

# HIGH-PERFORMING SILICONE SEALANTS

Exclusive Non-Staining Technology





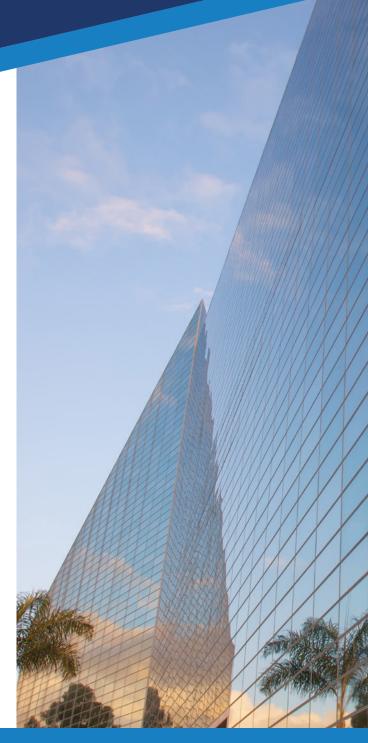


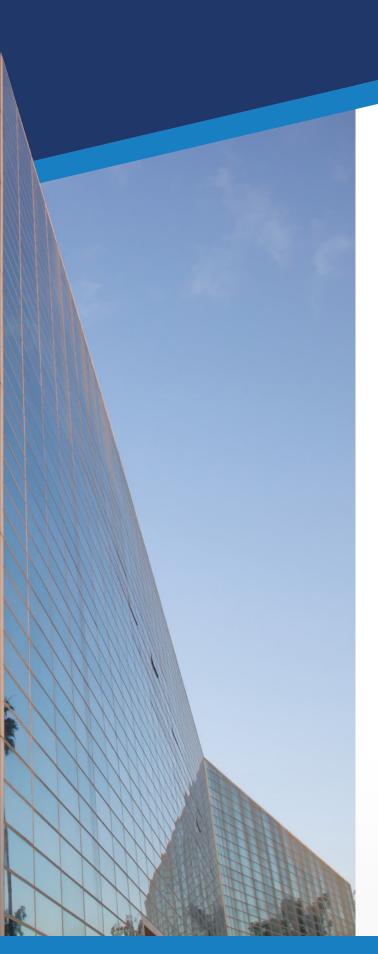
# SERVICE. PERFORMANCE. RESULTS.

# ARCHITECTURAL HIGH-PERFORMING SILICONE SEALANTS

Pecora offers a complete line of flexible, protective, silicone sealants, built on a relentless pursuit of perfection for the better part of 40 years. Our wide variety of silicone offerings address most project requirements; whether it's a specific adhesion requirement, modulus, joint type, rheology, or cure speed, Pecora offers a solution.

Our expert team understands the many factors involved in choosing a silicone sealant—including thermal expansion and contraction, wind load, hygrothermal movement, and more—and can help you select the right sealant for extending the life and integrity of your building structure. Pecora's innovative sealant solutions minimize costs from wasted product, stained substrates, or aged, failing sealant.





### PECORA NST NON-STAINING TECHNOLOGY™

# The First Complete Line of Non-Staining Silicones

#### PECORA 898 NST

Mold- and mildew-resistant, non-staining silicone for applications requiring a high degree of cleanliness

#### PECORA 890 FTS & 890 FST-TXTR

Field-tintable, non-staining silicone sealant—smooth and textured formulas

#### PECORA 864 NST

The industry's first non-staining, low-modulus silicone designed for expansion and control joints

#### PECORA 895 NST

The industry's first non-staining, medium-modulus silicone designed for structural and non-structural glazing

#### PECORA 890 NST

The legendary non-staining, ultra-low-modulus silicone





# INTELLIGENT ENGINEERING. INDEPENDENTLY TESTED. A TRUE INNOVATION IN SEALANT TECHNOLOGY.

Pecora is proud to be the first and only sealant manufacturer to offer a full line of non-staining silicone construction products. NST Non-Staining Technology™ is the result of years of development in Pecora's labs followed by verification of non-staining attributes in independent labs.

