



Air / Vapor Barrier System

Vapor impermeable - elastomeric

POLY WALL AIRLOK FLEX®
POLY WALL AIRLOK FLEX® with ProBan®

Note: Specification is prepared in accordance to CSI three part format. This specification must be adapted to suit the requirements of individual projects. Brackets [] require additional information from Specifier. The product AIRLOK FLEX® with ProBan® is provided at a slightly higher cost. ProBan® is a special mold inhibitor booster, factory blended into AIRLOK FLEX® when superior mold-inhibiting properties are required. Be certain to specify according to your requirements.

Section 07262 Fluid-Applied Air and Vapor Barrier

Part 1 – General

- 1.00 General Requirements
General conditions, Supplementary Conditions, Instructions to Bidders and Division One General Requirements shall govern this Section.
- 1.01 Description
Provide Labor, Materials and Equipment to complete work as shown on the Drawings according to the Specifications for the fluid-applied air and vapor impermeable barrier system.
- 1.02 Related Sections
 - A. Section [*Below grade waterproofing*]
 - B. Section [*masonry wall construction with tooled joints*]
 - C. Section [*wall panels*]
 - D. Section [*gypsum sheathing*]
 - E. Section [*plywood sheathing*]
 - F. Section [*roofing membrane*]
 - G. Section [*flashing and sealant*]
 - H. Section [*door and window frames*]
- 1.03 References
 - A. ASTM E2178 Standard Test Method for Air Permeance
 - B. ASTM E96 Water Vapor Transmission of Materials
 - C. ASTM D95 Water Absorption
 - D. ASTM D4541 Adhesion
 - E. ASTM C836 Low-Temperature Flexibility and Crack Bridging
 - F. ASTM E154 Resistance to Degradation
- 1.04 Submittals
Product data, including technical and laboratory testing information with the system, air leakage and vapor permeance rates meeting or exceeding code requirements.
- 1.05 Quality Assurance
 - A. Applicator specializes in performing work of this section and qualified by the manufacturer.
 - B. Application is to be completed in accordance to Manufacturer's Guide Specification.
- 1.06 Mock-Up
 - A. Construct a 6-foot by 6-foot mock-up wall to be built of specified substrate material, including a penetration and transition to demonstrate the material interface and seal.
 - B. Applicator installs specified air barrier system on mock-up.
 - C. Allow 48 hours for inspection of mock-up air barrier system by design professional [*specify*] before proceeding with work.



- 1.07 Pre-Installation Conference
Convene conference 1 week prior to commencing application of air barrier system. All contractors responsible for related sections are to be present.
- 1.08 Delivery, Storage and Handling
 - A. Deliver manufacturer's materials to job site in sealed containers or packaging.
 - B. Store roll materials in original packaging out of direct sunlight.
 - C. Store water-based membrane materials above 40°F.
 - D. Store solvent-based membrane materials outside away from ignition sources.
 - E. Refer to MSDS for proper storage and handling.
- 1.09 Coordination
Coordinate work of other sections that reference this section.
- 1.10 Alternates
 - A. Acceptable alternates will be by written addendum.
 - B. Substitute materials not approved in writing prior to pre-installation conference shall not be permitted for use on this project.
- 1.11 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.

Part 2 – Products

- 2.01 System Materials Manufacturer
 - A. Air/Vapor Barrier System – membrane and components are to be obtained from the POLY WALL brand membrane manufacturer:

