

SilPruf* SCS2000

silicone sealant & adhesive

Product Description

SilPruf SCS2000 sealant & adhesive is a dual-purpose silicone and is a candidate for use in both weathersealing and structural glazing applications. SilPruf SCS2000 sealant & adhesive is a one-component, medium-modulus, neutral cure silicone useful on a wide variety of materials in new or remedial applications. SilPruf SCS2000 sealant & adhesive is supplied as a paste and upon cure produces a durable, formed-in-place silicone rubber joint sealant.

Typical Performance Properties

- **Silicone Durability** - cured silicone rubber exhibits excellent long term resistance to natural weathering, including: ultraviolet radiation, high and low temperatures and rain and snow, with negligible change in elasticity.
- **Proven Track Record** - Improving global construction projects since 1974; SilPruf SCS2000 sealant & adhesive demonstrates superior sealing performance and long-lasting weatherability in a variety of applications.
- **Adhesion** - primerless adhesion to many substrates and finishes. May be considered a candidate for use with numerous construction-related materials, including: glass, polycarbonate, vinyl, numerous plastics, treated and untreated wood, fluoropolymer and powder coated paints, conversion-coated and anodized aluminum, EIFS, brick, terra-cotta, ceramic and porcelain materials, concrete and natural stones. Some finishes or substrates may require a primer.
- **±50% Movement Capacity** - can accommodate 50% movement in both extension and compression and has excellent recovery after cycling.
- **High Performance Properties** - SilPruf's combination of high tensile strength, high tear strength and the capacity to absorb high deformations (elongation) make this product an outstanding candidate for protective glazing designs and seismic applications.
- **Stable Consistency (uncured state)** - supplied as a lightweight paste, the consistency of which remains relatively unchanged over a wide temperature range. The paste is able to be easily gunned and tooled under hot and cold conditions.

GE - Advanced Materials, Silicones provides versatile materials as the starting point for our 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.



GE imagination at work

Typical Performance Properties *(continued)*

- **Thermal Stability (cured state)** - once cured, the material remains elastic over a range of -55°F (-48°C) to 300°F (149°C) and up to 400°F (204°C) under intermittent short-term exposure.
- **Extended Work Life** - designed to allow the user sufficient time for placement and tooling.
- **Low Sag or Slump** - useful for application to horizontal, vertical or overhead surfaces.
- **Low VOC** - significantly lower than the requirements of the U.S. Green Building Council’s Leadership in Energy and Environmental Design (L.E.E.D.) program.
- **Product Versatility** - full adhesive and chemical compatibility with GE - Silicones’ silicone elastomeric coating (SilShield* SEC2400) and silicone pre-cured weatherstrip (UltraSpan* US1100).
- Compatible with these GE - Silicones insulating glass products: IGS3703, IGS3713-D1, IGS3729, IGS3723, IGS3733, IGS3743.
- Compatible with these GE - Silicones weatherproofing product lines: SCS2700, SCS9000, SCS2800, US1100, SEC2400.
- Compatible with these GE - Silicones structural products SSG4000, SSG4000AC, SSG4800J, SSG4400.
- Neutral cure byproduct with low odor.

Basic Uses

- SilPruf SCS2000 sealant & adhesive is useful as a weatherproofing material when sealing between dissimilar or similar materials in either new or remedial glazing and sealing applications.
- SilPruf SCS2000 sealant & adhesive is useful as a weatherproofing sealant at window perimeters and punched openings.
- SilPruf SCS2000 sealant & adhesive is useful as a structural glazing adhesive (project review required).
- SilPruf SCS2000 sealant & adhesive has been successfully tested in protective glazing designs and may be considered a candidate for such applications.
- SilPruf SCS2000 sealant & adhesive is useful as an adhesive in panel stiffener applications.
- SilPruf SCS2000 sealant & adhesive is useful for adhering GE - Silicones UltraSpan US1100 pre-cured silicone weatherstrip product line.



Packaging

SilPruf SCS2000 sealant & adhesive is available in 10.1 fl. oz. (299 ml) plastic caulking cartridges, 20.2 fl.oz. (597 ml) foil sausage packs, 2 gallon plastic pails (2 gals. / 7.6 L) and 5 gallon plastic pails (5 gals. / 18.9 L). Plastic cartridges are packaged as 24 units in cardboard boxes and are dispensed using a single component hand or air-pressured caulking gun. Cartridges and pails are designed for convenience in shipping and are easily handled by warehouse workers and mechanics on scaffolds and staging. Sausage packs are designed to reduce volume of used containers compared to conventional sealant cartridges, thereby reducing solid waste. The use of sausage packs also boosts productivity by cutting typical reloading time in half.