Surface staining and residual rundown are more than cosmetic problems. When discoloration appears, it has a negative impact on how owners, tenants, and visitors feel about the overall quality of a structure. This shift in perception can have an adverse effect on the reputation of construction and maintenance partners. This is a real problem because the hardest thing to build and maintain is a strong reputation.

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Pecora's NST silicone sealants are formulated to eliminate the free-silicone-fluid molecules which migrate into substrates, run down the face of a building, and cause unsightly staining. This substance is expensive to remove and creates other problems. Pecora's unique sealant formulation maintains the flexibility necessary to accommodate a building's constant movement. Even the most expensive technology or facade substrates are safe because the root cause of the staining problem has been completely eliminated.

#### **MOLECULAR STRUCTURE & SILICONE SEALANTS**

Traditional silicone sealants contain both silicone polymers and free-fluid molecules. Silicone polymers are very long molecules designed to chemically react with atmospheric moisture. As a result, these polymer molecules bind together and are unable to escape from the sealant.

By contrast, nonreactive, free-fluid molecules, which are traditionally present in order to control the modulus and other physical sealant properties, remain unbound, giving them the opportunity to migrate. What makes nonreactive silicone fluids so potentially damaging is their propensity to coat everything they touch. Pecora's NST silicone sealants simply do not contain nonreactive fluid molecules, which tend to migrate into the substrate and run down the face of the building.

Pecora's NST Silicone Sealants do not contain fluids that stain, effectively eliminating staining and residue rundown



Traditional silicone products with free-silicone-fluid molecules



Pecora NST Non-Staining Technology with no silicone-fluid molecules



# THE COMPETITION

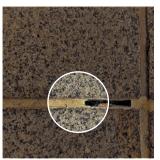
#### Other Silicone Sealants Are Formulated to Fail

Traditional silicone sealants contain both reactive silicone polymers and nonreactive free-fluid molecules, which are present to control the modulus. Nonreactive, free-silicone-fluid remains unbound, with the freedom to migrate into and onto both porous and nonporous surfaces, where it causes additional damage.

#### STAINING OF NATURAL STONES & OTHER POROUS SUBSTRATES



FREE-FLUID LEACHING WITH DIRT PICKUP



DIRT PICKUP



FREE-FLUID LEACHING WITH DIRT PICKUP



"PICTURE FRAMING"
DUE TO HYDROPHOBIC
SILICONE FLUID LEACHING

#### NON-POROUS STAINING & RESIDUE RUNDOWN WITH ASSOCIATED DIRT PICKUP



INCOMPATIBILITY WITH WINDOW SYSTEMS & COMPONENTS



ALUMINUM, METAL, COMPOSITE PANELS



STRUCTURAL GLAZING & WINDOW SYSTEMS



CURTAINWALLS

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THE BEST WAY TO MANAGE
STAINING AND RESIDUAL
RUNDOWN IS TO PREVENT
THEM BEFORE THEY HAPPEN

#### **HOW FLUID MIGRATION DAMAGES APPEARANCE**

Silicone fluids are able to migrate away from a silicone sealant to create two kinds of visual problems:

- 1. Staining: Absorption of the silicone fluid into porous substrates.
- 2. Residue Rundown: Where any silicone fluid which is not absorbed runs down the face of the building.

#### VISUAL APPEARANCE OF FLUID MIGRATION DEPENDING ON WEATHER CONDITIONS

WEATHER CONDITION	APPEARANCE WITH PECORA NST	POTENTIAL APPEARANCE WITH SOME SILICONE SEALANTS
Dry	No change in appearance	Unsightly contrast in the form of the dark outline of the stain against a lighter unstained substrate.
Rain	No change in appearance	Unsightly contrast due to a relatively light outline of the stain against the darker, wet substrate.  Water cannot be absorbed where the silicone fluid has already permeated the substrate.

