

AIRLOK FLEX®

Fluid-Applied Membrane Air/Moisture Barrier

PRODUCT NAME

Airlok Flex®

VOC: 525 g/L

MANUFACTURER

Polyguard Products, Inc.

Ennis, TX 75119

(214) 515-5000

www.polyguard.com

PRODUCT DESCRIPTION

BASIC USES

Airlok Flex® is designed as an above-grade air, weather and vapor impermeable coating to prevent the infiltration and exfiltration of moisture and air.

Strengths – A patented, elastomeric thermoplastic, synthetic rubber coating, non-permeable, at 40 wet mils curing to 20 dry mils. Can be applied at temperature as low as -20°F (-29°C). ABAA evaluated and NFPA 285 compliant.

Limitations – Solvent-based, 6-month UV exposure.

Uses – Typical applications; exterior-grade gypsum sheathing, concrete, concrete masonry walls (CMU), plywood, and oriented strand board (OSB) in cold weather climates.

COMPOSITION & MATERIALS

Airlok Flex® is a patented, solvent-based, non-permeable, elastomeric, thermoplastic, synthetic rubber coating with VOC content choices of 100, 200, and 525 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, 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™ 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

Per regulations of all states, excluding California

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™, 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™ or Airlok® 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® and related accessory products over sheathing and penetration substrates that are clean, dry, and free of loose material and frost.

Apply Airlok Flex and related accessory products over poured concrete and CMU walls that have cured three days minimum, are clean and less than 15% moisture content, and free of loose material and frost. Apply in ambient temperatures and on a surface temperature of -20°F (-29°C) and rising, up to a maximum temperature of 120°F (49°C).

Apply Airlok Flex in one coat or more; by means of a sprayer, roller, or brush; to achieve a continuous film at the desired coverage rate of 40 square feet per gallon (40 wet mils). Coverage will be inversely related to texture and porosity of the substrate. Best spray results occur using a 0.037-inch or 0.039-inch reversible tip, and having a minimum pressure of 3700-to-4000 PSI.

Airlok Flex dries to an average thickness of 20 mils. Allow 24 hours for Airlok Flex and accessories to dry before continuing work on the surface.

DETAILING

Transition, Joints, and Rough Openings:

Method A - Field Application followed by Detailing for when ambient surface and air temperature is -20°F (-29°C) and rising:

- 1) Apply a field coating of Airlok Flex® with ambient and surface temperatures of -20°F (-29°C) and rising; allow 24 hours to dry.

- 2) Choose one of the following when ambient surface and air temperature is 25°F (-4°C) and rising:
 - 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 per Polyguard's details and specifications.

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

Method B – Detailing followed by Field Application for when ambient surface and air temperature is falling down to 40°F (5°C) and rising:

- 1) Choose one of the following when ambient surface and air temperature is falling down to 40°F (5°C) and rising:
 - 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® with ambient surface and air temperatures down to 40°F (5°C) and rising.

Note: Method B requires primer with sheet flashings.

Masonry Anchors: Install masonry tie fasteners through cured Airlok Flex® and into sheathing studs with Method A or B. If fasteners are set into studs and removed, vacant fastener holes will be filled with Detail Sealant PW™. For enhanced water resistance around fasteners, one of the following tie fastener placement methods:

Method A: For ambient surface and air temperature is 25°F (-4°C) and rising: 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 and detail fastener head with a tooled bead of Detail Sealant, or;

Method B: For ambient surface and air temperature is 40°F (5°C) and rising: Install a minimum 2-inch wide strip of Airlok® Sheet 400 Series onto the face of dry Airlok Flex®. Position the flashing strip to be centerline penetrated by the fastener(s) and detail fastener head with a tooled bead of Detail Sealant.

INSPECTION

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

MEMBRANE REPAIR

Clean and dry the damaged areas of Airlok Flex® before recoating. Airlok Flex can be applied to damaged Airlok® UV 200 BU/NP, Airlok® UV 400 NP, or Airlok® UV Ultra NP. Airlok Flex will bond to itself without any additional surface preparation. Do not apply Airlok Flex over damaged areas of exposed 650 LT Liquid Adhesive, Detail Sealant, PW™, Airlok® Sheet 400 NP or Airlok® Sheet 400 HT/NP.

ASSEMBLIES:

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

LIMITATIONS

Airlok Flex® is designed for UV exposures for up to 6 months. Do not apply Airlok Flex directly over 650 LT Liquid Adhesive. Do not apply Airlok Flex onto Detail Sealant PW where Detail

Sealant PW has been applied over a base layer of either 650 LT Liquid Adhesive or Airlok Flex.

This product is not intended to be shipped or used in the States of California, Connecticut, Delaware, Maryland, or Rhode Island. The use of these products must be according to Federal, State and local governing regulations. To be used in exterior applications only. Cannot be applied to any polystyrene or foam-based products. Once the solvent has flashed out of the coating then polystyrene or foam-based products can be installed onto the cured membrane. Not to be used as a liner in potable water conditions.