Colors

SilPruf SCS2000 sealant & adhesive is available in 8 standard colors, 6 special colors, and can be custom colored.

Grade	Color
SCS2002	White
SCS2003	Black
SCS2004	Limestone
SCS2008	Light Grey
SCS2009	Aluminum Grey
SCS2010	Dark Grey
SCS2020	Precast White
SCS2097	Bronze
SCS2040	Earth Tone
SCS2041	Red Brick
SCS2046	Champagne
SCS2006	Antique Pink
SCS2100.0322	Blue Spruce
SCS2100.0148	Sandy Beige

Limitations

SilPruf SCS2000 sealant & adhesive is not recommended:

- For use underwater or in other applications where the product will be in continuous contact with water.
- For use in food contact applications.
- When painting of the cured sealant is desired (unless appropriate specialized paint products are used).
- For structural adhesion on bare metals or surfaces subject to corrosion (*i.e.*, mill aluminum, bare steel, etc.).

SilPruf SCS2000 sealant & adhesive should not be applied or used:

- In structural glazing applications unless GE - Silicones has reviewed shop drawings for applicability and has performed adhesion and compatibility tests on project substrates, spacer materials and all accompanying accessories. Review and testing is done on a project-by-project basis. No blanket approval is given by GE - Silicones for structural glazing applications. Structural glazing industry guidelines (ASTM C1401) suggest that drawings and details are to be reviewed by all parties involved in the manufacture of an SSG system and for each building project.
- Under exceedingly hot or cold conditions (see Sealant Application section for additional information).
- On wet, damp, frozen or contaminated surfaces.
- On excessively basic or acidic substrates.
- In exceedingly large structural cavities (see Sealant Application section for additional information).

Precautions

- This material requires atmospheric moisture to cure from paste to rubber and may not attain its listed final cured rubber properties when used in designs or applications where the silicone is encapsulated and without access to atmospheric moisture.
- When sealing against natural stones, GE - Silicones recommends that stain testing be performed prior to use to ascertain the visual acceptability of the sealant-stone combination. GE - Silicones recommends evaluation of SilPruf NB SCS9000 when sealing to natural stones.
- Some materials that bleed plasticizers or oils can cause a discoloration on the surface of sealants. When sealing to or over items such as: rubberized gaskets, bituminous-based materials, butyl or oil-based products, oily woods, tapes, etc., GE - Silicones recommends that compatibility testing be performed prior to use to confirm the suitability of the use of these materials when in contact with each other.
- Silicone materials are hydrophobic in nature and if inadvertently over-applied onto adjacent joint surfaces (even if removed immediately), can create a waterproofing effect on some substrate types when the substrate is wet. See section on Masking.

Technical Services

Complete technical information and literature are available from GE - Silicones. Laboratory facilities and application engineering are available upon request from GE - Silicones.

SilPruf* SCS2000 silicone sealant & adhesive

Specifications

Typical property values of SilPruf SCS2000 sealant & adhesive 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 GE - Silicones at 1-800-255-8886.

Typical Properties – Supplied

Property	Value ⁽¹⁾	Test Method
Consistency	Paste	
Polymer	100% silicone	
VOC	20 g/l	WPSTM C1454
Work Life (tooling time)	20-30 minutes	
Tack Free Time	3-4 hours (@ 72°F, 50% RH)	ASTM C679
Sag/Slump	0.1" max.	ASTM D2202

