of time unless all hoses are TEFLON® lined, all piping connections are sealed with TEFLON and all pump seals are TEFLON. SilShield SEC2400 silicone elastomeric coating cures by reacting with moisture. Equipment without TEFLON lining and seals will transmit sufficient moisture vapor to gradually form cured material on hose walls and at unsealed connections. This may result in increased operating pressures and material flow restrictions.

TEFLON is a registered trademark of DuPont.

SilShield* SEC2400 silicone architectural coating

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.momentive.com or, upon request, from any Momentive Performance Materials in conjunction with Momentive Performance Materials in conjunction with Momentive Performance Materials (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Emergency Service

Momentive Performance Materials¹ maintains an around-the-clock emergency service for its products. The American Chemistry Council (CHEMTREC), Transport Canada (CANUTEC), and the Chemical Emergency Agency Service also maintain an around-the-clock emergency service for all chemical products:

Location	GE Branded Products	All Chemical Products
Mainland U.S., Puerto Rico	518.233.2500	CHEMTREC: 800.424.9300
Alaska, Hawaii	518.233.2500	CHEMTREC: 800.424.9300
Canada	518.233.2500	CANUTEC: 613.996.6666 (collect) or CHEMTREC: 800.424.9300
Europe, Middle East, Africa	+32.(0)14.58.45.45 (Belgium)	CHEMTREC: +1-703.527.3887 (collect)
Latin America, Asia/Pacific, all other locations worldwide	+518.233.2500	CHEMTREC: +1-703.527.3887 (collect)
At sea	Radio U.S. Coast Guard, which can directly contact Momentive Performance Materials ¹ at 518.233.2500	CHEMTREC: 800.424.9300

DO NOT WAIT. Phone if in doubt. You will be referred to a specialist for advice.

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