



Air / Vapor Barrier Non-elastomeric

Vapor Impermeable – fluid-applied

Section 07262 Fluid-Applied Air and Vapor Barrier

1. Product Name

POLY WALL AIRLOK®
POLY WALL AIRLOK® with
ProBan®

2. Manufacturer

Polyguard Products, Inc.
Ennis, TX 75119
(800) 846-3020
www.poly-wall.com

3. Product Description

BASIC USE

POLY WALL AIRLOK® is an air/vapor barrier designed for use on concrete, precast concrete and concrete masonry surfaces. Typical applications includes coating single wythe walls, masonry walls, masonry cavity walls, poured walls, precast walls and exterior grade gypsum sheeting. It serves as an impermeable barrier coat over which paint can be applied to provide a finish color. Paint applied shall contain a bonding additive, Wil-Bond Liquid Surface Preparation for example, to achieve successful adhesion.

PRODUCT PROPERTIES

POLY WALL AIRLOK® has an attractive gray color. It can be applied in a broad temperature range of -20°F to 100°F. It has superior adhesion so it stays in place. It dries to a hard, non-tacky finish suitable for interior exposed walls; no primer required.

COMPOSITION & MATERIALS

POLY WALL AIRLOK® is a patented, cold-applied, single-component, thermoplastic coating designed to prevent air and moisture penetration, while protecting interior single wythe walls, concrete, concrete masonry and exterior grade gypsum sheeting surfaces. POLY WALL AIRLOK® is non-breathable and non-elastomeric.

POLY WALL AIRLOK® is solvent based with a VOC content of <600g/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

General: All rough concrete, surface defects, voids, and surface protrusions must be made smooth and filled flush. All surfaces to be coated must have minimum pull-off strength of 175 PSI when cured and a minimum profile of 3 to 5%. Prior to coating, surfaces must be clean and dry; free of mortar smears and form release; and free of frost, ice or excess moisture.

Poured Concrete Walls: Once bleed water is absent, allow for typical cure time of 12-24 hours before coating, giving longer cure time with lower ambient temperatures. Ties, inside and out, must be knocked off and filled flush with either POLY WALL Hole Filler or non-shrinking Portland cement grout. Honeycombs must be filled with non-shrinking Portland cement grout and allowed to thoroughly dry.

Concrete Masonry Walls: Are to be unpared. Concrete and Concrete Masonry to be constructed without integral moisture repellent. Construct CMU with type-M or type-S mortar in accordance with ASTM C270. Joints are to be tooled and brushed to create surface profile. Any voids in the mortar are to be filled (grouted) with non-shrinking Portland cement grout or POLY WALL Hole Filler. Allow assembly to cure for a minimum 12 – 48 hours before coating, giving longer cure time with lower ambient temperatures. Core

fills, bond beams, and rain add significant moisture to the assembly requiring longer lengths of time for drying.

Where control joints are employed, they must be filled and prepared according to POLY WALL's requirements. Submit control joint detail design for approval prior to commencing work.

PRIMING

No primer is needed. For best results AIRLOK® should be applied directly to sound concrete or gypsum surfaces.

MEMBRANE APPLICATION

POLY WALL AIRLOK® should be applied in one coat. POLY WALL AIRLOK® should be applied at a rate of 40-50 square feet per gallon (40 wet mils) inversely related to texture and porosity of wall surface. Very porous substrates would result in even lower square feet per gallon. The total Dry mil thickness should be 12-14 mils. Coating should be sprayed and back rolled to achieve a continuous coating at the desired coverage rate. Use of an airless sprayer with a 4000 PSI stall pressure and a 0.035-inch 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® is UV resistant.

METHODS

Exterior/Interior walls:
Apply even coat with coverage rate of 40-50 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:

Joints less than 3/8-inch should be filled with a color-matched, vapor impermeable caulk. Joints greater than 3/8-inch should be covered with POLY WALL Self-Adhering Flashing after drying a coat of POLY WALL AIRLOK® to the field.

Large Openings:

Openings greater than 1.0-inch should be filled with mortar, or compatible backing material; made even with substrate; then top coated with 40-50 wet mils of POLY WALL AIRLOK®. Instead, cover the opening with POLY WALL Self-Adhering Flashing.

Flanges for Windows or Doors:

Connect POLY WALL AIRLOK® air barrier to flanges with a color-matched vapor impermeable caulk. Apply Quick Grip Envelope Building Adhesive to the Flanges and then cover the opening with POLY WALL Self-Adhering Flashing. For an alternate seal in small separation areas where color match is not an issue, caulk with POLY WALL Hole Filler or POLY WALL Fiber Flash.

SAFETY

POLY WALL AIRLOK® liquid and vapors are flammable. When applying POLY WALL AIRLOK®, the work areas shall be well ventilated and restricted to only applicators. The following safety precautions must be observed:

1. Smoking and introduction of flames, sparks, electric arcs, etc., shall not be allowed.
2. Applicators shall wear a NIOSH approved disposable organic vapor respirator.
3. A working fire extinguisher, type ABC, shall be available in all vehicles near truck doors and in the work area.
4. All trucks, barrels and spray equipment shall be grounded.

MEMBRANE REPAIR

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

STORAGE

POLY WALL AIRLOK® is to be stored according to the requirements of local authorities. Protect containers of product from water, sparks, flames, excessive heat and poor ventilation.

Containers of POLY WALL AIRLOK® should be stored out of direct sunlight and in temperatures between -20°F and 100°F. For best results POLY WALL AIRLOK® should be stored in

temperatures above 50°F prior to application. This will help to reduce the material viscosity, allowing the material to be sprayed more consistently.

6. Availability & Cost

AVAILABILITY

POLY WALL AIRLOK® is available through a network of Manufacturer's Representatives, Distributors, and Qualified Installers. View the POLY WALL website or contact Polyguard Products, Inc. for information on the nearest manufacturer's representative or nearest distributor to your area.

COST

Contact Polyguard Products, Inc. or your nearest Representative or Distributor for pricing information.

7. Warranty

All POLY WALL products are warranted to be free of manufacturer's defects for a period of five (5) years. Contact Polyguard Products, Inc. for further information.

8. Technical Services

Technical information and advice are available from Polyguard Products, Inc. as well as through your nearest manufacturer's representative or Distributor.

POLY WALL AIRLOK®		
PROPERTY	TEST PROCEDURE	TYPICAL VALUE
AIR PERMEANCE	ASTM E 2178-01	0.0026 CFM/ft² @ 75 Pa
ADHESION	ASTM C 836-89a	Exceeds
VAPOR PERMEANCE	ASTM E 96, Method B	0.450 grains/sq.ft./hr./in. Hg. at 80 deg F.
VAPOR PERMEABILITY	ASTM E 96, Method A	0.004 perm*inch dry mil
RESISTANCE TO HYDROSTATIC HEAD	ASTM D 5385	100+ ft. of water
WATER ABSORPTION	ASTM D 95	Less than 1% weight
METABOLITES	GSA-PBS 07115	Unaffected
WATER PENETRATION AND LEAKAGE THROUGH MASONRY	ASTM E 514	No penetration and no leakage
ANTIFUNGAL ACTIVITY MILDEW AND ROT RESISTANCE (ProBan® factory added to formula)	AATCC 30 METHOD PART II - Modified	No visible growth on any film
CATEGORY 1 40 C.F.R.§59.401 "WATERPROOFING SEALERS AND TREATMENTS"		<600 G/L VOC