Typical Properties – Cured

Property	Value ⁽¹⁾	Test Method
Hardness, Durometer (Type A Indentor)	24	ASTM D2240
Ultimate Tensile Strength	341 psi (2.35 MPa)	ASTM D412
Ultimate Elongation	715%	ASTM D412
Tensile at 50% Elongation	47.0 psi (0.32 MPa)	ASTM C1184
Tensile at 100% Elongation	73.2 psi (0.50 MPa)	ASTM C1184
Ultimate Tensile Strength	140.5 psi (0.97 MPa)	ASTM C1135
Ultimate Elongation	353%	ASTM C1135
Tear Strength; die B	76.8 ppi	ASTM D624
Shear Strength (@ 1/4" thickness)	121.4 psi (0.84 Mpa)	ASTM C961
Peel Strength (average) (21-day cure @ 75°F (21°C) 50% RH)	56.6 pli	ASTM C794
Joint Movement Capability	±50%	ASTM C719
Service Temperature Range (after cure)	-55°F to +250°F (-48°C to 121°C)	
Fire Endurance	2 hours (with backer)	UL723, ASTM E814
Weathering and U.V. Resistance	Excellent	GE 20 yr. study
Cure Time (1/4" or 6 mm deep section) @ 75°F (24°C) 50% RH	3-4 days	
Full Cure (most common bead sizes)	10-14 days	

(1) Average value. Actual value may vary.

Applicable Standards

SilPruf SCS2000 sealant & adhesive meets or exceeds the requirements of the following specifications:

American Society for Testing & Materials International

- ASTM C920 Standard Specification for Elastomeric Joint Sealants; Type S, Grade NS, Class 50, Use A, G, M, O
- ASTM C1184 Standard Specification for Structural Silicone Sealants; Type S, Use G & O

U.S. Federal Specifications:

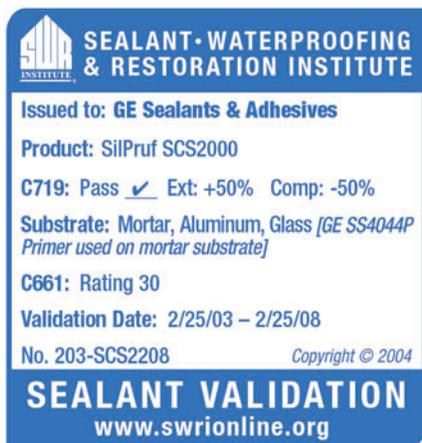
(widely referenced but cancelled Sept. 1996)

- TT-S-001543A Sealing Compound: Silicone Rubber Base (for Caulking, Sealing & Glazing in Buildings and Other Structures)
- TT-S-00230C Sealing Compound: Elastomeric Type, Single Component (for Caulking, Sealing & Glazing in Buildings and Other Structures)

Canadian General Standards Board (currently inactive)

CGSB-19.13-M87 Sealing Compound, One-Component, Elastomeric, Chemical Curing

SilPruf SCS2000 sealant & adhesive carries SWR Institute validation @ ±50% movement.



Suggested References

In addition to the guidelines provided on this datasheet, GE - Silicones recommends that designers and users of SilPruf SCS2000 sealant & adhesive familiarize themselves with the latest editions of following industry guidelines and best practices:

- 1.) ASTM C1193 Standard Guide for Use of Joint Sealants.
- 2.) ASTM C1481 Standard Guide for Use of Joint Sealants with Exterior Insulation & Finish Systems (EIFS).
- 3.) ASTM C1472 Standard Guide for Calculating Movement and Other Effects When Establishing Sealant Joint Width.
- 4.) ASTM C1401 Standard Guide for Structural Sealant Glazing
- 5.) SWR Institute's Applying Liquid Sealants Applicator Training Program.

Joint Designs and Dimensions - WEATHERSEALING

Joint Movement - The dimensions of joints in typical construction applications change daily as a result of solar heat gain and building sway, and throughout the year due to seasonal changes. The movement in a sealant bead installed on the sun-side of a building or during the hottest portion of the day will be almost entirely in extension during the cold season or cycle; while the movement of a bead installed during the coldest condition will be almost entirely in compression during the hotter season or cycle. In addition to these above movements, the designer should consider the effect of construction tolerances in his/her project to minimize the occurrence of over-sized or under-sized joints during construction. All moving (dynamic) joints must be designed so as not to allow three-sided adhesion of the sealant to occur (reference ASTM C1193). Three-sided adhesion hinders the ability of the sealant to extend and compress freely as desired and can lead to early joint failure.

Joint Width - When using SilPruf SCS2000 sealant & adhesive, the designed joint width must be at least twice the total anticipated joint movement. For example, if the total anticipated movement in an expansion joint in which SilPruf SCS2000 sealant & adhesive is to be installed is 1/4", the designed joint width must be at least 1/2". The designer may want to consider additional width to accommodate construction tolerances (reference ASTM C1472). Large panels or lites should allow a minimum width of 1/4" for the sealant bead, mostly to allow for a proper installation (very small/narrow beads become difficult to install and can accommodate less movement). Glazing of plastic or larger-sized metal panels may require larger than usual joint widths due to the greater movement potential (higher coefficients of thermal expansion). Consult with GE - Silicones Technical Services for recommendations on large or unusual applications.