PECORA'S NST SILICONE SEALANTS DO NOT CONTAIN FLUIDS THAT STAIN, EFFECTIVELY ELIMINATING STAINING AND RESIDUE RUNDOWN

#### PECORA'S NON-STAINING TECHNOLOGY (NST)

#### SEE PECORA.COM FOR ALL PRODUCT SPECIFICATION DATA SHEETS

Turn to Pecora's unique non-staining technology for silicone sealants that protect your project and your reputation by exceeding industry offerings in fluid-free architectural sealants. Our complete non-staining silicone sealant product line includes the following products:

Reduction in long-term dirt pickup on sealant surfaces is a feature of the Pecora NST line of silicone architectural grade sealants.

#### **890NST**

## NON-STAINING, ULTRA-LOW-MODULUS SILICONE SEALANT

890NST is a one-part, neutral-curing, ultra-low-modulus silicone sealant that will not stain natural stone such as marble and granite, and that reacts with atmospheric moisture to form a durable, flexible building sealant. 890NST performs exceptionally well under dynamic conditions due to its ultra-low-modulus, high-extension/high-compression recovery properties and strong adhesion to most building materials, and it accommodates long-term movement of +100 / -50% in properly designed joints.

Harsh weather conditions, rain, sleet, snow, sunlight, and extreme temperatures, high ozone concentrations and/or exposure to intense ultraviolet rays have very little effect on the ultimate performance of Pecora 890NST even after years of such exposure. It is particularly well suited for use in Exterior Insulation Finish Systems (EIFS) because of its proven strong adhesion to all base and top coats and because its ultra-low-modulus formulation places minimal stress on the bond line. Available in many of the more popular EIFS colors.

#### **BASIC USES**

- » New or remedial construction
- » Expansion and control joints in precast concrete panels
- » Architectural and natural stone
- » Metal curtain walls
- » Perimeter sealing of doors and windows
- » Exterior Insulation Finish Systems (EIFS) and numerous other areas requiring a high-performance sealant
- » Fluoropolymer painted and powder-coated aluminum, wood, vinyl, and many other plastics

#### 890FTS & 890FTS-TXTR

### FIELD-TINTABLE, NON-STAINING SILICONE SEALANT—SMOOTH AND TEXTURED FORMULAS

890FTS and 890FTS-TXTR are field-tintable, neutral-curing silicone sealants that will not stain natural stone, such as marble and granite, and will react with atmospheric moisture to form a durable, flexible building sealant. 890FTS and 890FTS-TXTR both perform exceptionally well under dynamic conditions, with 890FTS accommodating long-term movement of +100 / -50% and 890FTS-TXTR, accommodating long-term movement of +50 / -50% in properly designed joints.

Harsh weather conditions and extreme temperatures have very little effect on the ultimate performance of 890FTS and 890FTS-TXTR even after years of exposure. They are also particularly well suited for use in Exterior Insulation Finish Systems (EIFS) because of their proven strong adhesion to all base and top coats, and because the ultra-low-modulus formulation places minimal stress on the bond line.

#### **BASIC USES**

- » New or remedial construction
- » Expansion and control joints in precast concrete panels
- » Architectural and natural stone
- » Masonry, steel, metal curtain walls
- » Sealing door and window perimeters
- » Exterior Insulation Finish systems (EIFS)
- » Fluoropolymer and powder-coated aluminum, wood, vinyl, and many plastics
- » Installations featuring field tinting through the use of our universal color packs
- » Installations where smooth or a textured, grout-like formula is needed

#### **864NST**

#### NON-STAINING, LOW-MODULUS ARCHITECTURAL SILICONE SEALANT

864NST is a one-part, low-modulus, neutral-curing, high-performance silicone sealant that cures via atmospheric moisture to form a durable, flexible building seal. 864NST will not stain natural stone such as marble and granite. Because of its low-modulus, high extension/compression and recovery properties, and its strong adhesion to most building materials, Pecora 864NST performs exceptionally well under dynamic conditions, accommodating long-term movement of ±50% in properly designed joints.

