

# Pecora 890NST

NON-STAINING TECHNOLOGY™

Non-Staining, Ultra-Low Modulus Silicone Sealant

## Specification Data Sheet



### I. BASIC USES

Pecora 890NST is designed primarily for sealing expansion and control joints in precast concrete panels, architectural and natural stone, metal curtainwalls, perimeter sealing of doors and windows, Exterior Insulation Finish Systems (EIFS) and numerous other areas requiring a high-performance sealant. It adheres tenaciously to concrete, natural stones, masonry, steel, fluoropolymer painted and powder coated aluminum, wood, vinyl and many other plastics, generally without need for a primer, and performs equally well in new or remedial construction.

### 2. MANUFACTURER

Pecora Corporation  
165 Wambold Road  
Harleysville, PA 19438  
Phone: 215-723-6051  
800-523-6688  
Fax: 215-721-0286  
Website: www.pecora.com

### 3. PRODUCT DESCRIPTION

Pecora 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. Pecora 890NST performs exceptionally well under dynamic conditions due to its ultra-low modulus, high extension/ compression, recovery properties and strong adhesion to most building materials and 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 ultra violet rays have very little effect on the ultimate performance of 890NST even after years of such exposure.

Pecora 890NST 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. Additionally, Pecora 890NST is available in many of the more popular EIFS colors.

**Limitations:** Pecora 890NST should not be used in the following applications:

- Sealing horizontal decks, patios, driveway or terrace joints where abrasion or physical abuse is encountered.
- Below grade or sealing submerged joints or below the waterline in marine uses.
- In totally confined or air-free spaces since moisture is necessary for cure.
- In designs that will be painted after application of the sealant. Sealant should be applied after painting is completed.
- In structural glazing applications.
- On surfaces with special protective or decorative coatings without prior consultation with Technical Services.

- With building materials that bleed oils, plasticizers or solvents, i.e. impregnated wood, oil-based caulks, some vulcanized rubber gaskets or tapes, etc.
- In interior penetration firestop systems.
- On surfaces in direct contact with food. For such applications, use of Pecora 860 silicone with FDA approval is recommended.

#### PACKAGING

- 10.1 fl. oz. (300 ml) plastic cartridges
- 20 fl. oz. (592 ml) sausages
- 2-gallon (7.57 L) pails

#### COLOR

- Black, Limestone, Precast, Charcoal Gray, Sandstone, Red Rock, Hartford Green, Tru-White, Aluminum Stone, Beige, Classic Bronze, Natural Stone, Anodized Aluminum.
- Unlimited range of custom colors. (certain restrictions may apply).

**TABLE 1: TYPICAL UNCURED PROPERTIES**  
at 77°F (25°C), 50% R.H.

Test Property	Value	Test Procedure
Flow, Sag, Slump (in.)	<0.1	ASTM C639
Tool/Work Time (minutes)	15-25	Pecora Corporation
Tack Free Time (hours)	1-2	ASTM C679
Cure Time (days)	7-14	Pecora Corporation
Full Adhesion (days)	7-14	Pecora Corporation
VOC Content (g/l)	98	ASTM D3960

**TABLE 2: TYPICAL CURED PROPERTIES**  
After 7 days cure at 77°F (25°C), 50% R.H.

Test Property	Value	Test Procedure
Hardness (Shore A)	20	ASTM C661
Elongation (%)	1000	ASTM D412
Modulus @ 100% Elongation (psi)	30	ASTM D412
Ultimate Tensile Strength (psi)	120	ASTM D412
Tear Strength (ppi)	30	ASTM D624
Peel Strength (pli) on aluminum, glass, and concrete	25	ASTM C794
Dynamic Movement Capability (%)	+100-50	ASTM C719
Ozone/UV Resistance	Excellent	Weatherometer
Staining of porous substrates such as white marble	Pass	ASTM C1248
Service Temperature Range (°F)	-60 to +300	Pecora Corporation

## 4. TECHNICAL DATA

**Applicable Standards:** Pecora 890NST Silicone meets or exceeds the requirements of the following industry specifications; TTS-230C, Class A, ASTM C-920, Class 100, Type S, Grade NS, Use G,A,M,O and CGSB-19GP-9, ASTM C-1248, CAN/CGSB-19.13-M87.

**Joint Design:** A thin bead of silicone will accommodate more movement than a thick bead. Pecora 890NST Silicone sealant should be no thicker than 3/8" (9 mm) and no thinner than 1/8" (3 mm) for joints where excessive movement is expected. Ideally, the ratio of joint width to the sealant depth should be about 2:1 when appropriate. The width of building expansion joints varies because of seasonal and daily changes in temperature. If Pecora 890NST cannot be installed when the design width is approximately halfway between the dimensional extremes, the designed joint must be at least twice the total anticipated joint movement. Good architectural practice calls for joint design of four times the anticipated movement due to construction tolerances and material variations.

