DynaFlex

Flexible Polyurethane Security Sealant

UL CLASSIFIED

PECORA CORPORATION

SPECIFICATION DATA SHEET

BASIC USES

- All interior joints and perimeters of fixtures, penetrations, vents, doors, windows and all other similar openings where a flexible security sealant is required.
- Interior window glazing.
- Heavy pedestrian traffic expansion and control joints for security and non-security areas.
- Concrete joint applications requiring jet fuel resistance.

MANUFACTURER

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800-523-6688
Fax: 215-721-0286
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PRODUCT DESCRIPTION

Dynaflex is a unique two-part, non-sag, tamper resistant elastomeric polyurethane joint sealant.

Dynaflex is designed to achieve high tensile and tear strength, abrasion resistance and an ultimate Shore A hardness of 55, yet withstand 25% total joint movement. As a result, this rugged, but flexible sealant is ideally suited for use in institutional and correctional facility installations but performs equally as well in other public buildings and facilities where ordinary sealants are easily damaged or torn out by idle tampering and acts of vandalism.

Note: In high security areas where a harder material is required and flexibility is less important, Pecora Dynapoxy EP-1200 with a Shore D hardness of 70 is recommended.

Limitations: Dynaflex is not to be used:

- Light colors can yellow if exposed to direct gas fired heating elements or other equipment or materials that produce high levels of VOCs during the initial sealant cure period.
- When in direct contact with substrates that contain asphaltic or bituminous compounds.
- On polycarbonate substrates.
- In active joints experiencing movement greater than ±12-½% in compression or extension.
- In areas where it may come into contact with food products.
- In areas where it may be subjected to harsh chemicals such as acids, strong alkalis, ketones, etc.

Fire Rated Systems: Two-hour fire and temperature rated wall, Design (WW-S-0021) and floor, Design (FF-S-0017) joint systems up to 2" (50 mm) wide can be designed with Ultra Block™ fire blocking material.

These designs have been full-scale tested and classified by Underwriters Laboratories, Inc. and appear in UL's Online Certifications Directory or Fire Resistance Directory, Volume 2.

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, Colorado.

TECHNICAL DATA

Applicable Standards: Meets Federal Specification TT-S-00227E, Class B, Type II, SS-S-200E, Type M; and ASTM C-920, Type M, Grade NS, Class 12.5, Use T1, M, O . Also exceeds the test requirements of ASTM C1247 for sealants exposed to continuous immersion in liquids. Acceptance by U.S. Department of Agriculture for use in meat and poultry processing plants.

Joint Design: The width or depth of the joint should not be less than ¼" (6 mm). In joints up to ½" (12 mm), but not exceeding 1-¼" (31 mm), the depth should be maintained at ½" (12 mm).

For joints wider than 1-¼" (31 mm), please consult our Technical Service department.

INSTALLATION

Surface Preparation: When installing security sealants, surface preparation becomes of utmost importance in contributing to the overall tamper resistance and tamper-proof properties associated with security sealants. If bonding to the substrate is compromised in any way, the physical properties of the security sealant that contribute to tamper resistance become ineffective. All surfaces must be clean, sound, and free of surface water. Remove laitance, curing compounds, coatings, oil, grease, rust, waxes, and other bonding-inhibiting substances.

Application over paints or coatings is not recommended, unless the paint or coating can be relied upon to impart adhesive properties equal to the sealant/virgin concrete bond and maintain the security properties needed. Consult Pecora Technical Service for requirements regarding applying security sealants over painted surfaces as testing will be required.

Priming: For optimal performance, security caulking requires excellent adhesion, especially in isolated containment areas such as inmate living cells. Using Pecora P-75 or P-150 primer on concrete and masonry,

PACKAGING

- 1.5 gallon unit (5.7 L) including Base and Activator.

COLOR

- Pecora's Color-Pack system has pre-measured tint paste for 51 standard colors. It is not necessary to add a Color Pack if Dynaflex is to be painted after cure; however, this will tend to increase the hardness of the sealant.
- Custom colors are available upon request, minimum 5 color packs.

TABLE 1: TYPICAL PHYSICAL PROPERTIES

Test Property	Value	Test Procedure
Adhesion to Concrete (pli)	25	ASTM C794
Bond to Concrete:**		
Non-Immersed	Pass, no bond loss	Fed. Spec. SS-S-200E
Immersed	Pass, no bond loss	Fed. Spec. SS-S-200E
Fuel-Immersed	Pass, no bond loss	Fed. Spec. SS-S-200E
Elongation (%)	175-200	ASTM D412
Full Adhesion (days)	7	Pecora Corporation
Full Cure (days)	7	Pecora Corporation
Hardness, Shore A (2 days)	40-45	ASTM C661
(Ultimate*)	55±5	ASTM C661
Tack-Free Time (hrs)	10	ASTM C679
Tear Strength (ppi)	60	ASTM D624
Tensile Strength (psi)	300-350	ASTM D412
VOC Content:		
Activator (g/L)	<25	ASTM D3960
Base (g/L)	<100	ASTM D3960
VOC Emissions (TVOC)	<2 ug (0.002 mg)lou m	CDPH v1.1-2010 (CA Specification 01350)01350)

* Hardness may fluctuate from this value due to variations in field mixing, application of sealant, temperature and humidity.
** Primed with P-75 or P-200 primer

Since Pecora Architectural Sealants are applied to varied substrates under diverse environmental conditions and construction situations it is recommended that substrate testing be conducted prior to application.

