

AIRLOK FLEX® VP

Fluid-Applied Air/Moisture Barrier System

PRODUCT NAME

Airlok Flex® VP

MANUFACTURER

Polyguard Products, Inc.
Ennis, TX 75119
(214) 515-5000
www.polyguard.com

DISTRIBUTOR

Bowman Construction Supply
Denver, CO 80239
(303)696-8960
www.bowmanconstructionsupply.com

PRODUCT DESCRIPTION

BASIC USES

Airlok Flex® VP is designed as an above-grade air, weather and vapor permeable coating for application over poured concrete, precast concrete, CMU, the following types of sheathing: paper-face, glass-face, foil-face; rigid insulation; plywood; and OSB.

PRODUCT FEATURES

- Vapor permeable, cold liquid-applied, single-component, water-based air and weather barrier coating.
- UV resistance of up to one year.
- Forms a durable protection with over 100 PSI adhesive pull-off strength.
- Blocks inward-moving water from penetrating through the coating to the substrate, and reduces energy loss.
- For designers wanting maximum protection, Proban® added at the factory delivers additional contact mold-inhibiting properties to the air barrier system.

COMPOSITION & MATERIALS

Airlok Flex® 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™ as filler to be covered by Airlok Flex® 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.

Poured Concrete Walls: Before coating, fill surface voids and honeycombed concrete with Detail Sealant PW or a non-shrinking Portland cement 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.

Remove form ties from both sides of the wall. On the side of the wall that will be coated, fill tie depression irregularities flush with the face of the wall using non-shrinking Portland cement installed per manufacturer's instructions or Detail Sealant PW. Allow Detail Sealant PW a minimum of 1 hour to skin over before covering, adding additional time for lower ambient and surface temperatures. Apply Airlok Flex VP to clean, dry, sound concrete.

Concrete Masonry Walls: Test for adhesion over CMU units containing integral moisture repellent. Tool and then brush mortar joints to establish a surface profile for adhesion. Fill mortar voids or damaged faces with mortar, non-shrinking Portland cement installed per manufacturer's instructions, or Detail Sealant PW™. Allow Detail Sealant PW a minimum

Product Data Sheet

of 1 hour to skin over before covering, adding additional time for lower ambient and surface temperatures. Also allow the mortar and/or cement to dry to the touch before coating. Apply Airlok Flex VP to clean, dry and sound concrete.

Sheathed Walls: Following an Airlok Flex® VP application, cover exposed fastener heads with an application of Detail Sealant PW™.

Fill joints less than 1/4-inch wide with a bead of Detail Sealant PW tooled to 20 mils thick and onto a minimum of 1/2-inch beyond each side of the joint.

Fill joints between 1/4-inch and 3/4-inch wide with one of the following methods:

Method A: Fill the gap with a backer rod, when feasible, and an application of Detail Sealant PW. Tool the application to a uniform finish flush with the face of the substrate(s). Allow Detail Sealant PW a minimum of 1 hour to skin over before covering, adding additional time for lower ambient and surface temperatures.

Method B: Fill the gap with expandable two-part Urethane foam and then sand the dried foam flush with the face of the substrate(s).

Fill joints greater than 3/4-inch with sheathing strips and then proceed as above.

Cover these methods with the Airlok Flex VP field coating, allow 24 hours to dry, then apply a 6-inch wide strip of UV365™ Flashing, UV365™ Ultra Flashing, or 400 Flashing over the joints, following the product instructions for surface preparation and installation. For ambient and substrate surface temperatures between 25°F (-4°C) and 40°F (5°C), refer to Polyguard's Technical Bulletin on Cold Weather Applications for the flashing installation.

For NFPA 285 Assemblies, reinforce either joint flashing method with a coating of Detail Sealant PW applied onto a 3-inch wide, 1/4-inch drywall mesh centered over the gap.

Poured Concrete, CMU and Sheathed Walls:

Fill annular spaces around wall penetrations in these walls, on the interior and exterior sides of the wall; and, where possible, with a sized backer rod and Detail Sealant PW™, extending the material onto a minimum of a 1/2-inch of the surrounding wall space and penetration sidewall(s) with a tooled and uniform finish.

Submit expansion joint design to Polyguard Products, Inc. for approval prior to commencing work.

PRIMING

No substrate priming is necessary.

MEMBRANE APPLICATION

Apply Airlok Flex® 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 at a rate of 50 ft² per gallon (32 mils wet). Coverage will be inversely related to texture and porosity of the substrate. DensGlass® Gold exterior gypsum sheathing was used to determine the coverage standard. Applications can be made by brush, roller, or airless sprayer, having a minimum pressure of 2500 PSI. Best spray results occur using a 0.027–inch reversible tip.

