

## AIRLOK FLEX<sup>®</sup> VP

Fluid-Applied Air/Moisture Barrier System

### PRODUCT NAME

Airlok Flex<sup>®</sup> VP

### MANUFACTURER

Polyguard Products, Inc.  
Ennis, TX 75119  
(214) 515-5000  
[www.polyguard.com](http://www.polyguard.com)

### PRODUCT DESCRIPTION

#### BASIC USES

Airlok Flex<sup>®</sup> VP is designed as an above-grade air, weather and vapor permeable coating to prevent the infiltration and exfiltration of moisture and air.

*Strengths* – A water-based high-performance elastomeric acrylic polymer coating, permeable to 10 perms, 32 wet mils to 16 dry mils, with a VOC content of 50 g/L and UV resistance of up to 1 year. NFPA 285 compliant.

*Limitations* – Application temperatures starting at 40°F (5°C) and rising.

*Uses* – Typical applications; exterior-grade gypsum sheathing, concrete, concrete masonry walls (CMU), plywood, and oriented strand board (OSB) for long construction schedules.

### COMPOSITION & MATERIALS

Airlok Flex<sup>®</sup> VP contains 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

**Note:** When using Detail Sealant PW<sup>™</sup> as filler to be covered by Airlok Flex<sup>®</sup> VP, allow a minimum of 1 hour for sealant to skin over before covering, adding additional time for lower ambient and surface temperatures. Cure time is less than an hour at 75°F (24°C) and 50% RH.

Smooth and fill flush rough concrete, surface defects, surface protrusions, and voids greater than 1/2-inch in depth. Prepare substrates to be clean and dry; free of mortar smears and form release; and free of frost and ice.

**Poured Concrete Walls:** Once bleed water is absent, allow for minimum 3-day cure time before coating, giving longer cure time with lower ambient temperatures or heavy moisture saturation. Snap form ties flush to both sides of the wall; fill tie depressions and voids flush with the face of the wall using Detail Sealant PW<sup>™</sup> or non-shrinking Portland cement grout installed per manufacturer's instructions. Allow fill materials to dry before covering. Fill Honeycombs with non-shrinking Portland cement grout, installed per manufacturer's instructions, and allow to thoroughly dry.

## Product Data Sheet

**Concrete Masonry Walls:** Test for adhesion over CMU units containing integral moisture repellent. Mortar joints need to be struck full and flush to the face of the CMU. Allow assembly to cure for a minimum 3 days before coating, giving longer cure time with lower ambient temperatures or heavy moisture saturation. Core fills, bond beams, and/or rain add significant moisture to the assembly, thereby requiring longer dry time. Masonry walls are to be unparged. Fill wall voids and gaps between dissimilar materials with Detail Sealant PW<sup>™</sup>, or non-shrinking Portland cement grout installed per manufacturer's instructions. Allow Detail Sealant PW a minimum of 1 hour to skin over before covering, adding additional time for lower ambient and surface temperatures.

**Sheathed Walls:** Sheathing must be installed and fastened per manufacturer's instructions.

Fill joints less than 1/4-inch wide with a bead of Detail Sealant PW<sup>™</sup> or Airlok<sup>®</sup> STPE WRB Detail-N-Joint tooled to 20 mils thick and onto a minimum of 1/2-inch beyond each side of the joint.

Application order can be relative to "DETAILING" section by Method A or B.

### PRIMING

No substrate priming is necessary.

### MEMBRANE APPLICATION

Apply Airlok Flex<sup>®</sup> VP and related accessory products over sheathing and penetration substrates that are clean, dry, and free of loose material and frost.

Apply Airlok Flex VP and related accessory products over poured concrete and CMU walls that have cured three days minimum, are clean and dry to the touch, and free of loose material and frost. Apply in ambient temperatures and on a surface temperature of 40°F (5°C) and rising up to a maximum temperature of 120°F (49°C).

Apply Airlok Flex VP in one coat or more; by means of a sprayer, roller, or brush; to achieve a continuous film at the desired coverage rate of 50 square feet per gallon (32 mils wet / 16 mils dry). Coverage will be inversely related to texture and porosity of the substrate. Best spray results occur using a 0.027-inch reversible tip and having a minimum pressure of 2500 PSI.

Airlok Flex VP dries to an average thickness of 16 mils. Allow 24 hours for Airlok Flex<sup>®</sup> VP and accessories to dry before continuing work on the surface.