Joint Designs and Dimensions - WEATHERSEALING (continued)

Butt Jointing - A thin installation of silicone sealant can better accommodate more movement than a deep installation, as the deeper bead will result in additional stress being imposed on both the sealant and the bonding surfaces during joint movement.

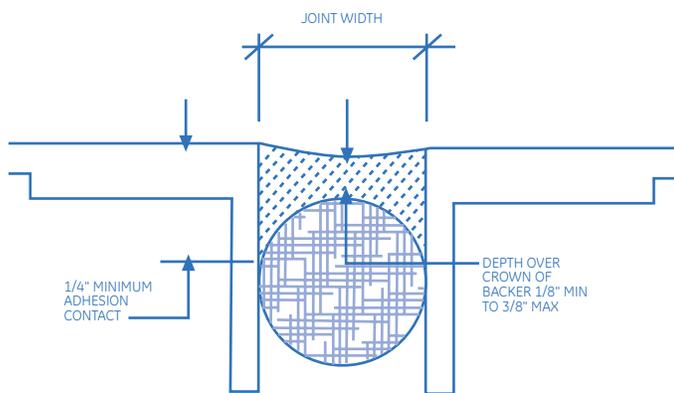
Figure 1 illustrates the general guidelines for installation of SilPruf SCS2000 sealant & adhesive into a typical butt joint configuration of widths up to 2”.

- 1.) The recommended sealant profile is an hourglass shape with the depth of the sealant over the crown of the backer rod to be no thinner than 1/8” and no thicker than 3/8”, and
- 2.) A minimum of 1/4” of adhesive bonding contact must be made to all surfaces to which the sealant is intended to adhere.

When used in joints exceeding 2” in width:

- 3.) The recommended sealant profile is an hourglass shape with the depth of the sealant over the crown of the backer rod to be no thinner than 1/4” and no thicker than 3/8”, and
- 4.) A minimum of 3/8” of adhesive bonding contact must be made to all surfaces to which the sealant is intended to adhere.

Figure 1



Joint Backer Materials

Backer materials, typically backer rod, provide the following benefits to aid in the correct application of SilPruf SCS2000 sealant & adhesive.

- 1.) To control and provide the desired sealant depth.
- 2.) Create a formed joint cavity that allows for the desired hourglass sealant shape.
- 3.) Provide a firm backup which helps attain full wetting of the substrates when the sealant is tooled.
- 4.) Act as a bond breaker to eliminate adhesion on the backside of a joint (three-sided adhesion).

Non-gassing polyethylene, polyolefin or polyurethane foam rod is the recommended back-up material for use with SilPruf SCS2000 sealant & adhesive. If the joint is too shallow to allow foam rod, use a polyethylene tape (as a bond breaker to eliminate three-sided adhesion). On EIFS and porous substrate applications, a closed cell backer rod is recommended (open cell backer materials absorb and hold water which can affect long-term sealant adhesion on these materials). Backer rod should be 25-50% greater (confirm with manufacturer of backer rod as to type selected) than the width of the joint, thereby providing continuous pressure against the joint walls, and expanding and contracting with the joint movement without pushing the sealant out of the joint during the compression cycle or falling away during the extension cycle. Rubber backup materials may stain the sealant and are not recommended, unless tested and verified for compatibility.

Joint Designs and Dimensions - STRUCTURAL GLAZING

- Silicone contact width and thickness (see Figure 2) will vary by project with the design wind load and glass size.
- **Contact Width** can be calculated using the following formula: [Design Wind Load (PSF) x Longest Short Span of Glass or Panel (Ft.)] divided by 480.
- A minimum sealant **thickness** of 1/4” (7mm) between substrates is required to accommodate thermal expansion and contraction (see Figure 3) of most systems and should be used in order to assure that sealant can be injected into the structural cavity obtaining full contact with both the glass and metal surfaces while remaining free of air voids. Greater joint thickness may be required to accommodate movement in some larger-sized SSG systems. GE - Silicones can be contacted to assist in determination of proper joint thickness to accommodate expected movement in structurally glazed applications.

The following materials are required to be submitted to GE - Silicones to receive suggestions for the use of SilPruf SCS2000 sealant & adhesive.