After Airlok Flex® VP application, allow 24 hours to dry, maintaining a minimum temperature of 40°F (5°C).

Apply Detail Sealant PW™ either before or after the application of Airlok Flex VP and by following the specific instructions in the Detail Sealant PW data sheet.

Rough Openings:

Note: Flat sills are acceptable planes for air barrier design. Incorporating the best water management principles with an air barrier design will have the sills sloping to drain.

Cover rough opening surfaces with Airlok Flex® VP.

Cover rough opening sills and 3-inches of the bottom of each jamb using one of the following accessory materials: a 20-mil thickness of Detail Sealant PW™, UV365™ Flashing, UV365™ Ultra Flashing, 400 Flashing. For UV365™ Flashing, UV365™ Ultra Flashing, or 400 Flashing, extend the coverage 3-inches onto the adjoining sheathing.

INSPECTION

Coverage is considered complete when the dry coating has been inspected and found to be continuous. The coating is considered dry when the face of the coating will not deform under heavily applied thumb pressure.

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.

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 UV365™ Flashing, UV365™ Ultra Flashing, or 400 Flashing onto the face of dry Airlok Flex® VP. Position the flashing strip to be centerline penetrated by the fastener(s).

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. 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 • Fax: (615) 691-5500
 Email: archtech@polyguard.com
 Website: www.polyguard.com

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	Up to 1 year
VOLATILE ORGANIC COMPOUNDS (VOC)		< 50 G/L

PACKAGING	PART NUMBER	UNIT SIZE
AIRLOK FLEX® VP	ALFLEXVP 05	5 gallon pail
<i>Proban® mold inhibitor can be added at the factory to Airlok Flex® VP</i>	ALFLEXVP 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
UV365™ FLASHING – 40 MIL (SIZES AVAILABLE: 6”, 9”, 12”, 18”)	varies/size	75’ roll
UV365™ ULTRA FLASHING - 40 MIL (SIZES AVAILABLE: 6”, 9”, 12”, 18”)	varies/size	75’ roll
400 FLASHING - 40 MIL (SIZES AVAILABLE: 6”, 9”, 12”, 18”)	varies/size	75’ roll
QUICK GRIP SPRAY ADHESIVE	QGADH30	30# canister

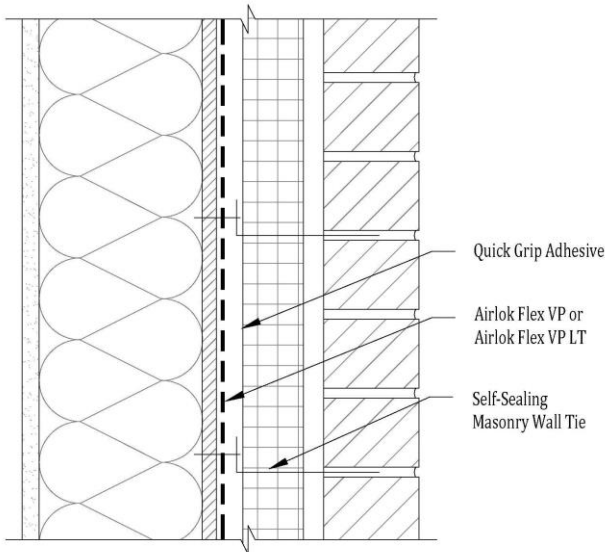
P.O. Box 755
 Ennis, TX 75120
 PH: (214) 515-5000
 FX: (972) 875-9425

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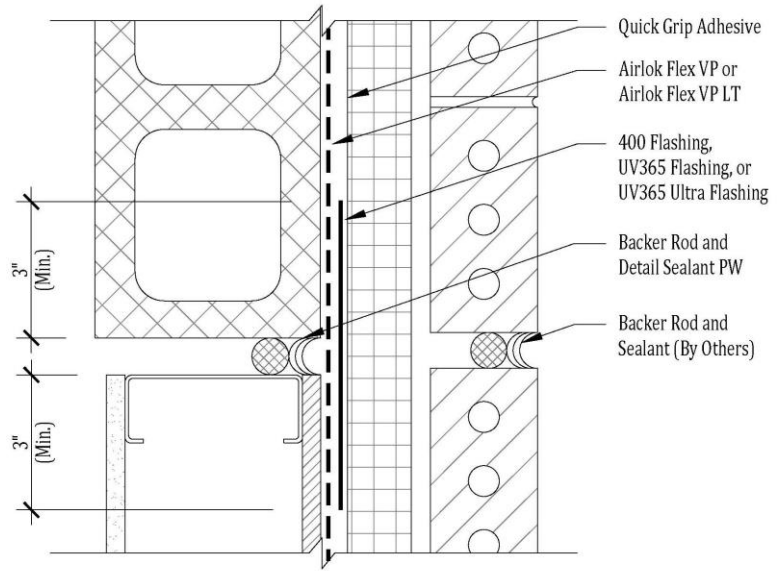


