

Pecora 890

Ultra Low-Modulus Silicone Sealant

Specification Data Sheet



BASIC USES

Pecora 890 is designed primarily for sealing expansion and control joints in precast concrete panels, architectural stones, 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
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Phone: 215-723-6051
800-523-6688
Fax: 215-721-0286
Website: www.pecora.com

3. PRODUCT DESCRIPTION

Pecora 890 is a one-part, neutral-curing, ultra low-modulus silicone sealant that reacts with atmospheric moisture to form a durable, flexible building sealant. Pecora 890 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 $\pm 100-50\%$ 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 890 even after years of such exposure.

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

Limitations: Pecora 890 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.
- Architectural stones, such as marble and granite vary greatly in porosity, some bleeding of the sealant into the substrate is a possibility. Laboratory substrate testing for stain potential is required. If positive, Dynatrol® II two-part urethane is suggested.

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, Classic Bronze, Tru-White, Aluminum Stone, Beige, Bronze, Natural Stone.
- 32 Special Color-Flex Designer colors and an unlimited range of custom colors (certain restrictions may apply).
- Visit custom color tools on www.pecora.com to assist in custom color selection (minimum 30 gallons).

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

Test Property	Value	Test Procedure
Cure Time (days)	7-14	Pecora Corporation
Flow, Sag, Slump	Nil	ASTM C639
Full Adhesion (days)	7-14	Pecora Corporation
Tack Free Time (hours)	1-2	ASTM C679
Tool/Work Time (minutes)	14-15	Pecora Corporation

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

Test Property	Value	Test Procedure
Dynamic Movement Capability (%)	$\pm 100-50$	ASTM C719
Elongation (%)	1000	ASTM D412
Hardness (Shore A)	15-18	ASTM C661
Modulus @ 100% Elongation (psi)	30	ASTM D412
Ozone/UV Resistance	Excellent	Weatherometer
Peel Strength (pli)	25	ASTM C794
Staining, Color Change	None	ASTM C510
Tear Strength (ppi)	30	ASTM D624
Service Temperature Range (°F)	-60 to +300	Pecora Corporation
Tensile Strength (psi)	120	ASTM D412

4. TECHNICAL DATA

Applicable Standards: Pecora 890 meets or exceeds the requirements of the following industry specifications: TTS-230C, Class A, ASTM C920, Class 25, Type S, Grade NS, Use NT, G, A, M, O, and CGSB-19GP-9.

Joint Design: A thin bead of silicone will accommodate more movement than a thick bead. Pecora 890 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 890 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 890 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-64 should be used on porous substrates and P-120 on special metal and plastic surfaces. All EIFS substrates require priming with P-64 primer. Contact Technical Services for primer use on other substrates.

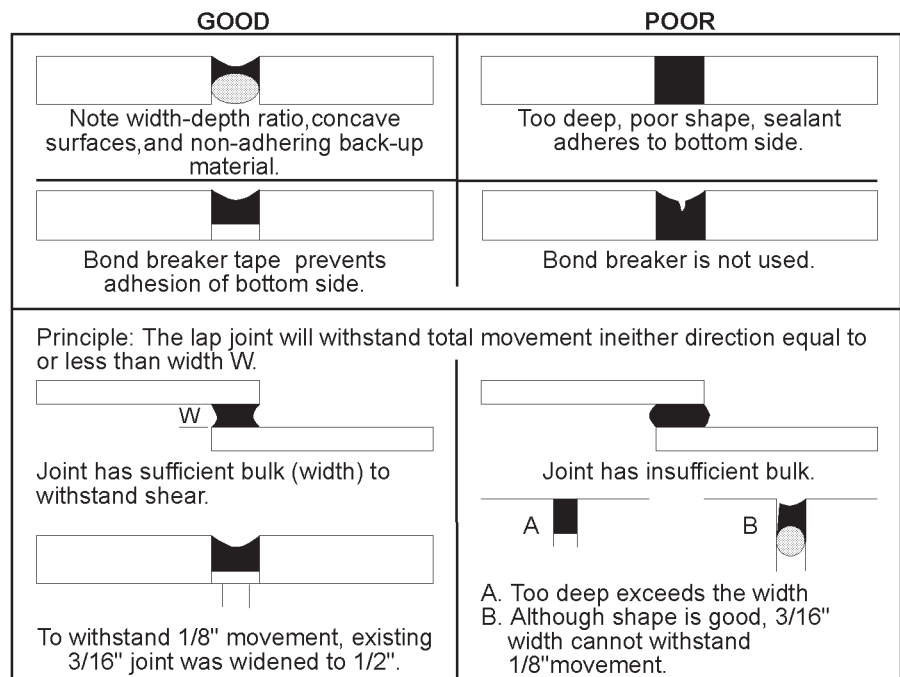
To assist in this determination Pecora has a list of adhesion-in-peel test results on a wide variety of substrates and building materials which is available on request from Technical Services.

Pecora routinely conducts project specific adhesion, compatibility, and staining 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.