#### **BASIC USES**

- » Expansion and control joints in precast concrete panels
- » Masonry and metal curtain walls
- » Natural stones
- » Perimeter sealing of doors and windows, and other building components

#### **895NST**

#### STRUCTURAL SILICONE GLAZING & WEATHERPROOFING SEALANT

895NST is a high-performing, neutral curing, medium-modulus silicone sealant specifically designed for structural and non-structural glazing, with excellent aesthetic characteristics in that it will not stain sensitive, porous natural stones, such as granite or marble, and will not contribute to residue rundown on non-porous surfaces, such as metal or glass curtain wall facades.

Reduction in long-term dirt pickup on sealant surface is also a feature of the Pecora NST line of silicone architectural grade sealants. With a dynamic movement capability of  $\pm 50\%$  to complement its structural strength, 895NST is equally efficient as a weather seal in the vast majority of sealant applications other than glazing.

#### **BASIC USES**

- » Structural glazing of glass, metal, and plastic
- » Weatherseal in structural glazing applications
- » Non-structural glazing applications including cap, toe, and heel beads and as a weatherseal in glass-to-glass butt joint glazing
- » Sealing expansion and control joints in precast concrete panels, metal curtain walls, and natural stone
- » Perimeter sealing of doors, windows, and other building components
- » Adhering stiffeners to building panels
- » Unitized curtain wall systems
- Security glazing and impact-resistant window systems

#### **898NST**

#### SANITARY MILDEW-RESISTANT SILICONE SEALANT

Pecora 898NST is a single-component, very-low-odor, neutral-curing silicone sealant with excellent aesthetic characteristics: it will not stain sensitive, porous natural stones, such as granite or marble. Reduction in long-term dirt pickup on sealant surface is also a feature of the Pecora NST line of silicone architectural-grade sealants. 898NST is expressly developed for those interior applications requiring a high degree of cleanliness, freedom from bacterial growth, and an appearance complementary to adjacent surfaces. 898NST adheres extremely well to glass, plastics, ceramic tile, glazed pottery, natural or cultured marble, porcelain, enamel, metals, painted wood, granite, limestone, and other natural stones.

#### **BASIC USES**

- » Perimeters of fixtures of bathroom, lavatory, kitchen, and other hygienic facilities
- » Reset and/or re-grout ceramic tile
- » Natural stone, such as marble and granite

# THE PECORA ADVANTAGE

#### Independent Validation

The non-staining attributes have been independently tested in accordance with procedures outlined in ASTM C 1248-04 "Standard Test Method for Staining of Porous Substrates by Joint Sealants." The results confirm absolutely zero visual staining with products containing Pecora's NST Non-Staining Technology, while several competitors' products produced significant visual surface staining of the white marble substrate used in the test.

#### Available In Virtually Any Color

Combine the perfect color for your project and the confidence of non-staining performance to make your vision a reality. Pecora's NST silicone sealants are available in a wide variety of standard colors as well as virtually any custom color. Pecora's color-matching team can quickly take your substrate or chip sample and turn it into a custom batch of NST silicone sealant.

#### **Choose With Total Confidence**

When you choose NST silicone sealants, you can complete a project with the confidence that any substrate—from the expensive and exotic to the most ordinary—will not be damaged by the silicone. And because the NST silicone sealants are available in a variety of moduli, and any color you can imagine, the sealant decision process is even easier.

#### Sil-Span Pre-Formed Silicone Profiles

Sealant failures are a common occurrence and can result in substantial damage. Pecora Sil-Span pre-formed silicone profiles make restoration easy, offering an alternative to the traditional method of repairing failed sealants. Pecora's Sil-Span bridges the joint to waterproof the building envelope, while maintaining building integrity, without removing old material and avoiding substrate damage.



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#### SILICONE SOLUTIONS

#### **PCS Pecora Contractor Silicone**

A one-part, neutral-cure, medium-modulus silicone sealant designed for moving joints in exterior window and door perimeters, concrete panels, curtain walls, and EIFS. PCS offers primerless adhesion to most building substrates, and is 100% compatible for edge-contact to laminated and insulated glass units.