## DETAILING

### Transition, Joints, and Rough Openings:

#### Method A - Field Application followed by Detailing:

- 1) Apply a field coating of Airlok Flex® VP and allow 24 hours to dry.
- 2) Choose one of the following:
  - a. Install fluid flashings; using Airlok STPE flashing products and/or Detail Sealant PW™ per Polyguard's details and specifications.
  - b. Install sheet flashings; using Airlok® Sheet 200 Series or Airlok® 400 Series per Polyguard's details and specifications.

**Note:** Method A does not require primer with sheet flashings.

#### Method B - Detailing followed by Field Application:

- 1) Choose one of the following:
  - a. Install fluid flashings; using Airlok STPE flashing products and/or Detail Sealant PW™ per Polyguard's details and specifications.
  - b. Install sheet flashings; using Airlok® Sheet 200 Series or Airlok® 400 Series per Polyguard's details and specifications.
- 2) Apply a field coating of Airlok Flex VP.

**Note:** Method B requires primer with sheet flashings.

**Masonry Anchors:** Install masonry tie fasteners through sheathing joints that have been filled with (cured) Detail Sealant PW. For ties that will not align over joints filled with (cured) Detail Sealant PW, proceed with one of the following tie fastener placement methods:

Method A: Apply a 1/4-inch daub of Detail Sealant PW on the wall interfacing side of the fastener hole in the tie, and then fasten the tie to the structure, or;

Method B: Install a minimum 2-inch wide strip of Airlok® 200 Series or Airlok® 400 Series onto the face of dry Airlok Flex® VP. Position the flashing strip to be centerline penetrated by the fastener(s).

## INSPECTION

Coverage is considered complete when the dry coating has been inspected and found to be continuous.

## MEMBRANE REPAIR

Repair omissions, deficiencies, and damage by cleaning the subject area with either a clean rag and water or a 30% solution of isopropyl alcohol and water. Allow the cleaned surface to dry before applying additional material.

## ASSEMBLIES:

For NFPA 285 Assemblies, please refer to engineer evaluated assemblies schedule.

## LIMITATIONS

Airlok Flex® VP has a UV resistance of up to 1 year. Application temperatures starting at 40°F (5°C) and rising.

## CLEAN-UP

Clean-up of uncured material is accomplished with water. Xylene is used for clean-up of cured material.

## STORAGE

Store Airlok Flex® VP as follows;

- 1) Keep from freezing in an environment having a temperature range between 40°F (5°C) and 100°F (38°C). For best application results, store in ambient temperatures above 50°F (11°C).
- 2) On a stable surface with lid securely closed.
- 3) In compliance with local governing regulations.

## SAFETY

SDS documents for all Polyguard products can be obtained at our website [www.polyguard.com](http://www.polyguard.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 product proved to be defective 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. P.O. Box 755, Ennis, TX 75120-0755  
Sales: (615) 217-6061 • Tech Support: (214) 515-5000  
Email: [archtech@polyguard.com](mailto:archtech@polyguard.com)  
Website: [www.polyguard.com](http://www.polyguard.com)

PROPERTY	TEST METHOD	TYPICAL VALUE
COLOR		Gray Opaque
SERVICE TEMPERATURE RANGE		-25°F to 185°F
AIR PERMEANCE – GYPSUM SHEATHING @ 70 ft <sup>2</sup> /gal	ASTM E 2178-01	0.0037 cfm/ft <sup>2</sup> @ 75 Pa
AIR PERMEANCE – BLOCK @ 50 ft <sup>2</sup> /gal	ASTM E 2178-01	0.003 cfm/ft <sup>2</sup> @ 75 Pa
AIR LEAKAGE & DURABILITY	ASTM E 2357	0.002 cfm/ft <sup>2</sup> @ 75 Pa
PULL ADHESION	ASTM D 4541	> 100 PSI average
PERMEANCE TO WATER VAPOR TRANSMISSION	ASTM E 96 Method A	2.15 perms
PERMEANCE TO WATER VAPOR TRANSMISSION	ASTM E 96 Method B	10 perms
ELONGATION	ASTM D 412	500%
NAIL SEALABILITY	ASTM D 1970	PASS
EVALUATION OF FIRE PROPOGATION CHARACTERISTICS	NFPA 285	Compliant*
ULTRAVIOLET (UV) RADIATION EXPOSURE LIMIT	BY MANUFACTURER	Up to 1 year
VOLATILE ORGANIC COMPOUNDS (VOC)		< 50 G/L

