

Pecora 864

Architectural Silicone Sealant

Specification Data Sheet



1. BASIC USES

- For sealing expansion and control joints in precast concrete panels and metal curtainwalls, perimeter sealing of doors and windows and other building components.
- For fire rated applications in accordance with appropriate UL Design systems.
- For meat and poultry processing plants.

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 864 is one-part, low-modulus, neutral-curing, high-performance silicone sealant that cures via atmospheric moisture to form a durable, flexible building seal. Because of its low-modulus, high extension/compression and recovery properties, and its strong adhesion to most building materials, Pecora 864 performs exceptionally well under dynamic conditions accommodating long-term movement of $\pm 50\%$ in properly designed joints.

Limitations: Pecora 864 should not be used in the following applications:

- Sealing horizontal decks, patios, driveway or terrace joints where abrasion or physical abuse is encountered.
- Sealing submerged joints or below the waterline in marine applications.
- In totally confined or air-free spaces.
- In designs that will be painted after application of the sealant. (Sealant should be applied after painting is completed).

- To surfaces with special protective or decorative coatings without prior consultation with Technical Services department.
- With building materials that bleed oils, plasticizers or solvents, i.e. impregnated wood, oil-based caulks, some vulcanized rubber gaskets or tapes, etc.
- Sealing natural stone, marble, granite, etc. without testing by Pecora laboratory in accordance with ASTM C-1248. (Pecora 864 should never be used with kerf clips on natural stone; use either Pecora 890 silicone or Dynatrol® I polyurethane).

Fire Rated Systems: Two-hour fire and temperature rated wall Design U900 O (WVWS 0010) and floor Design J900H (FFS 0006) joint systems up to 3/4" (19 mm) wide can be designed with Ultra Block® fire blocking material.

Ref: Standard Fire Tests of Building Construction Materials, ANSI/UL 263, ASTM E119, NFPA #251.

Ultra Block® is a product of Backer Rod Mfg. Co., Denver, CO.

PACKAGING

- 10.1 fl. oz. (300ml) disposable fiber cartridges
- 2-gallon (7.57 L) pails

COLOR

- Black, Limestone, Precast, Bronze, Tru-White, Aluminum Stone, Classic Bronze, Tan, Brick Red, Hartford Green
- 32 Special colors, and an unlimited range of custom colors.
- Visit custom color tools on www.pecora.com to assist in custom color selection (minimum 30 gallons).

TYPICAL UNCURED PROPERTIES (at 77°F, (25°C), 50% RH)

Test Property	Value	Test Procedure
Curing Time (days)	7-14	ASTM C679
Flow, Sag, Slump	Nil	ASTM C639
Full Adhesion (days)	7-14	ASTM C679
Tack Free Time (minutes)	60-90	ASTM C679
Tool/Work Time (minutes)	25-35	Pecora Corporation
VOC Content (g/L)	12	ASTM D3960

TYPICAL CURED PROPERTIES (After 7 days cure at 77°F, (25°C), 50% RH)

Test Property	Value	Test Procedure
Dynamic Movement Capability (%)	± 50	TT-S-1543A
Elongation (%)	800	ASTM D412
Hardness (Shore A)	25	ASTM C661
Ozone/UV Resistance	Excellent	ASTM C793
Peel Strength (pli)	27	ASTM C794
Staining, Color Change	None	ASTM C510
Tear Strength (ppi)	30	ASTM D624
Temperature (°F (°C))	-60 to +300 (-51 to 149)	
Tensile Strength		
100% Elongation (psi)	40	ASTM D412
Ultimate (psi)	150	ASTM D412

4. TECHNICAL DATA

Applicable Standards: Pecora 864

Silicone meets or exceeds the requirements of the following industry specifications; TT-S-1543A, TT-S-230C, Class A, CGSB-19GP-9, ASTM C-920, Class 25, Type S, Grade NS, Use NT, G,A,M,O, City of Los Angeles RR 25071.