For the most up to date information, please visit our website at pecora.com.

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and Pecora P-100 or P-120 primer on steel, aluminum, and glass is recommended. Always conduct field tests under site-specific conditions to verify adequate adhesion. Given the higher hardness of security sealants, consult Pecora Technical Service if considering applications without primer, as these sealants must meet stricter performance standards than standard sealants. A field test should always be conducted to confirm satisfactory adhesion. Contact Technical Services (800-523-6688) for other recommendations for priming or other surface treatment.

Joint Backing: Backer rod cushions the sealant, controls the depth and allows it to be applied under pressure. For the firmer support recommended for security sealing, use a closed-cell polyethylene backer rod that will compress 25% when inserted into the joint. In joints too shallow for backer rod, use a polyethylene bond-breaker tape to prevent three-sided adhesion.

Mixing: Activator and base components are packaged in exact ratio for use. The addition of a Pecora universal color pack is required when using a field-tintable neutral base. Use one (1) Pecora universal color pack per 1.5-gallon unit. Extrude entire contents of color pack and mix into base along with the activator. Mix all components as supplied using an Albion Engineering model 381-G04 mixing paddle (refer to illustration below) or comparable. Do not attempt to mix partial units and risk the probability of a partially or non-curing sealant Thoroughly mix the activator, base, and colorants for three (3) minutes using a variable speed, heavy-duty drill. Stop mixing and thoroughly scrape any unmixed material from sides and bottom of pail with a bucket scraping tool. Continue to mix for an additional three (3) minutes not exceeding a total (6) six-minute mixing time. Avoid over-mixing which can entrain air in the sealant causing bubbling and blistering.

Application: Do not thin with solvents or adulterate the mixed material in any way. Apply sealant to joints using standard caulking equipment. Application life is 2 hours at 77˚ F (25˚ C), 50% R.H. Higher temperature and/or humidity will shorten this application life. For maximum pot-life, store material in a cool, dry place prior to mixing. If warming is necessary, do not heat above 120˚F (49˚C).

Tooling: Tool immediately to assure full adhesion. Tooling without a slicking agent is preferred but if conditions require one, mineral spirits is recommended. Cleaning: Mechanically remove excess sealant. Wipe up residues with a small amount of mineral spirits following appropriate safety precautions on the supplier's SDS or allow residues to cure and remove mechanically to decontaminate the area thoroughly.

Painting: Dynaflex is offered in a wide range of colors to eliminate the need for painting. However, it can be painted after a full cure, if so specified. A high-quality latex is the best choice, but good oil-based paints are acceptable. Care should be taken when using the hard drying epoxy paints. These paints do not have the flexibility of the sealant and may crack in active joints when the sealant expands and contracts to a degree greater than the movement capability of the paint. Also, epoxy paints should be completely dry or cured before Dynaflex is applied against them or an area of incompatibility will result. A mockup with representative paint finishes is highly recommended. Refer to Pecora Technical Bulletin #31 for guidelines regarding painting over joint sealants.

Storage Life: Dynaflex has a shelf life of approximately one (1) year from the date of manufacture when stored in sealed containers at temperatures lower than 80˚F (26˚C). Dynaflex performs equally well during any part of this shelf life.

Precautions: Contains diisocyanates.Contact with uncured sealant or with dust formed from cured sealant may cause eye, skin, or respiratory tract irritation or allergic reaction. Repeated contact with uncured product may, without symptoms, increase susceptibility of these effects. Do not breathe vapor or dust. Use only with adequate ventilation or wear an appropriate NIOSH-approved respirator. Do not get in eyes or on skin or clothing. Wear chemical resistant gloves and eye protection. Wash throughly after handling. Refer to Material Safety Data Sheet (MSDS) for more information.

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

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.

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 priceof, 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.

MAINTENANCE

If the sealant is damaged and the bond is intact, cut out the damaged area and prime with P-75 or P-150 primer and recaulk. If the bond has been affected, remove the sealant, clean and prepare the joint in accordance with instructions under "Installation".

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.

FILING SYSTEMS

CSI MasterFormat Designations:

- 07 92 00 - Joint Sealants
- 07 92 16 - Rigid Joint Sealants
- 32 13 73 - Concrete Paving Joint Sealants