#### **Glass and Glazing Sealants**

Pecora offers a complete line of high-performance products suitable for shop or field applications in demanding structural and non-structural glazing. With building and energy-efficiency codes regularly becoming more stringent, Pecora's glazing solutions include products with high green-strength long-lasting bonds to a variety of substrates. Choose from a variety of products which include Pecora 860, 896, 896-HIS, 896-SSL, 896-TBS, 896-TBS-SSL, 896FC, 985, and 1215.

#### **Traffic Silicone Sealants**

Reduce pavement deterioration by preventing surface-water penetration into underlying layers with Pecora's traffic silicone sealants. Our 300-SL, 301-NS, or 322FC products offer a solution for virtually any traffic-grade application.



#### TRANSITION SYSTEMS

Most new buildings and building recladding systems use an air barrier to create energy-efficient building envelopes. Creating a continuous monolithic skin remains key to the success of any air barrier system, but can present challenges when connecting dissimilar components and materials.

Pecora's transition system—a simplified approach to assuring continuity of a window system or curtain wall to the air, vapor, and water barrier systems—uses Pecora's XL-Span 100% silicone-extruded transition membrane and Pecora AVB Silicone sealant.

XL-Span is an extruded-silicone membrane in 50-foot, translucent, ribbed rolls, available in four-, six-, or nine-inch-wide sections. Apply AVB Silicone—a single-component, 100% non-staining silicone sealant—as the adhesive for the XL-Span to ensure an airtight transition. AVB Silicone adheres to a wide variety of low-surface-energy materials, and the transition system allows for a continuous air- and watertight transition seal between dissimilar materials, curtain walls, and window systems.







#### **NON-STAINING WARRANTY**

Pecora's 100% silicone-based NST sealants are formulated to a unique composition in which the Si-based sealants simply do not contain the components that cause staining issues to occur. For this reason, we offer a non-staining sample warranty with our product submittal package.

Pecora's commitment to NST is based on sound science and extensive testing, to the point that Pecora offers a warranty to back that up. This includes a special "non-staining warranty," which can be issued without the need for pre-project testing. Upon request, Pecora will continue to offer project-specific stain testing, in compliance with ASTM C-1248.

#### **20-YEAR WATERTIGHT WARRANTY**

Pecora Corporation warrants that its products are manufactured free from defects in materials and workmanship. Pecora further warrants that Pecora NST silicone sealants will not cause porous substrates to discolor or change their appearance due to fluid migration and will maintain a watertight weather seal for a period of twenty (20) years from the date of installation.

#### THE FOLLOWING CRITERIA ARE TO BE MET:

- A. The sealant is applied in strict compliance with Pecora Corporation's published application procedures and with any written requirements indicated on any recommendation letters
- B. The sealant is used with the materials which have been approved for compatibility and adhesion.
- C. The samples which have been submitted for testing are representative of the materials actually used on the project.
- D. The application of the sealant and the joint configurations are completed in accordance with the project prints/specifications.
- E. The sealant is applied within the stated shelf life of the product.

# IF THE APPLICATION EXCEEDS 5000 LINEAL FEET, THE FOLLOWING ADDITIONAL CRITERIA ARE TO BE MET:

- A. Field adhesion tests are made and documented to confirm adhesion under site conditions.
- B. Field adhesion test results are submitted within thirty days of completion of field testing.
- C. All requirements outlined in Pecora project test results are strictly adhered to.



PECORA PROTECTS



### THE PECORA PROTECTS PROMISE

The Pecora Protects Promise is about more than high-quality sealants, air barriers, and traffic coatings. It's a promise to you, to your project, and to your reputation. We're hands-on and always here when you need us. Ready to make recommendations, answer questions, work through decisions, and help you find the best solution for your job. It's a promise of partnership. Pecora—protecting projects and reputations since 1862.

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