



# Air / Vapor Barrier Elastomeric

Fluid applied vapor permeable  
membrane

## 1. Product Name

### Poly-Wall AIRLOK FLEX VP®

AIRLOK FLEX VP® is a fluid applied; single component coating that forms a tough, continuous, bonded elastomeric barrier. AIRLOK FLEX VP® provides a protection against air infiltration and exfiltration reducing energy loss. The cured membrane of AIRLOK FLEX VP® keeps water out of the structure yet allows for vapor transmission. Use AIRLOK FLEX VP® where vapor permeable air barrier properties are required.

## 2. Manufacturer

Protective Coatings  
Technology, Inc.  
Menomonie, WI 54751  
(800) 846-3020  
www.poly-wall.com

## 3. Product Description

### BASIC USE

Poly-Wall AIRLOK FLEX VP® is a coating designed for use as an air barrier and installed on concrete and concrete masonry surfaces to prevent the penetration of moisture and air yet, allow water vapor to escape. Typical applications include: coating masonry walls, masonry cavity walls, and exterior grade gypsum sheeting in the cavity.

### PRODUCT PROPERTIES

Poly-Wall AIRLOK FLEX VP® has an attractive light gray color. Superior UV resistance allows its use on both unexposed and exposed portions of walls. It can be applied in a temperature range of 40 to 120 degrees F. It has good adhesion qualities. It dries to an elastomeric film. Does not require a primer. These properties may suggest other uses of Poly-Wall AIRLOK FLEX VP®.

## COMPOSITION & MATERIALS

Poly-Wall AIRLOK FLEX VP® is a cold applied coating designed to prevent air and moisture penetration at the same time allowing water vapor to escape. It is a single component liquid applied polymeric coating. Poly-Wall AIRLOK FLEX VP® is vapor permeable and elastomeric. Poly-Wall AIRLOK FLEX VP® is water based with a VOC content of 0.0 g/l.

## 4. Technical Data

See Table

## 5. Installation

### GENERAL

Read and carefully follow the instructions contained on this spec sheet as well as in the most current Manufacturer's Guide Specifications.

### SURFACE PREPARATION

New concrete should be fully cured. Concrete surfaces should have a minimum surface pull off strength of 175 psi. Minimum surface profile height: 4-5 mils. Surface temperature must be above 40 degrees F.

Concrete and concrete masonry units should be free of surface voids, honeycombed concrete, cracks, mortar smears, dirt and form release agents that will interfere with adhesion. Clean all surfaces to remove dirt, mud, debris, dust, laitance, etc.

Surface defects such as cracks, holes or cavities should be filled and finished flush with a high grade Portland cement, grout, or concrete or Poly-Wall Hole Filler. Voids in surfaces are to be filled to create a smooth, compatible surface.

### PRIMING

No primer is needed. For best results Poly-Wall AIRLOK FLEX VP® should be applied directly to sound concrete or gypsum sheathing surfaces.

## MEMBRANE APPLICATION

Poly-Wall AIRLOK FLEX VP® should be applied in one coat. Poly-Wall AIRLOK FLEX VP® should be applied at a rate of 50-70 square feet per gallon inversely related to texture and porosity of wall surface. 50 square feet per gallon is 32 wet mils and 19 mils dry. 70 square feet per gallon is 23 wet mils and 14 dry. The total Coating should be sprayed to achieve a continuous coating at the desired coverage rate. Use of an airless sprayer with a 2500 p.s.i. stall pressure and a .035" reversible tip is recommended.

Inspect all surfaces for complete, continuous and consistent coverage. Re-apply material as needed for complete coverage.

## PROTECTION

Allow adequate drying time before continuing work on the surface.

Poly-Wall AIRLOK Flex VP® will not be adversely affected by constant UV exposure for periods of 1 year or more. Clean and recoat as necessary.

## METHODS

Exterior/Interior walls not exposed:  
Apply even coat with coverage rate of 50-80 square feet per gallon. Coverage is inversely proportional to texture and porosity of the wall.

Masonry Anchors:  
Apply extra coating amount to seal anchors.

Penetrations:  
Apply extra coating around penetrations.

## Transition and Control Joints:

Method A: Exterior grade gypsum board joints up to ¼ inch should be covered with Venture Red Sheathing Tape 1585CW-2. AIRLOK FLEX VP® should be applied over the tape at an application rate of 50-80 square feet per gallon. An alternative method is to apply the AIRLOK FLEX VP® first,



allow it to dry for 12 to 24 hours and cover the open joints with Venture Red Sheathing Tape or fill with a high quality caulk such as Poly-Wall Hole Filler.

Method B: Joints of up to ¼ inch should be filled with a compatible caulk such as Poly-Wall Hole Filler or two part Urethane foam and allowed to dry per manufacturer's recommendation and then coated with AIRLOK FLEX VP®.

Flanges for Windows or Doors: Should be top coated with 60 - 80 wet mils of AIRLOK FLEX VP®. An alternative recommendation is to cover the opening with Poly-Wall Crack Guard.

Large Openings: Opens of .5 – 1.0 inches should be first filled with expandable two part compatible Urethane foam and allowed to dry per the manufacturer's recommendation. Top coat with AIRLOK FLEX VP®. An alternative recommendation is to cover the opening with Poly-Wall Crack Guard.

**SAFETY**

Poly-Wall AIRLOK FLEX VP® is water based. Standard fire protection precautions apply.

- When using high pressure spray equipment wear protection for the eyes, hands, and skin. Use a NIOSH approved disposable vapor respirator.
- Keep out of the reach of children.

**MEMBRANE REPAIR**

Repair of Poly-Wall AIRLOK FLEX VP® is simply a matter of thoroughly cleaning and drying the damaged area and re-coating. Poly-Wall AIRLOK FLEX VP® will bond to itself without any elaborate surface preparation.

**STORAGE**

Poly-Wall AIRLOK FLEX VP® is to be stored according to the requirements of local authorities. Material is non-combustible therefore can be safely stored indoors. Keep from freezing. Keep lids closed tightly.

**AVAILABILITY**

Poly-Wall AIRLOK FLEX VP® is available through a network of Distributors, Manufacturer's Representatives and Qualified Installers. Contact Protective Coatings Technology Inc. for additional information and the nearest representative or distributor.

**COST**

Contact Protective Coatings Technology Inc. or your nearest Representative or Distributor for pricing information.

**7. Warranty**

All PCT, Inc. products are warranted to be free of manufacturer's defects for a period of five (5) years. Contact Protective Coatings Technology, Inc. for further information.

**8. Technical Services**

Technical information and advice are available from Protective Coatings Technology, Inc. as well as through your nearest manufacturer's representative or distributor.

**6. Availability & Cost**

POLY-WALL AIRLOK FLEX VP®		
PROPERTY	TEST PROCEDURE	TYPICAL VALUE
AIR PERMEANCE – BLOCK	ASTM E 2178-01	0.0037 CFM/ft² @ 70 sq. ft/gal.
AIR PERMEANCE –BLOCK	ASTM E 2178-01	0.0030 CFM/ft² @ 50 sq. ft/gal.
ADHESION	ASTM CD 4541	100 PSI average
UV EXPOSURE LIMIT	ASTM D412	> 1 year
WATER VAPOR TRANSMISSION	ASTM E 96, Method B	7.6 perms
RESISTANCE TO HYDROSTATIC HEAD	ASTM D5385	50 ft. of water
VOC		0.0 G/L VOC

More information is available upon request.

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