Common Polyguard® Airlok Flex® VP and Airlok Flex® VP LT Membrane Applications

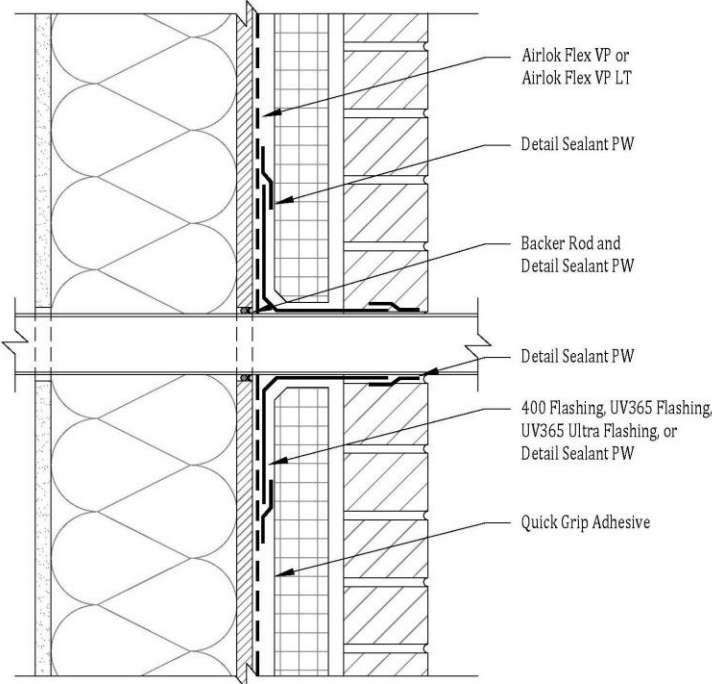
These diagrams are not intended to be application instructions, simply illustrations



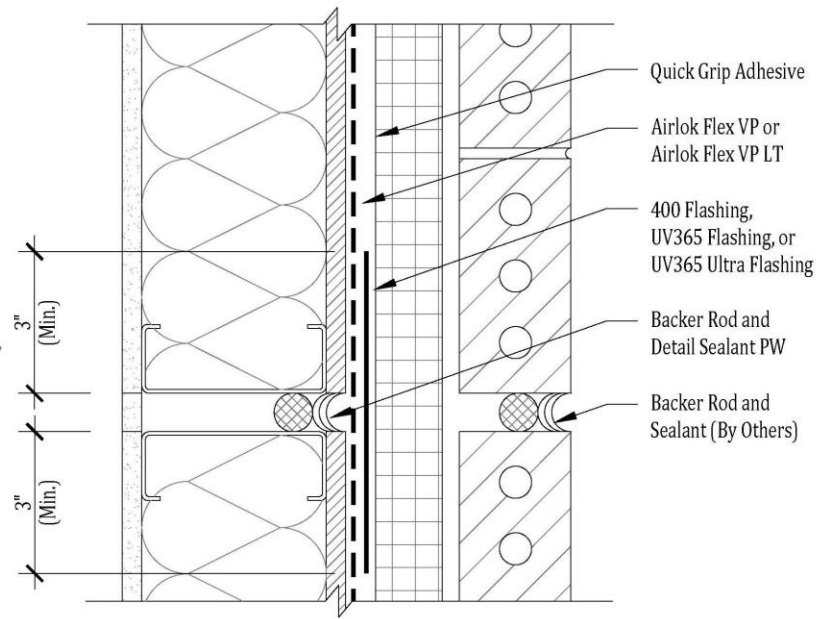
Airlok Flex VP or Airlok Flex VP LT Typical Wall



Airlok Flex VP or Airlok Flex VP LT Typical Wall



Airlok Flex VP or Airlok Flex VP LT Penetration



Airlok Flex VP or Airlok Flex VP LT Expansion Joint

Please Note: Not intended to be full details. For full application detail on these configurations, see Polyguard Airlok Flex VP or Airlok Flex VP LT details or contact Polyguard Products.