## 5. INSTALLATION

**Surface Preparation:** Clean all joints and glazing areas by removal of foreign matter and contaminants such as oil, dust, grease, frost, water, surface dirt, old sealants or glazing compounds and any protective coating. Porous substrates and precast concrete panels using form release agents other than polyethylene film should be cleaned by grinding, saw cutting, blast cleaning (water or sand), mechanical abrading or a combination of these methods which will provide a sound, clean and dry surface for sealant application. Dust, loose particles, etc. should be blown out of joints with oil-free compressed air or vacuum cleaned. Metal, glass and plastic surfaces should be cleaned by solvent procedure or by mechanical means. Soap or detergent and water cleaning treatments are not recommended. Cleaning of all surfaces should be done on the same day on which the sealant is applied.

**CAUTION:** Solvents may be toxic and/or flammable. Refer to solvent manufacturer's instructions or Material Safety Data Sheets.

**Priming:** Pecora 890NST does not require priming on most common substrates. However, Pecora strongly suggests adhesion pretesting, either in the field or in Pecora's laboratory on all porous substrates, particularly brick, as well as unusual building materials and other substrates where special coatings or surface treatments may impair optimum adhesion. Where primer is indicated, P-150 should be used on porous substrates and P-120 on special metal and plastic surfaces. All precast substrates require priming with P-225 primer. All EIFS substrates require priming with P-75 or P-150 primer. Contact Technical Services for primer use on other substrates.

To assist in this determination Pecora has a list of adhesion-in-peel test results on a wide variety of substrates and building materials which is available on request from Technical Services.









Pecora routinely conducts project specific adhesion and compatibility tests in its laboratory on representative substrate

samples. Consult Technical Services for details.

**Joint Backing:** Backer rod controls the depth of the sealant and allows it to be applied under pressure. Use a size that will compress 25%. Denver Foam open-cell polyurethane or reticulated (soft) polyethylene rod is recommended. Closed-cell polyethylene may be used but care must be taken not to puncture the rod which can cause outgassing or bubbling/blistering in the sealant. Open-cell polyurethane is required with non-porous substrates to allow proper curing from both sides of the sealant. In joints too shallow for backer rod, use a polyethylene bond-breaker tape to prevent three-sided adhesion.

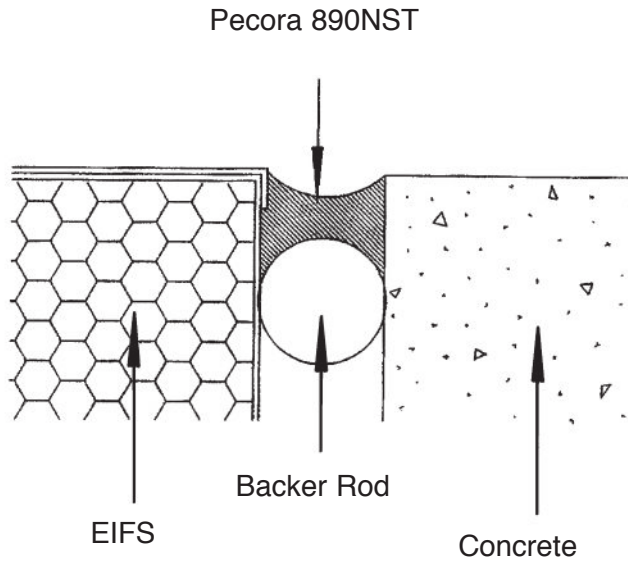
**Application:** All joints should be masked to ensure a neat appearance and prevent sealant applied outside the joint confines from imparting a discoloration to the substrate.

### EXAMPLES OF DIFFERENT JOINTS

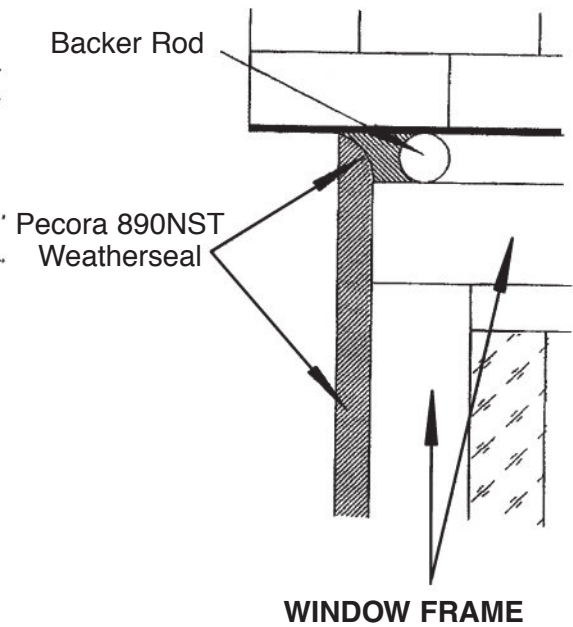
GOOD	POOR
 <p>Note width-depth ratio, concave surfaces, and non-adhering back-up material.</p>	 <p>Too deep, poor shape, sealant adheres to bottom side.</p>
 <p>Bond breaker tape prevents adhesion of bottom side.</p>	 <p>Bond breaker is not used.</p>
<p>Principle: The lap joint will withstand total movement in either direction equal to or less than width W.</p>	
 <p>Joint has sufficient bulk (width) to withstand shear.</p>	 <p>Joint has insufficient bulk.</p>
 <p>To withstand 1/8" movement, existing 3/16" joint was widened to 1/2".</p>	 <p>A. Too deep exceeds the width B. Although shape is good, 3/16" width cannot withstand 1/8" movement.</p>