WARNING:

Flammable Liquid and vapor. DO NOT SMOKE while mixing or applying product. Ensure there are no open flames and/or spark generating sources on project while mixing or applying the product.

PRECAUTIONS:

Conduit: All conduit must be rigid PVC / hardline-type conduit in order to ensure a watertight application. Any flexible or romax type conduits are not acceptable.

Install in a well-ventilated open area. Take safety precautions and wear appropriate safety gear for the application of solvent-based coatings (i.e. gloves, eye protection, respirator, ventilation, etc.) according to Federal, State and local governing regulations. Harmful if inhaled. Can cause eye and skin irritation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor, or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment and non-sparking tools. All trucks, barrels and spray equipment shall be properly grounded and bonded. A working fire extinguisher, type ABC, shall be available onsite in both the mixing and work areas. Prior to use and mixing, review the Safety Data Sheet for proper protective equipment and additional health, environmental and safety precautions.

STORAGE:

This product is a solvent based product and special care must be taken during storage, handling and use. Protect containers from water, sparks, flames, excessive heat, and poor ventilation. Store/keep product out of direct sunlight and in ambient temperatures between 10° F (23° C) and 100° F (38° C). For best application results, store in ambient temperatures above 50° F (11° C). Store in original container, lid securely closed, and with all markings & labeling in tact. Follow all Federal, State and local governing regulations.

CLEAN-UP

Xylene is used for clean-up of uncured and cured material.

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
 Email: archtech@polyguard.com
 Website: www.polyguard.com

PROPERTY	TEST METHOD	TYPICAL VALUE
COLOR		Gray
SERVICE TEMPERATURE RANGE		-25°F to 185°F
AIR LEAKAGE & DURABILITY	ASTM E 2357	0.0008 cfm/ft ²
AIR PERMEANCE – GYPSUM SHEATHING	ASTM E 2178	0.0017 cfm/ft ²
AIR PERMEANCE –BLOCK	ASTM E 2178	0.00012 cfm/ft ²
PERMEANCE TO WATER VAPOR TRANSMISSION	ASTM E 96 Method A	0.058 Perms
PERMEANCE TO WATER VAPOR TRANSMISSION	ASTM E 96 Method B	0.216 Perms
ADHESION	ASTM D 4541	> 135 PSI Average
RESISTANCE TO HYDROSTATIC HEAD	ASTM D 5385	231 ft.
TENSILE STRENGTH	ASTM D 412 Modified Die C	387 PSI
ELONGATION	ASTM D 412 Modified Die C	515%
NAIL SEALABILITY	ASTM D 1970	Pass
CRACK BRIDGING	ICC ES-AC 212	Pass
SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS	ASTM E 84-94; NFPA 255; ANSI 2.5; UL 723 Omega 1995	10 -Flame Spread Index 35 – Smoke Development
EVALUATION OF FIRE PROPAGATION CHARACTERISTICS	NFPA 285	Compliant*
CATEGORY 1 40 C.F.R.§59.401 "WATERPROOF SEALER TREATMENTS"		525 G/L VOC Also available in other VOC options

*Related to specific assemblies

PACKAGING	PART NUMBER	UNIT SIZE
AIRLOK FLEX®	ALFLEX GRAY 05	5-gallon pail
	ALFLEX GRAY 55	55-gallon drum
Airlok Flex® Accessories:		
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

