

AIRLOK FLEX[®] VP

Fluid-Applied Membrane Air/Moisture Barrier

PRODUCT NAME

Airlok Flex[®] VP

MANUFACTURER

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PRODUCT DESCRIPTION

BASIC USES

Airlok Flex VP is a vapor-permeable membrane that is designed as an air barrier for installation on concrete and concrete masonry surfaces to prevent the penetration of air and moisture. Airlok Flex VP forms a tough, continuous, bonded elastomeric barrier that provides a protection against air infiltration and exfiltration to reduce energy loss. The cured Airlok Flex VP membrane keeps water out of the structure, yet allows for vapor transmission.

Applications include coating concrete; precast concrete; Concrete Masonry (CMU); paper-, glass-, or foil-faced sheathing; plywood; oriented strand board (OSB); and rigid insulation in the cavity. Use Airlok Flex VP where vapor permeable air barrier properties are required.

PRODUCT PROPERTIES

Apply in a temperature range of 40°F (4°C) (and rising) up to 120°F (48°C). Resistance to ultraviolet (UV) radiation allows use on both unexposed and exposed portions of walls.

For designers wanting maximum protection, Proban[®] added at the factory delivers additional contact mold-inhibiting properties to the air barrier system. These properties may suggest other uses of Airlok Flex VP.

COMPOSITION & MATERIALS

Airlok Flex VP is a cold fluid-applied, single-component, acrylic-based, elastomeric, vapor-permeable polymeric membrane designed to prevent air and moisture penetration while allowing water vapor to escape. Airlok Flex VP is a non-combustible, water-based blend of high-performance, elastomeric acrylic polymers and selected fillers with a VOC content of <50 g/l.

TECHNICAL DATA

See physical properties table.

INSTALLATION

SURFACE PREPARATION

Concrete surfaces should be cured a minimum of 3 days and have a minimum 175 PSI adhesive pull-off strength and a 3-to-5% profile. Concrete and Concrete Masonry (CMU) are to be constructed without integral moisture repellent. Remove form ties from both sides of the wall.

Concrete Masonry (CMU) shall be constructed with Type-M or Type-S mortar in accordance with ASTM C270. Joints are to be filled with mortar, tooled and brushed to increase a profile. Do not use Airlok Flex VP over CMU containing

Product Data Sheet

integral moisture repellants without prior compatibility testing. No paring.

All concrete surfaces should be free of voids, honeycombed concrete, cracks, mortar voids and smears, dirt and form release agents that will interfere with adhesion. Clean all surfaces to remove frost, dirt, mud, loose material, debris, dust, laitance, etc. Surface temperature must be minimum 40°F (4°C) and rising.

Voids in surfaces are to be filled to create a smooth, compatible surface. Surface defects such as cracks, holes, form tie depressions, or cavities, should be filled and finished flush with Detail Sealant PW[™], a high-grade Portland cement, grout, or concrete.

PRIMING

No priming necessary

APPLICATION

Airlok Flex VP can be applied via sprayer, brush, or roller in a single or multiple coat(s). Airlok Flex VP shall be applied at 50 square feet per gallon (32 wet mils), inversely related to the wall surface texture and porosity. Measure wet mils directly after the application: 32 wet mils averages 14 dry mils. The total membrane should be applied to achieve a continuous coating at the desired coverage rate. Use an airless sprayer with a 2500 PSI stall pressure and a 0.025-inch to 0.027-inch reversible tip is recommended.

The coverage is complete when continuous and the material's coverage rate was installed. Apply additional material as needed to complete coverage.

PROTECTION

Allow ample dry time before continuing surface work. Airlok Flex VP will not be adversely affected by constant ultraviolet (UV) radiation exposure for periods of 1 year or more. Clean and re-coat as necessary.

METHODS

Exterior/Interior walls not exposed: Apply Airlok Flex VP at 50 square feet per gallon (32 wet mils), inversely related to wall surface texture and porosity.

Masonry Anchors and Penetrations: Apply extra coating amount to form a seal from wall surface to anchors or penetrations.

Transition and Control Joints:

Method A: Fill joints 0.25-inch or less with Detail Sealant PW[™] tooled to 30 mils 0.5-inches on each side and then cover with the Airlok Flex VP field coating.

Method B: Apply the Airlok Flex VP field coating, allow 12-to-24 hours to dry, and then fill the joints with Detail Sealant PW[™] tooled to 30 mils 0.5-inches on each side.

Method C: Apply the Airlok Flex VP field coating, allow 12-to-24 hours to dry, and then cover the joints with 400 Flashing (or compatible equal) in minimum 6-inch wide pieces.