# Typical Applications for Pecora 890NST Ultra-Low Modulus Silicone Sealant

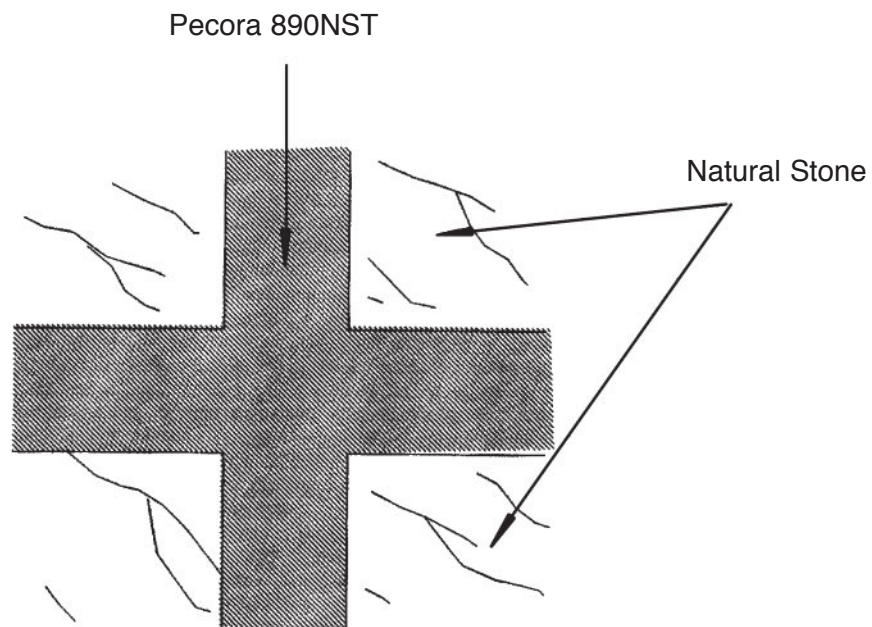
## EXPANSION JOINT



## MASONRY



## EXPANSION JOINT



Sealant should be applied in a continuous operation using sufficient pressure to fill the joint and make complete contact to the joint sides. Tool the sealant slightly concave using solvent or dry-tooling techniques. Contact Technical Services prior to tooling with solvent. Do not tool with soap or detergent and water solutions.

**Tool Time: (Initial Skin):** 15-25 minutes at 77° F (25° C), 50% RH. Higher temperatures and/or humidity will shorten this time.

**Clean Up:** Immediately remove all excess sealant and smears adjacent to joints with mineral spirits. For equipment cleanup, also use mineral spirits. Consult manufacturer's Material Safety Data Sheet for handling and safety precautions.

**Shelf Life:** Pecora 890NST has a shelf life of 12 months from date of manufacture when stored at temperatures lower than 80° F (27° C).

**Precautions:** Use with adequate ventilation or wear an appropriate NIOSH-approved respirator. Contact with uncured sealant or with vapors generated during curing may cause respiratory tract irritation. Contact with skin or eyes may cause irritation or allergic reaction. Avoid contact and wash thoroughly after handling. May be harmful if swallowed. Refer to Material Safety Data Sheet (MSDS) for more information.

**FOR PROFESSIONAL USE ONLY.  
KEEP OUT OF THE REACH  
OF CHILDREN.**

## 6. AVAILABILITY AND COST

Pecora products are available from stocking distributors nationwide. For the name and telephone number of your nearest representative, call the number below or visit our website at [www.pecora.com](http://www.pecora.com).

## 7. WARRANTY

Pecora Corporation warrants its products to be free of defects. Under this warranty, we will provide, at no charge, replacement materials for, or refund the purchase price of, any product proven to be defective when used in strict accordance with our published recommendations and in applications considered by us as suitable for this product. The determination of eligibility for this warranty, or the choice of remedy available under this warranty, shall be made in our sole discretion and any decisions made by Pecora Corporation shall be final. This warranty is in lieu of any and all other warranties, expressed or implied, including but not limited to a warranty of merchantability or fitness for a particular purpose and in no case will Pecora be liable for damages other than those expressly stated in this warranty, including but not limited to incidental or consequential damages.

## 8. MAINTENANCE

If the sealant is damaged and the bond is intact, cut out the damaged area and recaulk. No primer is necessary. If the bond has been affected, remove the sealant, clean and prepare the joint in accordance with the instructions under "Installation".

## 9. TECHNICAL SERVICES

Pecora representatives are available to assist you in selecting an appropriate product and to provide on-site application instructions or to conduct jobsite inspections. For further assistance call our Technical Service Department at 800-523-6688.

## 10. FILING SYSTEMS

- Sweet's Catalog File: [www.sweets.com](http://www.sweets.com)
- General Building
  - 07100 Waterproofing
  - 07920 Sealants
- Civil Engineering
  - 07100 Waterproofing

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