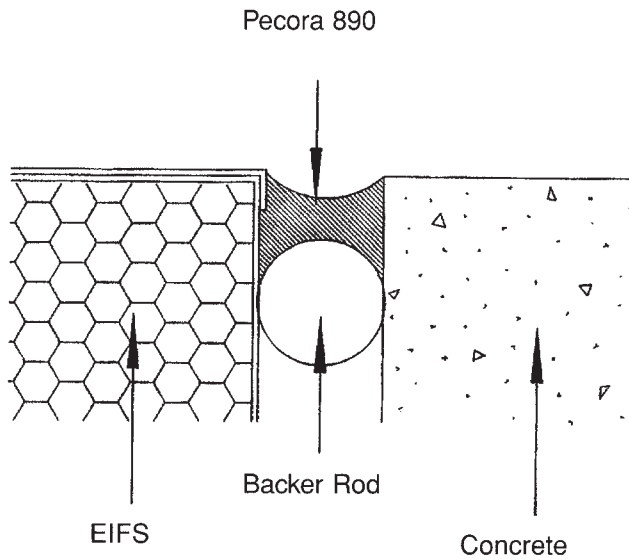
Application: All joints should be masked to ensure a neat appearance and prevent sealant applied outside the joint confines from imparting a discoloration to the substrate.

EXAMPLES OF DIFFERENT JOINTS

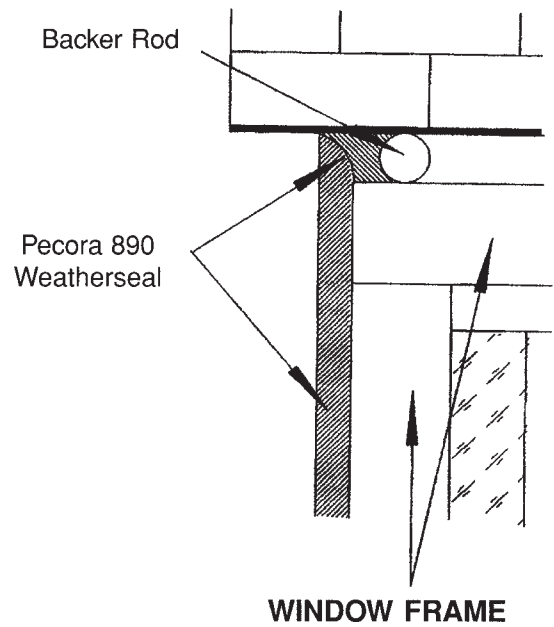


Typical Applications for Pecora 890 Ultra Low-Modulus Silicone Sealant

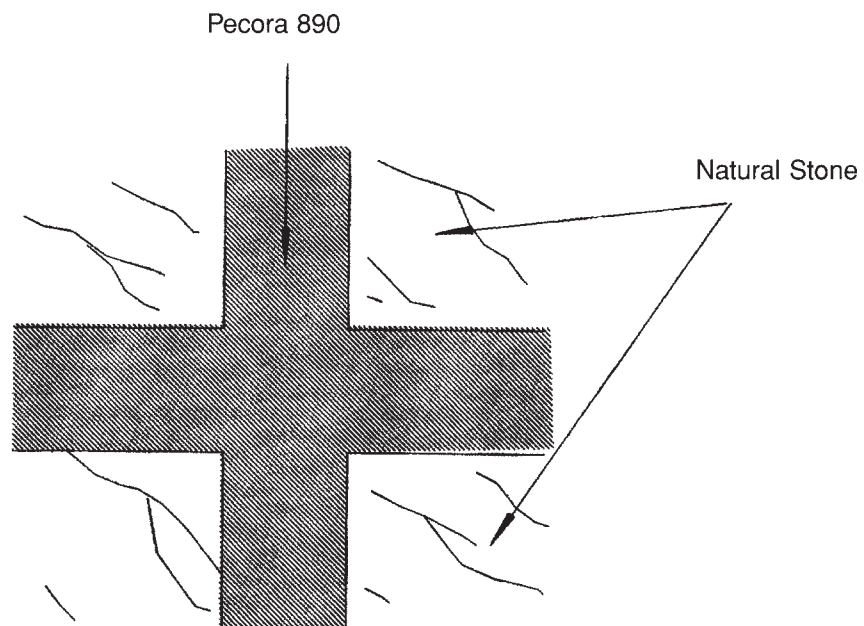
EXPANSION JOINT



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): 25-35 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 890 Silicone has a shelf life of 12 months from date of manufacture when stored in unopened cartridges at temperatures lower than 80° F (27° C), or 9 months in tightly-sealed bulk packages and performs equally well during any part of this shelf life.

Precautions: Use sealant in well-ventilated areas. Contact with uncured sealant may irritate eyes and skin. Flush eyes with water for 15 minutes and seek medical attention if irritation persists. May be harmful if swallowed. Refer to Material Safety Data Sheets for additional information.

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

6. AVAILABILITY AND COST

Pecora products are available from our plants and warehouses, or from stocking distributors in all major cities. For the name and telephone number of your nearest representative call one of our locations listed below or visit our website at 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. This warranty is in lieu of any and all other warranties, expressed or implied, and in no case will Pecora be liable for 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 or 215-723-6051.

10. FILING SYSTEMS

- Sweet's Catalog File: www.sweets.com
- General Building
 - 07100 Waterproofing
 - 07920 Sealants
- Civil Engineering
 - 07100 Waterproofing



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