Flanges for Windows or Doors:

Method A: Tool Detail Sealant PW to 30 mils minimum 3-inches onto wall substrate and onto jamb or flange. Then apply the Airlok Flex field coating.

Method B: Apply Airlok Flex VP field coating. Allow 12-to-24 hours to dry. Then tool Detail Sealant PW to 30 mils minimum 3-inches onto wall substrate and jamb/flange.

Method C: Apply Airlok Flex VP field coating. Allow 12-to-24 hours to dry. Then use 400 Flashing (or compatible equal) in minimum 6-inch wide pieces.

Voids:

Grout openings 0.5-inch and larger with hydraulic cement and allow 12-to-24 hours to dry. Then,

Method A: Apply tooled Detail Sealant PW to 30 mils 1-inch beyond the void area and allow 12-to-24 hours to dry. Last, apply the Airlok Flex VP field coat.

Method B: Apply Airlok Flex VP 50-70 wet mils to 1-inch beyond the void area and allow 12-to-24 hours to dry. Last, apply the Airlok Flex WG field coat.

Method C: Apply the Airlok Flex VP field coating and allow 12-to-24 hours to dry. Cover with 400 Flashing (or compatible equal) as minimum 6-inch strips.

MEMBRANE REPAIR

Thoroughly clean the Airlok Flex VP, dry the damaged area, and then re-coat. Airlok Flex VP will bond to itself without any elaborate surface preparation.

STORAGE

Store Airlok Flex VP as follows;

- 1) Keep from freezing in an environment having a temperature range between 40°F and 100°F.
- 2) On a stable surface with lid securely closed.
- 3) In compliance with local governing regulations.

SAFETY

SDS sheets for all Polyguard Products can be obtained at our website www.polyguardproducts.com. Call Polyguard Products, Inc. at (214) 515-5000 with questions.

WARRANTY

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product are beyond our control; such as weather, workmanship, equipment utilized and prior condition of the substrate. We will replace, at no charge, proven defective product within twelve (12) months of purchase, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided. A five (5) year material or system warranty may be available upon request. Contact Polyguard Products, Inc. for further details.

TECHNICAL SERVICES

Technical assistance, information and Polyguard's products are available through a nationwide network of distributors and architectural representatives, or contact Polyguard Products, Inc.

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PROPERTY	TEST METHOD	TYPICAL VALUE
COLOR		Gray Opaque
AIR PERMEANCE - GYPSUM SHEATHING @ 70 ft ² /gal	ASTM E 2178-01	0.0037 cfm/ft ² @ 75 Pa
AIR PERMEANCE - BLOCK @ 50 ft ² /gal	ASTM E 2178-01	0.003 cfm/ft ² @ 75 Pa
AIR LEAKAGE & DURABILITY	ASTM E 2357	0.002 cfm/ft ² @ 75 Pa
PULL ADHESION	ASTM D 4541	100+ PSI average
PERMEANCE TO WATER VAPOR TRANSMISSION	ASTM E 96 Method B	10 perms
ELONGATION	ASTM D 412	500%
EVALUATION OF FIRE PROPOGATION CHARACTERISTICS	NFPA 285	PASS
ULTRAVIOLET (UV) RADIATION EXPOSURE LIMIT	BY MANUFACTURER	> 1 year
VOLATILE ORGANIC COMPOUNDS (VOC)		< 50 G/L

More information is available upon request.

*CMU sq. ft. coverage varies inversely with the porosity of the block

PACKAGING	PART NUMBER	UNIT SIZE
AIRLOK FLEX® VP <i>Proban® mold inhibitor can be added at the factory to Airlok Flex® VP</i>	PWALFLEXVP 05	5 gallon pail
	PWALFLEXVP 50	50 gallon drum
AIRLOK FLEX® VP Accessories:		
DETAIL SEALANT PW™	DETAIL SEALANT PW - SAU 20 OZ	20 sausages/ctn
DETAIL SEALANT PW™	DETAIL SEALANT PW - 3 GAL	3 gallon pail
ALUMA FLASH - 40 MIL (sizes available: 4", 6", 9", 12", 18", 36")	varies/size	33'.3 roll
400 FLASHING - 40 MIL (sizes available: 4", 6", 9", 12", 16", 24")	varies/size	75' roll
400 MEMBRANE - 40 MIL (48")	varies/size	48" x 75' roll
QUICK GRIP SPRAY ADHESIVE	PWQGADH30	30# canister

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