Acceptance by U.S. Department of Agriculture for use in meat and poultry processing plants.

Joint Design: A thin bead of silicone will accommodate more movement than a thick bead. Pecora 864 Architectural 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. Lap shear joints should have a bead width which is equal to or greater than the total anticipated movement. Small curtainwall panels and lites should allow a minimum width of 1/4" (6 mm) for the sealant bead. Larger panels for which a great deal of movement is expected should allow a minimum width of 1/2" (12 mm) for the sealant bead. Glazing of plastic lites and panels fabricated from plastic require

larger than usual joint dimensions due to the plastics high coefficient of thermal expansion.

The width of building expansion joints varies because of seasonal and daily changes in temperature. If Pecora 864 silicone 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 864 does not require priming on most common substrates. However, we strongly suggest adhesion pretesting, either in the field or in our 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. 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.

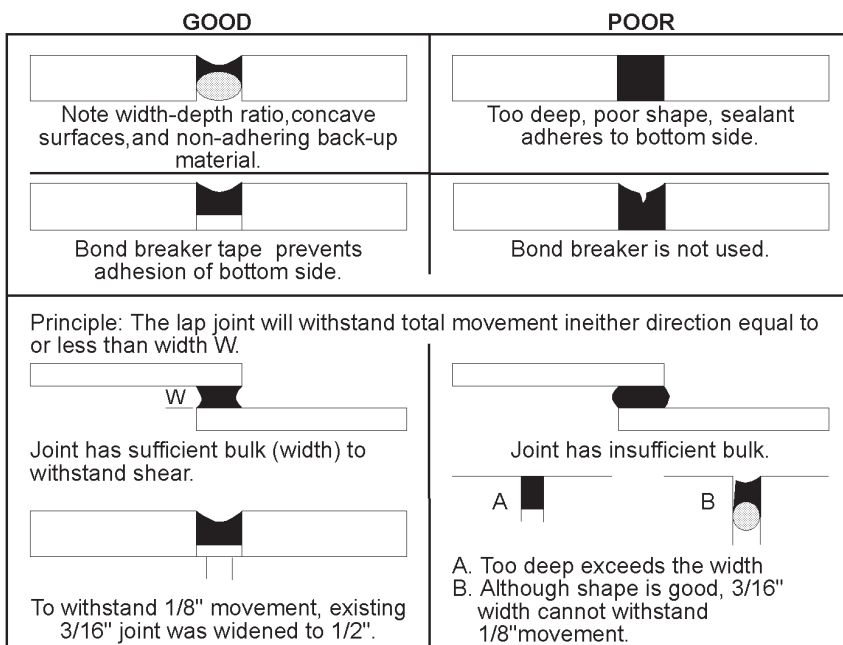
Also, Pecora offers complimentary adhesion and stain testing in its laboratory on actual field samples of substrate from the jobsite or on representative samples from the same lots. Contact Technical Services for details.

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.

In joints too shallow for backer rod, use a polyethylene bond-breaker tape to prevent three-sided adhesion.

EXAMPLES OF DIFFERENT JOINTS



(continued on last page)

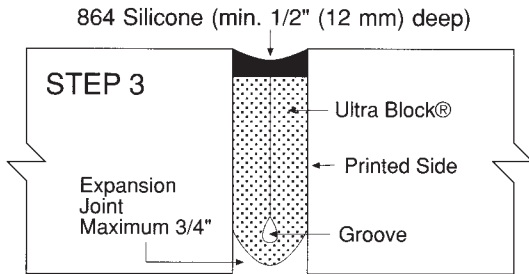
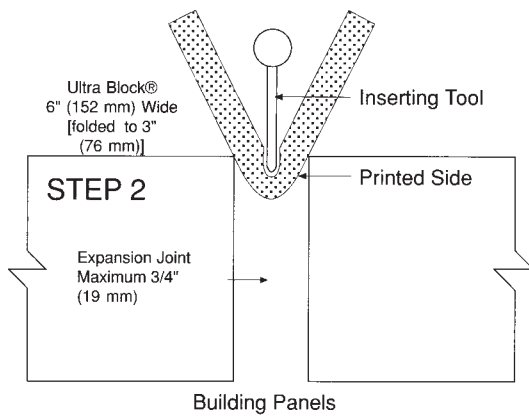
SUGGESTED PECORA 864 - ULTRA BLOCK® SYSTEM SPECIFICATION

