

Pecora XL-Perm^{ULTRA} VP

Fluid Applied, Permeable STPU Vapor Retarding Water Resistive Air Barrier



SPECIFICATION DATA SHEET

BASIC USES

- Designed as a system component to control the movement of air and moisture vapor through the building envelope. Pecora XL-Perm^{ULTRA} VP functions as a vapor retarding water resistive air barrier for use on concrete block, concrete, exterior gypsum sheeting, plywood, OSB and many other common building materials. Pecora XL-Perm^{ULTRA} VP exhibits excellent UV resistance and weatherability and is approved for use in rain screen applications.

MANUFACTURER

Pecora Corporation

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PRODUCT DESCRIPTION

Pecora XL-Perm^{ULTRA} VP is an integral part of the XL-Perm Air, Vapor & Water Resistive Barrier System, a four step approach for complete air and vapor barrier protection for your building envelope. Pecora XL-Perm^{ULTRA} VP is a primerless, single component, high performance, elastomeric fluid applied STPU (Silyl Terminated Polyurethane) that combines the best characteristics of silicone and urethane properties for exterior wall assemblies where it functions as an air and water barrier. Applied in a single coat via airless sprayer or roller, this durable elastomeric weatherproofing membrane provides two to three times the coverage of other fluid applied products. Pecora XL-Perm^{ULTRA} VP has excellent elasticity and crack bridging capabilities contributing to a seamless durable airtight building envelope.

Product Advantages:

- Excellent Weatherability: UV and water resistant.

PACKAGING

- 5-gallon (18.9 L) pails
- 50-gallon (189 L) drums

COLOR:

- Blue
- Custom Colors Available

- STPU chemistry allows enhanced compatibility with a diverse selection of wall components.
- Performs as a vertical odor containment barrier when used with odor control systems.
- Eliminates construction delays: Can be applied during inclement weather conditions.
- Saves on labor cost: Primerless and can be applied in one single coat.
- Versatility: Can be sprayed or rolled.
- Permeable, allows for water vapor diffusion.
- Water and Air penetration resistant for normal and extreme weather conditions.
- Low VOC, compliant in all areas of the U.S.

TABLE 1: TYPICAL PHYSICAL PROPERTIES

Test Property	Value	Test Procedure
Drying time of 14 wet mil film at 73°F/50% RH	1 hr. on CMU substrate	Pecora Corporation
Coverage Rate, Theoretical	85 – 110 sq. ft. / gallon	Pecora Corporation
Application Temperature	Minimum 10°F – Max 122°F	Pecora Corporation
Modulus @ 100% Elongation, psi	30	ASTM D412
Elongation at Break, %	>1000	ASTM D412
Nail Sealability	No Leakage	ASTM D1970, 180°
Percentage Solids (weight), %	78	Pecora Corporation
VOC (g/L)	<100	ASTM D3960
VOC Emissions (TVOC)	<2 ug (0.002 mg)/cu m	CDPH v1.1-2010 (CA Specification 01350)
UV Resistance ¹	Pass	ASTM D4587
Pull-Off Adhesion	87psi on Concrete, >16psi on Ext Gypsum	ASTM D4541
Low-Temp -15°F Crack Bridging	Pass	ASTM C1305
Air Penetration of Building Materials, cfm/ft ² @75Pa (1.57 psf)	0.00024	ASTM E2178
Water Penetration Resistance	Pass	AATCC 127
Water Vapor Transmission @ recommended 8-12 mil DFT	Method B 20.0	ASTM E96
Peel Strength Lbf/in/Aluminum	18pli cohesive	ASTM D903
Adhesion-in-Peel Lbf/in./mortar	16pli cohesive	ASTM C794
Tensile	230 Psi	ASTM D412
Recovery	>90%	ASTM D412
Ultraviolet Light Exposure Assembly /QUV 5000 hours	Pass	Accelerated Weathering G155
Wall Assembly Air Penetration Resistance @75Pa (1.57 psf)	0.0008	ASTM E2357
Flame Propagation, Non-Load Bearing Wall Assembly (UL EWS 0024)	Pass	NFPA 285, EJ's available on project basis
Surface Burning Characteristics	Class A, Flame Index 10, Smoke Index 40	ASTM E84
Cone Calorimeter/Heat of Combustion (10 mil DFT)	THR 3.8 MJ/m ² , Peak HRR 124 kW/m ² , EHC 8.9 MJ/kg	ASTM E1354
Asphalt Compatibility	Pass	AAMA 713

¹ Coating applied over fiberglass mat faced sheathing

- Contributes to creation of an air tight building envelope reducing energy costs by 40%² (when properly installed).
- Can be used on damp substrates and green concrete.
- Can be used as a durable UV and water resistant barrier in rain screen applications.
- Asphalt Compatibility: Approved for use with self-adhered membranes with asphalt adhesives and asphalt based fluid applied coatings. Consult Pecora Technical Service for guidelines.

