

SILICONE SEALANT COMPARISON GUIDE

Dow Corning® 795 Silicone Building Sealant vs. the Competition

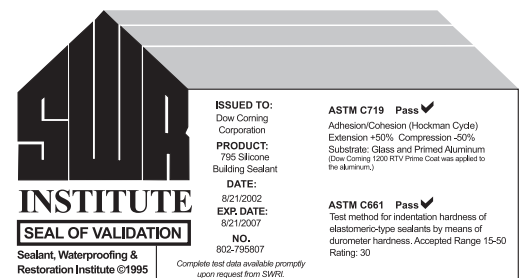
Tremco	GE			Pecora	Sika	Degussa
<i>Spectrem</i> ® 2	<i>SilPruf</i> ® SCS 2000	<i>UltraPruf</i> ® II SCS 2900	<i>UltraGlaze</i> ® SSG 4000	<i>Pecora</i> 895	<i>SikaSil</i> ®-C 995	<i>Sonneborn</i> ® <i>Sonolastic</i> ® 150

Proven Performance That Can't Be Beat

Dow Corning® 795 Silicone Building Sealant is a one-part, neutral-cure, adhesive/sealant for new construction and renovation applications. It cures upon exposure to atmospheric moisture to produce a durable, flexible seal.

For structural and nonstructural glazing as well as general weathersealing applications, *Dow Corning* 795 Silicone Building Sealant can't be beat.

- Strong enough to support glass and other panel materials under high windload and flexible enough to accommodate thermal movement
- The standard for silicone structural glazing – approved for both 2- and 4-sided structural glazing
- Accommodates movement up to ±50% in a properly designed weatherseal joint (±25% in a properly designed structural glazing joint)
- SWRI validation of ±50% movement capability
- Primerless adhesion to most building substrates; compatible with two-part silicone insulating glass seals
- Ideal for structural and nonstructural glazing of glass, metal and plastic; for adhering stiffeners to building panels, and for adhering *Dow Corning*® 123 Silicone Seal
- Excellent for general weatherproofing applications, including perimeter sealing of door and window frames
- Lower staining potential than many silicone sealants
- A long history of success – in use since 1980
- The assurance of a 20-year limited weathersealing and structural warranties
- Backed by Dow Corning Corporation, a global silicone technology leader with a reputation for superior technical support and one of the best warranty programs in the business



How does the competition compare? Turn the page and see for yourself ...

