# Dyna**Trol® I-XL Hybrid**

One-Part, Non-Staining, Non-Yellowing Sealant



## **BASIC USES**

- Exterior and interior caulking of door and window perimeters
- Expansion and control joints
- Coping and coping to facade joints
- · Cornice and wash joints
- Pre-cast tilt-up panels
- EIFS and architectural panels
- Underside of precast planks
- · Top of non-load bearing walls
- · Fiber cement siding
- Liquid flashing and joint filler for use with the Pecora air barrier systems
- As a component of UL fire-rated joint systems
- Concrete joint applications requiring jet fuel resistance.

Suited for various manufacturing uses:

- Production of travel trailers and mobile homes
- Extruded PVC window and doors
- Seam sealer and adhesive for automotive and other OEM manufacturing applications.

## **MANUFACTURER**

#### PECORA CORPORATION

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#### PRODUCT DESCRIPTION

Dynatrol I-XL Hybrid is based on a unique hybrid STPU (silyl-terminated polyurethane) chemistry that allows for a low odor, non-staining, nonyellowing, one-part, moisture cure, gun grade, isocyanate free sealant. It has been developed specifically for sealing dynamic joints between dissimilar materials, of varying coefficients of expansion and contraction on both porous and non-porous surfaces. It cures to a low modulus rubber with extraordinary adhesion, capable of accommodating joint movement of ±50% of the original joint width. It does not yellow, crack or craze on long term exposure to UV

### Advantages:

- AAMA compliant for use as exterior perimeter sealing compound
- Non-Staining
- · Non-Yellowing
- Paintable
- · Isocyanate free
- Fire-rated

- · Exceptional adhesion
- · Moisture tolerant
- · Low VOC
- · No shrinkage
- · Minimal dirt pick-up
- Low odor
- · Non-gassing
- · Long life
- Fast Cure
- · Adhesion to green concrete
- Jet fuel resistant

### Paintability:

Dynatrol® I-XL Hybrid may be painted with a high quality moisture permeable coating once a tough skin has developed (30-60 minutes). Dynatrol® I-XL Hybrid will require a full cure (7 days) before application of a nonpermeable paint or coating. All paints and coatings should be tested for compatibility and adhesion before application over Dynatrol® I-XL Hybrid.

#### Fire Rated Systems:

Three-hour fire and temperature rated wall-to-wall, floor-to-floor and head-of-wall UL joint systems up to 3.5" (89mm) wide can be designed with mineral wool fire safing insulation. These designs have been full-scale tested and classified by Underwriter's Laboratories, Inc. (UL) and appear in the UL Fire Resistance Directory.

Ref: "Standard Methods of Tests of Fire Resistance of Building Construction and Materials" ASTM E119 and UL 263. Consult Pecora Technical Bulletin #85 for complete listing of Pecora Firestop Systems.

#### Limitations:

Sealant should not be used:

- When in direct contact with substrates that contain asphaltic or bituminous compounds
- For structural glazing
- For use in water immersion applications contact Technical Service.
- Under urethane coatings prior to full cure.
- For glazing applications contact Technical Service.

## **PACKAGING**

- ·10.1 oz. (300 mL) cartridges
- •20 oz. (591 mL) sausages

#### COLORS

- Tru-White, Black, Anodized Aluminum, Precast, Aluminum Stone, Limestone, Classic Bronze, EIFS Tan, Sequoia, Window Tan
- Additional custom colors available in batch quantities. Contact your Pecora Rep for additional details.