Limitations: Pecora XL-Perm^{ULTRA} VP should not be used in the following applications:

- Do not use on below grade applications.
- Dilution or thinning with solvents or paint thinner is not recommended.

TECHNICAL DATA

Applicable Standards:

XL-Perm^{ULTRA} VP complies with air leakage requirements prescribed by individual state building and energy codes when tested in accordance with ASTM E2178 and ASTM E2357.



Design Number:
EWS0024



INSTALLATION

See Related Products: The following products are part of the Pecora XL-Perm Air and Vapor Barrier System:

- Pecora AVB Silicone, air & vapor barrier silicone sealant.
- Pecora XL-Span, transitional seal membrane.
- Pecora XL-Flash, liquid flashing and joint filler.
- Pecora XL-Perm^{ULTRA} VP, fluid applied STPU.

Surface Preparation: Surfaces must be dry and free of all contaminants such as oil, grease, wax, dust, corrosion, tar, asphalt, loose aggregate, frost, form-release agents and decorative and protective coatings. Precast using form release agents must be sandblasted or mechanically abraded and blown or brushed dust free. All questionable surfaces should be tested for compatibility and adhesion prior to full scale application of fluid applied air barrier or flashings.

Application:

1. Complete all change of plane, joint and flashing with Pecora XL-Flash before applying Pecora XL-Perm^{ULTRA} VP.
- a. In sheathing over stud construction, sheathing joints shall be detailed with Pecora XL-Flash, tool as shown in Pecora details.

b. Window openings, inside-outside corners, base of wall, roofline, and other transitions shall be flashed corners, base of wall, roofline, and other transitions shall be flashed with Pecora XL-Flash to detail expansion joints and window/curtain wall transitions. Please consult Pecora details for guidance.

2. For transitions between building components with significant movement use Pecora XL-Span transition system. Consult XL-Span specification data.
3. Pecora XL-Perm^{ULTRA} VP may be applied immediately over freshly applied XL Flash. No extended XL-Flash cure times are required. Pecora XL-Perm^{ULTRA} VP may be applied with a roller or approved airless sprayer. Spray apply to exterior wall in a single coat at 10-14 wet mils (8-12 DFT) through approved airless spray equipment. Size 623 spray tip is recommended. Roller apply to exterior wall assembly using vertical strokes with slight diagonal slant. Use 1/2" nap roller over smooth surfaces and 5/8" nap roller over rough surfaces.

Apply to recommended thickness of 10-14 wet mils (8-12 DFT). When applying air & vapor barrier membrane at ambient temperatures below 20°F (-7°C) or above 95°F (35°C) consult Pecora Technical Services. Inspect for pinholes, voids or gaps in the membrane and repair as needed.

4. Allow product to cure, these times will vary depending on temperature, substrate, and humidity.
At 70°F and 50% humidity Pecora XL-Perm^{ULTRA} VP should be dry to touch in 1 hour.
Consult Pecora Technical Service for approved airless sprayer equipment specifications.

Rain Screen Applications: Pecora XL-Perm^{ULTRA} VP may be successfully applied in rain screen applications following the required surface preparation and liquid flashing/joint filler installation as noted above. Rain screen applications will require the Pecora XL-Perm^{ULTRA} VP to be applied at a minimum 30 wet mils in a single coat via an airless sprayer or roller.

Cleaning: Pecora recommends 100% Isopropyl or 100% Denatured alcohol solvents for purging of pumps and components as well as cleaning of any tools. (Caution: Cleaning solvents may be flammable and toxic. Observe cleaning solvent manufacturers' precautions.)

Shelf Life: 12 months from date of manufacture when stored in original unopened containers at temperatures above 40° F.

Precautions: Use with adequate ventilation and avoid breathing of the vapors. In closed areas, wear approved breathing apparatus, protective clothing and eye protection. Avoid contact with skin. Avoid ingestion.

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.

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.

MAINTENANCE

Pecora XL-Perm^{ULTRA} VP may be exposed to 24 months of continuous UV exposure. If exposed longer, contact our Technical Services Department for an inspection.

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 the remedy available under this warranty, shall be made in our sole discretion and any decision 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.

FILING SYSTEMS

- CSI Master Format Designations
 - 07 25 00 - Weather Barriers
 - 07 27 00 - Air Barriers
 - 07 27 00 - Fluid-Applied Membrane Air Barriers