\*Related to specific assemblies

PACKAGING	PART NUMBER	UNIT SIZE
<b>AIRLOK FLEX® VP</b>	ALFLEXVP 05	5-gallon pail
	ALFLEXVP 50	50-gallon drum
<b>AIRLOK FLEX® VP Accessories:</b>		
DETAIL SEALANT PW™	DETAIL SEALANT PW – SAU 20 OZ	20 sausages/ctn
DETAIL SEALANT PW™	DETAIL SEALANT PW – 3 GAL	3-gallon pail
AIRLOK® STPE WRB FLASH-N-ROLL	AIRLOK STPE 2400-2 GAL	2-gallon pail
AIRLOK® STPE WRB FLASH-N-ROLL	AIRLOK STPE 2400-5 GAL	5-gallon drum
AIRLOK® STPE WRB GUN-N-SPREAD	AIRLOK STPE 2100-SAU 20 OZ	20 sausages/ctn
AIRLOK® 200 BU/NP	- 28 mil (6", 9", 12", 18", 24") Commonly used as TWF	VARIES/SIZE
AIRLOK® UV 200 BU/NP	- 28 mil (6", 9", 12") Used as <i>Window Flashing Only; no TWF</i>	VARIES/SIZE
AIRLOK® 400 NP	- 40 mil (6", 9", 12", 18", 24") Commonly used as TWF	VARIES/SIZE
AIRLOK® UV 400 NP	- 40 mil (6", 9", 12") Used as <i>Window Flashing Only; no TWF</i>	VARIES/SIZE
AIRLOK® UV ULTRA 400 NP	- 40 mil (6", 9", 12") Used as <i>Window Flashing Only; no TWF</i>	VARIES/SIZE

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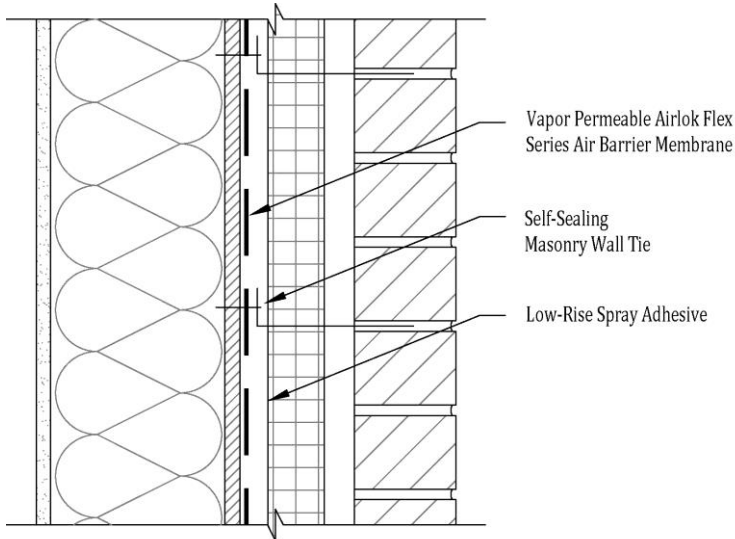
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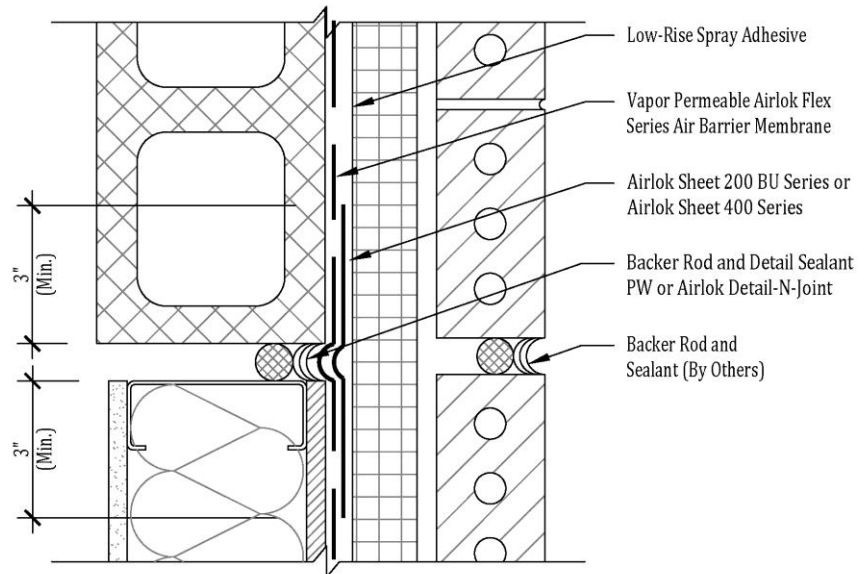
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## Common Polyguard® Non-Permeable Airlok Flex® Series Applications