- Architectural and shop drawings for review and comment.
- Design wind load requirement(s) for project.
- Glass or panel sizes.
- Production samples of metal, glass, gaskets, spacers and setting blocks with type and manufacturer identified.
- Specification and/or identification of paint or finish to which SilPruf SCS2000 sealant & adhesive is intended to adhere (i.e., 215-R1 anodized or if paint; manufacturer, finish system and ID#).

Joint Designs and Dimensions - STRUCTURAL GLAZING *(continued)*

GE - Silicones will provide the following, after reviewing the materials above:

- Determination as to whether the submitted joint dimensions meet the minimum design criteria necessary for the use of SilPruf SCS2000 sealant & adhesive.
- Short-term adhesion data using (typically) the ASTM C794 and/or ASTM C1135 test method. Other test methods may be employed.
- Short-term compatibility test results on gaskets, spacers and setting blocks and other accessories per ASTM C1087 or GE - Silicones test method for compatibility.
- Information regarding suggested primers, when required.

GE - Silicones will not:

- Design sealant joints.
- Provide comments on the structural integrity of overall framing system(s).
- Provide long-term performance data.

The design professional has final responsibility for the determination of structural sealant joint dimensions based on project conditions, design wind load(s), glass or panel sizes, anticipated thermal, seismic or other movement of the system.

The ASTM C1401 Standard Guide for Structural Sealant Glazing provides a thorough overview of design topics and information for use in SSG systems.

Figure 2

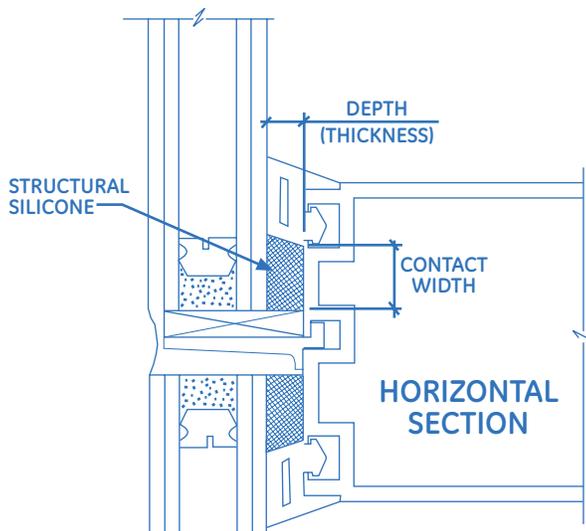
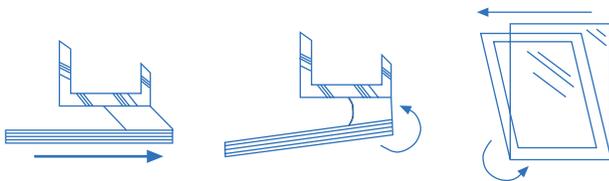


Figure 3: Movement from thermal expansion and contraction and/or glass rotation



Installation

Sealants may not adhere or maintain long-term adhesion to substrates if the surface is not prepared and cleaned properly before sealant application. Using proper materials and following prescribed surface preparation and cleaning procedures is vital for sealant adhesion. IN ALL CASES IT IS IMPORTANT TO CONFIRM THE ACCEPTIBILITY OF EACH SEALANT-SUBSTRATE COMBINATION WITH A LAB OR SITE ADHESION TEST PRIOR TO PROCEEDING WITH PROJECT INSTALLATION. GE - Silicones can provide lab and field adhesion testing information and suggestions to user upon request.

Surface Preparation

Porous Materials (Concrete, Masonry, Brick, Stone, etc.)

- Joints must be clean, dry and sound prior to application of the sealant. All contaminants, impurities, or other adhesion inhibitors (such as moisture/frost, oils, concrete form release agents, old sealants, asphalt and other surface treatments, etc.) must be removed from the surfaces to which the sealant is intended to adhere.
- Clean where necessary by wire brush, mechanical abrading, grinding, sanding, saw cutting, blast cleaning (sand or water), or a combination of these methods to provide a stable clean surface for sealant application.
- Remove dust and other remaining loose particles with a soft bristle brush or by using an oil-free air blow.
- Polished stone surfaces and smooth sawn edges can be cleaned using a solvent dampened rag (allow sufficient time for solvent to evaporate prior to application of the sealant). When handling solvents, refer to manufacturer's MSDS for information on handling, safety and personal protective equipment.
- Cleaning of surfaces should be done within 1 to 2 hours of when the sealant is to be applied.
- Since porous materials can absorb and retain moisture, it is important to confirm that substrates are dry prior to application of the sealant.