Expansion joints shall have a 2-hour Fire and Temperature rating. Unless otherwise specified for a specific area, only system tested per ASTM E-119 Standard, complying with Underwriters Laboratories U/L-263, Designs J-900H (FFS 0006) and U900 0 (WWS 0010) and classified as 2-Hour Fire & Temperature Rated are approved. Pecora 864 - Ultra Block® systems using such classified sealants shall be used in both Configuration #1 and Configuration #2 whichever is applicable. Reference U/L File #13729.

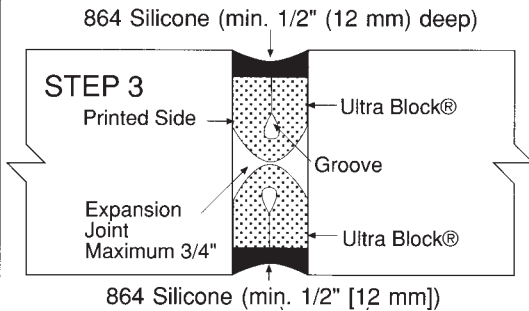
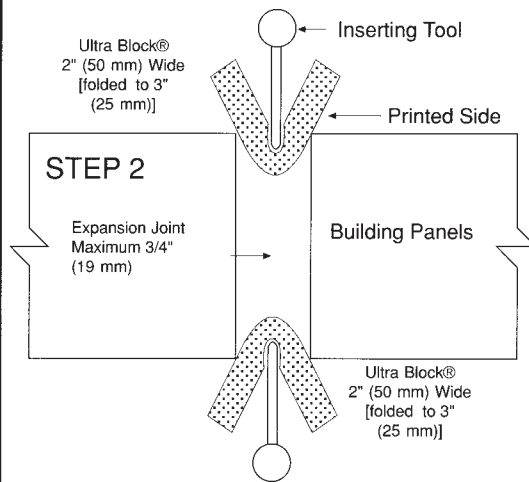
This is a performance specification. Bidders will be required to furnish technical data and Underwriters Laboratories reports for "or equal" approval.

INSTALLATION PROCEDURES

Configuration #1



Configuration #2



CLASSIFIED

PECORA 864 - ULTRA BLOCK® UL Rated Wall and Floor Expansion Joint System

This system should be used in high rise office buildings, hospitals, schools, hotels, prisons, enclosed sports arenas, airport terminals, shopping malls, nursing homes, manufacturing plants, precast and prestressed concrete structures, parking garages, warehouses, chemical plants, elevator shafts and others to comply with existing building and fire codes. The system will effectively contain fire, smoke and toxic fumes within a given area surrounded by fire walls for a 2-hour period, thereby enabling a safe and orderly evacuation of the surrounding areas.

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.

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 dry-tooling techniques. Consult 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% relative humidity. Higher temperatures and/or humidity will shorten this time.

Cleaning: Immediately remove all excess sealant and smears adjacent to joints with mineral spirits. Also use mineral spirits for removing uncured sealant from equipment. Remove cured sealant by scraping, sandpapering, etc. (Caution: mineral spirits is flammable and toxic. Observe manufacturer's precautions.)

Shelf Life: Pecora 864 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. Ultra Block®

is a non-carcinogenic processed continuous filament textile glass fiber that may cause skin, eye and respiratory irritation. When applying, wear long sleeves, gloves, cap, safety glasses and NIOSH/MSHA approved dust respirator. After use, bathe with soap and warm water. Wash clothes separately and rinse after use. 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.

10. FILING SYSTEMS

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