TABLE 1: TYPICAL UNCURED PROPERTIES AT 75°F (24°C), 50% RH			
Test Property	Value	Test Procedure	
Cure Time 1/8" Bead (Hours)	24	Pecora Corporation	
Extrusion Rate @ 30PSI, 1/8" Orifice (Gms./Min.)	51	ASTM D2202	
Sag (Inch)	0.05	ASTM D2202	
Tack-Free Time (Hours)	2.5 - 3	ASTM C679	
Tooling Time (Min.)	30	Pecora Corporation	
Viscosity, #7 @ 10 RPM (Cps.)	300,000	ASTM D2196	
VOC (g/L)	18	ASTM D3960	
VOC Emissions (TVOC)	<2 ug (0.002 mg)/cu m	CDPH v1.1-2010	

TABLE 2: TYPICAL CURED PROPERTIES AT 75°F (24°C), 50% RH			
Test Property	Value	Test Procedure	
Bond Durability - Class 50	Pass	ASTM C719	
Elongation at Break (%)	1,400	ASTM D412	
Hardness, Shore A	27	ASTM D412	
Peel Adhesion to (Pli; % Cohesive)			
Aluminum (Unprimed)	30; 100	ASTM C794	
Concrete (Unprimed)	30; 100	ASTM C794	
Glass (Unprimed)	30; 100	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	
Tensile Strength @ 100% Elongation (PSI)	35	ASTM D412	
Tensile Strength, Ultimate (PSI)	180	ASTM D412	
Service Temperature (°F)	-40 to 195	Pecora Corporation	
Staining of Porous Substrates (White Marble)	Pass	ASTM C1248	
Tensile Adhesion Properties			
Ultimate Tensile Strength (PSI)	140	ASTM C1135	
Ultimate Elongation (%)	605	ASTM C1135	

<sup>\*</sup> Modified for single component curing system. P-200 or P-225 primer required.

# DynaTrol® I-XL Hybrid

# SPECIFICATION DATA SHEET

## **TECHNICAL DATA**

Applicable Standards: Meets or exceeds the requirements of TT-S-00230C Type II, Class A, SS-S-200E (Modified); ASTM C-920, Type S, Grade NS, Class 50, Use NT, T1, G, M, A and O, AAMA 808.3 Type I. Sealant complies with appropriate USDA requirements for use in Federally inspected meat and poultry plants. Consult Typical Properties Chart for specific testing properties.

#### INSTALLATION

Joint Design: Proper sealant dimensions are critical when installing elastomeric joint sealants. Generally, a sealant width-to-depth ratio of 2:1 is recommended. Dynamic joint conditions will require a minimum 1/4" width and 3/16" depth in order to maintain the sealant's movement capabilities. For joints greater that 1" wide, please consult Technical Service.

Surface Preparations: Joints to receive sealant must be sound, smooth, uniform in dimensions and free from defects and foreign materials. They must also be clean, dry, free of frost and all contaminants, such as curing, compounds, sealers, waterproofing, coatings, etc.

Priming: Dynatrol® I-XL Hybrid has excellent adhesion to most common substrate materials. In some applications it may be necessary to use a primer. For porous surfaces Pecora P-150 or Pecora P-225 is recommended. For non-porous surfaces Pecora P-120 is recommended. For specific questions regarding primer use, please consult Technical Services.

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 opencell 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.

Application: Joints should be masked to ensure a neat appearance. 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.

Tool Time (Initial Skin): 30 minutes at 77° (25°C); 50% relative humidity. Higher temperatures and/or humidity will shorten this time. Lower temperatures and/or humidity will lengthen this time. Cleaning: Immediately remove all excess sealant and smears adjacent to joints with mineral spirits. For equipment cleanup, use iso-propyl alcohol or mineral spirits. Consult manufacturer's SDS for handling and safety precautions.

**Shelf Life:** Twelve months when stored in original, unopened container in a dry area at temperatures below 80°F.

Precautions: Use sealant in well ventilated areas. Keep away from heat and flame. Do not take internally. Call a physician if swallowed. Avoid eye and skin contact. For additional health and safety information, consult manufacturer's SDS.

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

# **AVAILABILITY & 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 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.

#### **MAINTENANCE**

If the sealant is damaged and the bond is intact, cut out the damaged area and recaulk. No primer is required. If the bond has been affected, remove the sealant, clean and prepare the joint in accordance with the 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 Designation - 07 92 00: Joint Sealants

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.