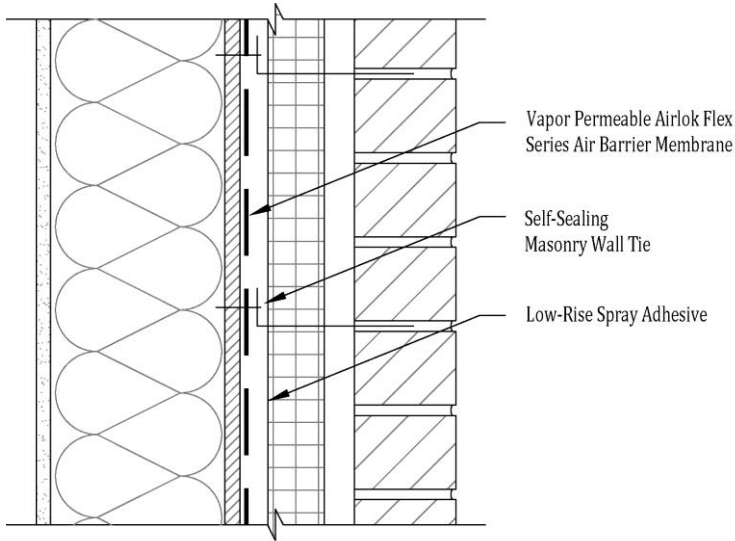
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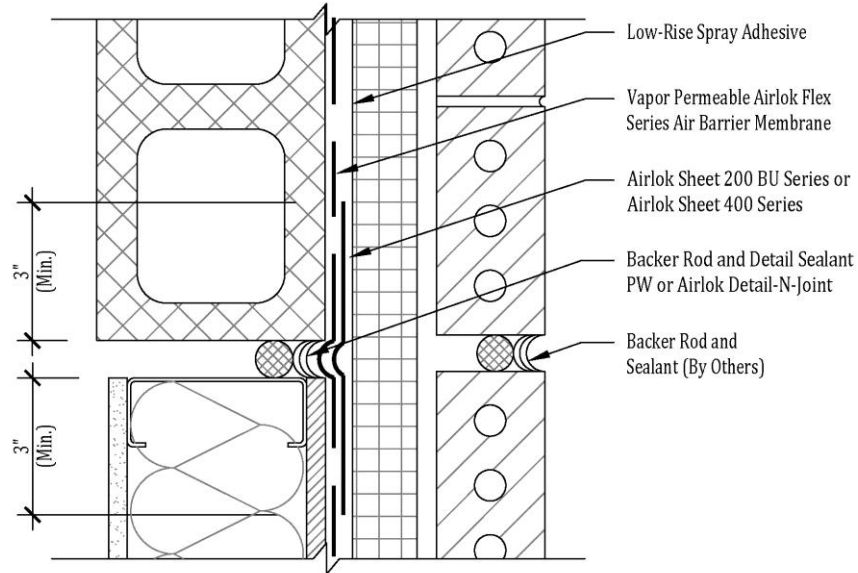
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Common Polyguard® Non-Permeable Airlok Flex® Series Applications

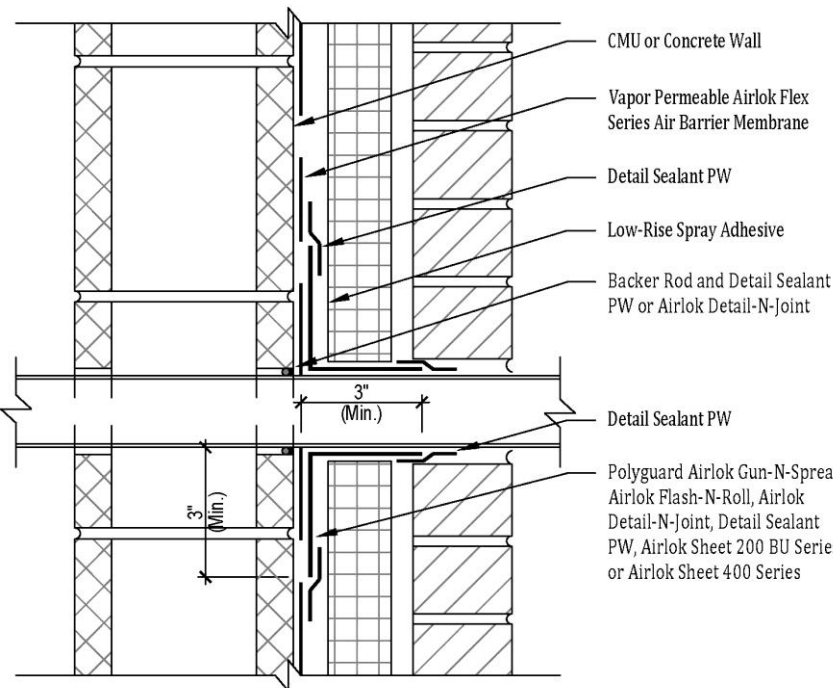
These diagrams are not intended to be application instructions, simply illustrations



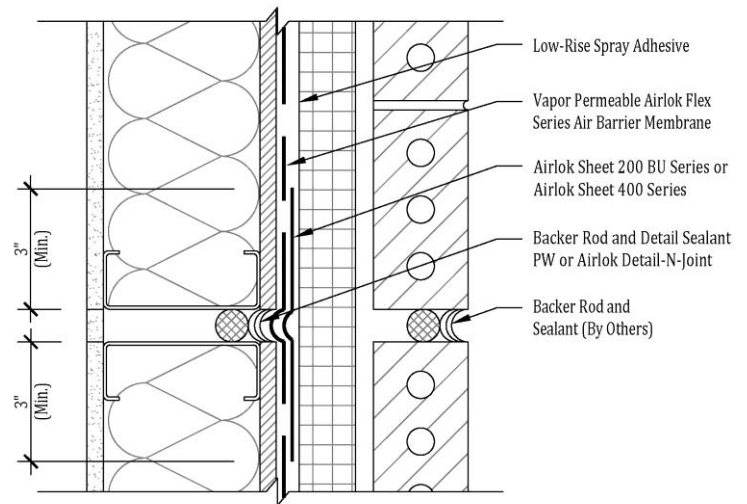
Vapor Permeable Airlok Flex Series - Typical Wall



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.