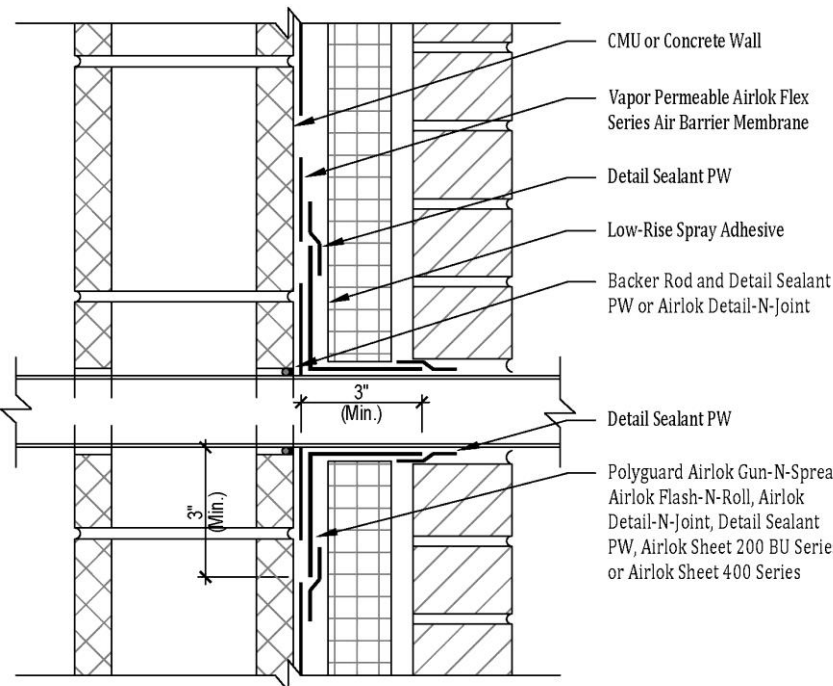
These diagrams are not intended to be application instructions, simply illustrations



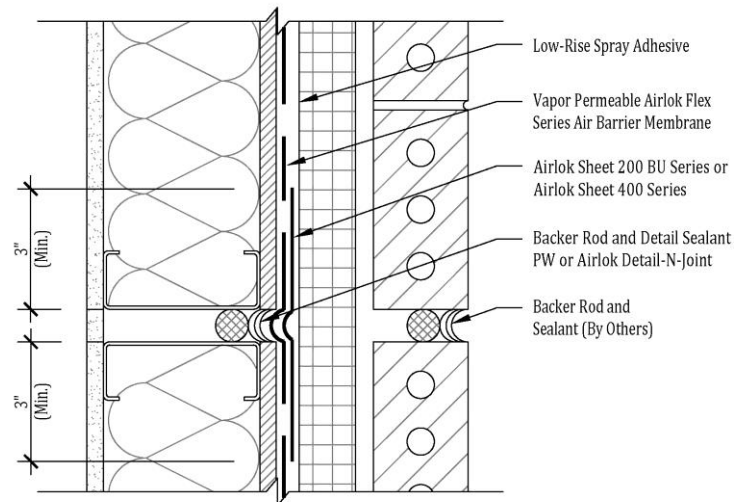
Vapor Permeable Airlok Flex Series - Typical Wall



Vapor Permeable Airlok Flex Series - Substrate Transition



Vapor Permeable Airlok Flex Series - Penetration



Vapor Permeable Airlok Flex Series - Expansion Joint

**Please Note:** Not intended to be full details. For full application detail on these configurations, see Polyguard Vapor-Permeable Airlok Flex Series details or contact Polyguard Products.

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