Dow Corning® 795 Silicone Building Sealant vs. the Competition¹

	Dow Corning® 795 Silicone Building Sealant	Tremco Spectrem® 2	GE SilPruf® SCS 2000	GE UltraPruf® II SCS 2900	GE UltraGlaze® SSG 4000	Pecora 895	Sika SikaSil®-C 995	Degussa Sonneborn® Sonolastic® 150
Type	One-part, moisture-cure silicone; methoxy cure system	One-part, neutral-cure silicone; oxime cure system (High free fluid level; >20% free fluid content.)	One-part, neutral-cure silicone; alkoxy cure system	One-part, neutral-cure silicone; methoxy cure system (Contains free silicone fluids; 18.7% extractables, compared with <10% for Dow Corning 795 Sealant.)	One-part, neutral-cure silicone; alkoxy cure system	One-part, neutral-cure silicone; oxime cure system (Fluid-filled)	One-part, moisture-cure silicone	One-part silyl-terminated polyether; moisture cure
Intended Use	Structural glazing Nonstructural glazing Weathersealing	Structural glazing Nonstructural glazing Weathersealing	Structural glazing Nonstructural glazing Weathersealing Impact glazing	Weathersealing (Not permitted for structural glazing.)	Structural glazing Weathersealing	Structural glazing Nonstructural glazing Weathersealing	Nonstructural glazing Weatherproofing	Nonstructural glazing Weathersealing (Not permitted for structural glazing; lack of adhesion to glass after 1000 hours of QUV exposure makes the product unsuitable for wet glazing.)
Supported for 2- and 4-Sided Structural Glazing	Yes	2-sided only	Yes	Not applicable	Unknown	Yes	No	Not applicable
Meets ASTM C-1184 (Standard specification for structural silicone sealants)	Yes	Not listed on data sheet	Yes	No	Yes	Yes	No	No
Movement Capability	±50%	Mfr claims ±50% movement; failed both ±50 and ±25% when tested at Dow Corning per ASTM C-719.	Mfr claims +50% movement; failed when tested at Dow Corning per ASTM C-719.	Mfr claims ±50% movement; failed when tested at Dow Corning per ASTM C-719.	±25%	±50%	+50%	Mfr claims +100/-50% movement; failed when tested at Dow Corning per ASTM C-719.
SWRI Validation	Yes at ±50%	No	Yes	No	No	No	No	No
Tensile Strength/Modulus (For structural glazing sealants, long-term stability, indicated by weatherometer data, is critical.)	40 psi at 25% extension (35 psi after weathering) 55 psi at 50% extension (50 psi after weathering) (ASTM C-1135)	90-100 psi at 100% extension; no weatherometer data provided (ASTM C-1135) (Per Dow Corning tests, modulus increases after weathering.)	41 psi at 50% extension (extension at 1/2 in/min); no weatherometer data provided (Lower modulus sealants are not appropriate for structural glazing.)	Mfr claims low modulus; no data provided (Low modulus achieved through use of silicone fluids; lower modulus sealants are not appropriate for structural glazing.)	75 psi at 50% extension; no weatherometer data provided	50 psi at 100% extension; no weatherometer data provided (ASTM D-412)	360 psi (ASTM D-412)	35 psi at 100% extension (In Dow Corning tests, modulus doubled after 2500 hr. weathering, which can cause excessive bond line stress and reduced movement capability; a disadvantage in high-movement weathersealing applications.)
Durometer, Shore A, points (An indication of sealant toughness.)	35 (ASTM D-2240)	37-40 (ASTM C-661)	25 (ASTM D-2240)	25 (ASTM D-2240)	39 (ASTM D-2240)	27 (ASTM D-2240)	25 (ASTM D-2240)	17 (ASTM C-661)
Adhesion	Primerless adhesion to many common construction materials, including anodized or alodine aluminum, Duracron® paint, glass, granite and brick. Primer required on stainless and galvanized steel, and limestone; may also be needed on mill finish aluminum, Kynar™, concrete, marble and EIFS.	Mfr claims product “exhibits primerless adhesion to many common building substrates.” Dow Corning tests indicate a need for primer on concrete, limestone, marble and brick; may also be needed on Kynar and EIFS.	Mfr claims primerless adhesion to most common building components including glass, paints, plastics, most metals, stone, concrete and masonry. Dow Corning tests indicate a need for primer on mill finish aluminum, galvanized and stainless steel, concrete and limestone; may also be needed on marble, EIFS and Kynar.	Mfr claims “adheres to most common building substrates usually without priming” but indicates “some materials such as concrete, mill finish aluminum, galvanized steel, fluoropolymer paint coatings and other materials with variable surface characteristics often require priming.” Dow Corning tests indicate a need for primer on stainless and galvanized steel and limestone; may also be needed on mill finish aluminum, Kynar, concrete, marble and EIFS.	Mfr claims “strong adhesion to a wide range of coated and uncoated glass, painted and anodized metals, among others.” Dow Corning tests indicate a need for primer on mill finish aluminum, galvanized steel, Kynar, concrete and brick; may also be needed on anodized aluminum and granite.	Mfr claims “excellent unprimed adhesion to most surfaces, including glass, reflective glass, anodized aluminum, plastics, wood, masonry and fluoropolymer-based paints.” Dow Corning tests indicate a need for primer on mill finish aluminum, stainless steel, concrete and limestone; may also be needed on Kynar.	Mfr claims primerless adhesion to many common construction materials. However, concrete, mill finish aluminum, galvanized steel, fluoropolymer paint coatings (Kynar) and other materials with variable surface characteristics often require priming.	Mfr claims adhesion to most construction materials without a primer but that certain architectural metal finishes and some porous substrates may require primer. Dow Corning tests indicate a need for primer on limestone and EIFS; may also be needed on Kynar, concrete, marble and granite. Although initial adhesion to glass and concrete was adequate, weatherometer testing resulted in adhesive failure on both.
Stain-Free Performance	No staining on granite, marble, limestone, brick and concrete per ASTM C-1248; may stain some white marble. (Unlike ASTM C-510, ASTM C-1248 is designed specifically to test for staining on sensitive stone.)	No staining data provided. Free fluids raise staining potential; stained white marble in Dow Corning tests.	No staining on concrete per ASTM C-510, but mfr warns product “should not be used on high-gloss or light-colored surfaces where aesthetics are critical, or on unpredictably absorptive surfaces such as marble or limestone.” Stained white marble in Dow Corning tests.	No staining on concrete per ASTM D-1248, but mfr warns product should not be used “on areas where atmospheric contaminants might change the appearance of light-colored sealants or on reflecting, high-gloss or light-colored surfaces where aesthetics are critical without prior testing.” Free fluids raise staining potential; stained white marble in Dow Corning tests.	No staining data provided.	No staining or color change per ASTM C-510, but mfr warns product should not be used to seal natural stones such as marble, granite and limestone.	No staining or color change per ASTM C-510, but mfr warns that sealant should not be used on “unpredictably absorptive surfaces such as marble or limestone, unless a standard of appearance has been agreed upon by the seller and the purchaser as a result of testing for stain or discoloration.”	Passes ASTM C-510. Stained white marble in Dow Corning tests.
Volatile Organic Content (VOC)	28 g/L	Unknown	Unknown	Unknown	Unknown	12 g/L	Unknown	2.07 g/L
Published Custom Color Availability	Yes	No	Yes	No	No	Yes	No	No
Published Weatherseal Warranty	20 years	None	None	None	None	None	None	None