Non-Porous Materials (Glass, Metals, Plastics, Ceramics, etc.)

- Clean by using a two-rag wipe technique → wet one rag with solvent and wipe the surface with it, then use the second rag to wipe the wet solvent from the surface BEFORE it evaporates (allowing the solvent to dry on the surface without immediately wiping with a second cloth can negate the cleaning procedure because the contaminants may simply be re-deposited as the solvent dries). In all cases where used, solvents should be wiped dry with a clean, white cloth or other lint-free wiping materials. Change the cleaning rags frequently, as they become dirty. It is easier to see the dirt accumulating on the rag if white rags are used. Do not dip used cleaning rags into the cleaning solvent as this can contaminate the solvent (cleaning with contaminated solvent can result in sealant adhesion issues). Always use clean solvent-resistant containers for solvent use and storage.
- When cleaning deep, narrow structural glazing cavities, wrap the cleaning cloth around a clean, narrow-blade putty knife. This permits force to be applied to the cleaned surface.
- Isopropyl Alcohol (IPA) is a commonly-used solvent and has proven useful for most non-porous substrates encountered in architectural construction applications. Xylene and Toluene have also been found useful on many substrates. When handling solvents, refer to manufacturer's MSDS for information on handling, safety and personal protective equipment.
- Architectural coatings, paints and plastics should be cleaned with a solvent approved by the manufacturer of the product or which does not harm or alter the finish.
- Cleaning of surfaces should be done within 1 to 2 hours of when the sealant is to be applied.
- Difficult or nearly impossible to see on a joint substrate, frost is likely to develop on substrates when temperatures drop near the freezing point. Since frost and moisture will interfere with proper sealant adhesion, it is important to confirm that substrates are dry prior to application of the sealant.

Surface Preparation *(continued)*

Exterior Insulation and Finish Systems (EIFS)

- The use of an appropriate silicone primer is required on all EIFS substrates. Consult GE - Silicones Technical Services for sealant-primer-substrate recommendations.
- Confirm with the EIFS supplier which finish the sealant should be applied to (*i.e.*, base coat or base coat with EIFS primer).
- All EIFS surfaces must be clean, dry and sound and in an acceptable condition to receive sealant. Confirm with the EIFS supplier or project architect or consultant, what joint conditions are considered acceptable for sealant installation to proceed. If unacceptable conditions are found, cease installation of sealant until corrections are made.
- To clean EIFS, lightly abrade the joint surfaces using a synthetic brush or pad and then remove dust and other remaining loose particles with a soft bristle brush or using an oil-free air blow.
- Cleaning of surfaces should be done within 1 to 2 hours of when the sealant is to be applied.
- Since EIFS materials can absorb and retain moisture, it is important to confirm that the EIFS materials are dry prior to application of the sealant.

Priming

SilPruf SCS2000 sealant & adhesive attains primerless adhesion to many commonly encountered construction materials. However, some materials with variable surface characteristics may require the use of a primer to help obtain durable long-term adhesion. Prior to use, trial applications should be made to check adhesion to the specific materials to be used on the project. See the GE - Silicones primer datasheets for product specific information on use and priming instructions. PRIMER APPLICATION IS NOT A SUBSTITUTE FOR SURFACE PREPARATION. Consult GE - Silicones Technical Services for sealant-primer-substrate recommendations.

CAUTION: Primers may contain solvents. When handling solvents, refer to manufacturer's MSDS for information on handling, safety and personal protective equipment.

Masking

The use of masking tape is recommended where appropriate to ensure a neat job and to protect adjoining surfaces from over-application of sealant. Masking tape can prevent contact of sealant with adjoining surfaces that otherwise would be permanently marred or damaged by such contact or by cleaning methods required to remove sealant systems. When tooling, use care not to spread the sealant over the face of the substrates adjacent to the joint or masking as the silicone can be extremely difficult to remove on rough or porous substrates. Do not allow masking tape to touch clean surfaces to which the silicone sealant is to adhere (adhesive on masking tape can interfere with adhesion of silicone). Masking tape should be removed immediately after tooling the sealant and before the sealant begins to skin over (tooling time).

Sealant Application - WEATHERSEAL

- Apply sealant in a continuous operation, horizontally in one direction and vertically from the bottom to the top of the joint opening, applying a positive pressure adequate to properly fill and seal the joint width.
- Tool or strike the sealant with a concave tool applying light pressure to spread the material against the back-up material and the joint surfaces to ensure a void-free application.
- In glazing applications, tool the sealant at the sill so that precipitation and cleaning solutions will not pool.
- Excess sealant should be cleaned from glass, metal and plastic surfaces while still uncured. On porous surfaces the excess sealant should be allowed to progress through the initial cure or set-up. It should then be removed by abrasion or other mechanical means.
- Due to the smooth consistency of SilPruf SCS2000 sealant & adhesive, tooling agents such as water, soap, or detergent solutions are not necessary or recommended. Dry tooling is recommended.
- Sealant application is not recommended when the temperature is below 40°F (4°C) or if frost or moisture is present on the surfaces to be sealed.
- Application of SilPruf SCS2000 sealant & adhesive is not recommended to surfaces above 122°F (50°C).
- The cure rate of this product is dependent upon temperature and the availability of atmospheric moisture. Under Standard Conditions (relative humidity of 50 ±5% at an air temperature of 73.4 ±2°F [23 of ±1°C]) this material can attain a cured thickness of 2-3 mm per 24 hours (assuming ample access to atmospheric moisture). As temperature decreases, the cure rate slows down (and vice versa). Low moisture environments will also reduce the cure rate. Near-confined spaces which limit the overall access to atmospheric moisture will cure only from that surface which has access to the atmosphere. Colder temperatures can significantly increase cure times and can open the possibility of sealant irregularities if joint movement occurs while sealant is not fully cured. The following reference provides additional information on Movement-During-Cure of sealant joints: ASTM C1193 - Standard Guide for Use of Joint Sealants; section 12.5.

Sealant Application - STRUCTURAL GLAZING

- Apply the sealant by pushing the bead ahead of the nozzle and making sure that the entire cavity is filled. Tooling should be done neatly, forcing the sealant into contact with the sides of the joint, thus helping to eliminate any internal voids and assuring good substrate contact. AIR POCKETS OR VOIDS WITHIN THE STRUCTURAL CAVITY ARE NOT ACCEPTABLE.
- Due to the smooth consistency of SilPruf SCS2000 sealant & adhesive, tooling agents such as water, soap or detergent solutions are not necessary or recommended. Dry tooling is recommended.
- Sealant application is not recommended when the temperature is below 40°F (4°C) or if frost or moisture is present on the surfaces to be sealed.
- SilPruf SCS2000 sealant & adhesive works best when applied to surfaces below 122°F (50°C).
- SilPruf SCS2000 sealant & adhesive should not be applied in totally confined spaces since the sealant requires exposure to air to cure properly and develop typical properties. In a typical SSG cavity, cure depths up to 3/4" from an air interface will generally cure satisfactorily and reach maximum properties within several days. Cure depths > 3/4" may take significantly longer time to cure and when applied in a single application may not cure satisfactorily. Consult GE - Silicones technical services for additional information on depth of cure for this product.

Method of Application

SilPruf SCS2000 sealant & adhesive is easily dispensed directly from cartridges and foil sausage packs using standard caulking guns or from 2 gallon pails using standard bulk caulking gun equipment. The sealant may also be dispensed from 55 gallon drums with pumping equipment.

HANDLING AND SAFETY

Material Safety Data Sheets are available @ www.GESilicones.com or, upon request, from a GE - Silicones representative. Similar information for solvents and other chemicals used with GE - Silicones products may be obtained from your suppliers.

Storage Conditions and Warranty Period

SilPruf SCS2000 sealant & adhesive should be stored in the original unopened container at 80°F (27°C) or lower. All users of this material are recommended to obtain and retain any invoices or other documentation relating to delivery and to manage their inventory on a FIRST IN / FIRST OUT basis. Applicable warranty information can be obtained from GE - Silicones, Waterford, NY, the GE - Silicones' sales office nearest to you, or an authorized GE - Silicones' product distributor.

Availability

Information on ordering can be obtained from GE - Silicones, Waterford, NY, the GE - Silicones' sales office nearest to you, or an authorized GE - Silicones' product distributor. For information regarding cost, contact your local distributor or GE - Silicones Territory Manager. Our Customer Service number is: 877-943-7325.