¹Based on manufacturers’ 2002-2004 product data sheets, MSDS, other published data and Dow Corning tests.

Product Shortcomings

Tremco Spectrem 2 – Lacks *Dow Corning 795 Silicone Building Sealant's* track record for structural glazing; recommended for 2-sided structural glazing only, not 4-sided; high free fluid level raises staining potential; movement capability claim could not be substantiated; no SWRI validation; modulus increases after weathering, making the product less desirable for weathersealing softer substrates such as EIFS; may not offer primerless adhesion to brick; no published warranty.

GE SilPruf SCS 2000 – Lower modulus and durometer than *Dow Corning 795 Silicone Building Sealant* – may lack toughness; less appropriate for structural glazing applications than the *Dow Corning* product; movement capability claim could not be substantiated; high staining potential; no published warranty.

GE UltraPruf II SCS 2900 – Lower modulus and durometer than *Dow Corning 795 Silicone Building Sealant* – may lack toughness; not permitted for structural glazing applications; movement capability doesn't live up to claim; no SWRI validation; no published warranty.

GE UltraGlaze SSG 4000 – Lacks *Dow Corning 795 Silicone Building Sealant's* movement capability; no SWRI validation; does not offer primerless adhesion to brick; may require primer on granite and anodized aluminum as well; no published warranty.

Pecora 895 – Fluid filled – high stain potential; lower durometer than *Dow Corning 795 Silicone Building Sealant* – may lack toughness; no SWRI validation; no published warranty.

Sika SikaSil-C 995 – No SWRI validation; may stain or discolor sensitive substrates; not approved for structural glazing; no published warranty.

Degussa Sonneborn Sonolastic 150 – Not a true silicone; lacks silicone's long-term durability and flexibility; does not live up to movement capability claim; no SWRI validation; significantly increases modulus after accelerated weathering – in *Dow Corning* tests, the product lost adhesion to glass and concrete after 1000 hours of QUV exposure; may not be appropriate for wet glazing as claimed; not permitted for structural glazing; no published warranty.

**For sealant performance that is everything it claims to be ...
put your trust in 795 Silicone Building Sealant from Dow Corning.**

Dow Corning Corporation is the global silicone technology leader with more than 50 years of silicone experience. Across the construction industry, worldwide, Dow Corning is known for high-performance products, consistent quality, reliable supply and the ability to provide total building envelope solutions. It's a name you can trust.

For more information, please visit www.dowcorning.com/construction.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

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Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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