Government Requirement

Prior to considering use of a GE - Silicones product in fulfilling any government requirement, please contact the Government and Trade Compliance office at: 413-448-4624.

Patent Status

SilPruf SCS2000 sealant & adhesive is the subject of one or more pending U.S. patent applications.

Nothing contained herein shall be construed to imply the non-existence 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

Customers considering the use of any of GE - Silicones products should consult the latest Material Safety Data Sheets and labels for product safety information. Customers must evaluate GE - Silicones products and make their own determination as to fitness of use in their particular applications. For Material Safety Data Sheets contact the GE - Silicones sales office nearest you. Customers must ensure that all applicable federal, state, and local requirements have been met before handling any of the products mentioned in the text.

Emergency Service

GE - Silicones 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 - Silicones Products	All Chemical Products
Mainland U.S., Puerto Rico	800.809.9998	CHEMTREC: 800.424.9300
Alaska, Hawaii	304.926.8418 (collect)	CHEMTREC: 800.424.9300
Canada	304.926.8418 (collect)	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	+304.926.8418 (collect)	CHEMTREC: +1-703.527.3887 (collect)
At sea	Radio U.S. Coast Guard, which can directly contact GE - Silicones at 800.809.9998 or CHEMTREC at 800.424.9300.	

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

Principal Locations

Regional Information	Phone	Fax
North America World Headquarters 187 Danbury Road Wilton, CT 06897, USA	800.295.2392	607.754.7517
Latin America Rodovia Eng. Constância Cintra, Km 78,5 Itatiba, SP – 13255-700 Brazil	+ 55.11.4534.9650	+ 55.11.4534.9660
Europe, Middle East, Africa and India GE Bayer Silicones GmbH & Co. KG Leverkusen Germany	00.800.4321.1000	
Pacific GE Toshiba Silicones 6-2-31 Roppongi Minato-ku Tokyo 106-8550 Japan	+ 81.3.3479.5361	+ 81.3.3479.5391
Customer Service Centers		
North America South Charleston, WV 25303, USA E-mail: cs-na.osi@ge.com	Specialty Fluids 800.523.5862	304.746.1654
	UA, Silanes, Resins, and Specialties 800.334.4674	304.746.1623
	RTV Products-Elastomers 800.332.3390	304.746.1623
	Sealants and Adhesives and Construction 877.943.7325	304.746.1654
Canada Toronto, Canada	Within Canada 800.668.4644 Outside Canada 905.858.5187	905.858.6687
Latin America Argentina and Chile Brazil Mexico and Central America Venezuela, Ecuador, Peru, Colombia, and Caribbean E-mail: csla.gesosi@ge.com	+54.23.2055.2857 +55.11.4534.9650 +52.55.5257.6042 +58.212.902.5167	+ 54.23.2055.2811 + 55.11.4534.9660 + 52.55.5257.6094 + 58.212.902.5158
Europe, Middle East, Africa and India GE Bayer Silicones GmbH & Co. KG E: ebusiness1.gebs@ge.com GE Specialty Materials (Suisse) Sàrl E: cs-eur.osi@ge.com	00.800.4321.1000	
Pacific Japan E-mail: helpdesk@getos.co.jp China Korea Singapore	+ 81.276.20.6182 + 86.800.820.0202 + 82.2.530.6400 + 65.6220.7022	
Worldwide Hotline Worldwide Web	800.295.2392 GESilicones.com	+ 607.754.7517

THE MATERIALS, PRODUCTS AND SERVICES OF THE BUSINESSES MAKING UP THE ADVANCED MATERIALS UNIT OF GENERAL ELECTRIC COMPANY, ITS SUBSIDIARIES AND AFFILIATES, ARE SOLD SUBJECT TO GE - ADVANCED MATERIALS' STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, GE - ADVANCED MATERIALS MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN GE - ADVANCED MATERIALS STANDARD CONDITIONS OF SALE, GE - ADVANCED MATERIALS BUSINESS AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of GE - Advanced Materials' materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating GE - Advanced Materials' products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of GE - Advanced Materials' Standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by GE - Advanced Materials. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of General Electric Company or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

Copyright 2003-2006 General Electric Company, all rights reserved.

*SilPruf, SilShield, UltraGlaze and UltraSpan are trademarks of General Electric Company.