Polyguard Products, Inc.
Ennis, TX 75119
(800) 846-3020
www.poly-wall.com
- 2.02 Membrane System (Basis-of-Design)
 - A. POLY WALL AIRLOK FLEX® [*insert "with ProBan®" when specified*] [*insert VOC level required; 525, 400, 200, or 100*] air/vapor barrier: single-component; elastomeric; thermoplastic rubber; liquid; spray, rolled, or brushed; cold-applied to concrete masonry (CMU) or gypsum substrate.
 - 1. Air permeability: 0.0007 CFM/SF [ASTM E2178-01 CMU/gypsum assembly]
 - 2. Vapor permeance: 0.2 perms [ASTM E96 Method B]
 - 3. Adhesion: 100+ PSI [ASTM D4541]
 - 4. Wet mil thickness: 40. Check with Gardner wet mil gauge.
 - 5. Dry mil average thickness: 16.
 - 6. Elongation: 500% [ASTM D412]
 - 7. Temperature (surface) range @ application: -20°F to 110°F
 - 8. Temperature (ambient) range @ application and cure: -20°F to 110°F
 - B. POLY WALL Self-Adhering membrane: modified bitumen membrane, cross-laminated polyethylene film applied to primed concrete masonry (CMU), gypsum, wood or metal substrate.
 - 1. Air permeability: 0.0007 CFM/SF [ASTM E2178; CMU/gypsum assembly]
 - 2. Vapor permeance: 0.02 perms [ASTM E96 Method B]
 - 3. Adhesion: 10 lbs/in width [ASTM D1000]
 - 4. Elongation: 500% [ASTM D412]
 - 5. Low Temperature Pliability: -25°F [ASTM D146]
 - C. POLY WALL Hole Filler dispensed from caulking tube or POLY WALL Fiber Flash dispensed from 3 gallon container): fills mortar voids; provides termination and penetration sealant. Alternate material for POLY WALL Self-Adhering membrane at gypsum sheathing seams.
 - 1. Compatible with POLY WALL Air Barrier System
 - 2. Air permeability system: 0.0007 CFM/fSF [ASTM E2178-01]
 - 3. Elongation: 275% [ASTM D412]



4. Low Temperature Pliability: -75° F
5. UV Rating: 2000 hours no change [ASTM G26]

D. Masonry Flashings

Masonry flashings are specified in section []. Material selection and application shall be coordinated and compatible with air barrier system.

2.03 Primer

- A. AIRLOK FLEX® serves as the primer for the POLY WALL Self-Adhering membrane. No other primer is necessary.

2.04 Insulation Adhesive (when specified)

- A. Quick Grip industrial-grade aerosolized adhesive applied directly to dried AIRLOK FLEX® or as primer for flashing material in cold temperatures.
1. Compatible with AIRLOK FLEX® System
 2. Adheres to: air barrier; board insulations; POLY WALL Self-Adhering Flashing; thru-wall flashings; and other substrates.
 3. Can be applied in temperatures from 0° F to 120° F.
 4. Dry time 1 -10 minutes depending on surface and ambient temperature.

Part 3 - Execution

3.01 Examination

- A. All surfaces to be treated must be sound, dry, clean and free of dirt, excess mortar, or other contaminants. Masonry substrate to have tooled mortar joints.
- B. Cut outs and breakouts for support columns and beams are to be filled and made flush with the substrate by others prior to commencing work.
- C. Masonry and new concrete shall have been cured a minimum of 3 days and must be dry at time of application.
- D. Design Professional to verify substrate and conditions are acceptable to commence work within this section.

3.02 Surface Preparation

- A. Surface must be clean and dry: free of mortar or gypsum smears; free of ice, frost or excess moisture.
- B. Poured concrete ties inside and out must be knocked off and filled flush.
- C. Masonry wall must be unpargead.
- D. Gypsum sheathing voids are to be filled and made flush with substrate.
- E. Open joints are to be filled with foam or POLY WALL Hole Filler. Tight joints can be coated without additional preparation.

3.03 Installation of air vapor barrier system

Install all materials following manufacturer's guide specifications.

Complete membrane detailing before or after fluid-applied application of AIRLOK FLEX® to substrate.

- A. Apply AIRLOK FLEX® [] evenly to substrate using airless spray equipment, brush or roll, checking immediately for proper application thickness: 40 wet mils.
- B. Spray wrap rough openings as required.
- C. Apply extra material at anchor ties and penetrations.
- D. Allow application to dry for 12 hours and inspect for continuous coverage. If necessary, apply additional material as needed to provide a continuous coating then allow drying for 12 hours.
- E. Commence detailing. Apply POLY WALL Hole Filler, POLY WALL Fiber Flash or POLY WALL Self-Adhering Flashing to control joints, transition joints, window and door openings as specified.
- F. When using POLY WALL Self-Adhering Flashing, overlap end and side laps 2 inches. Roll all flashing to ensure seal. Seal top edge of flashing strips with POLY WALL Hole Filler caulk or POLY WALL Fiber Flash. Trowel to feathered edge as needed.
- G. Minor voids are to be filled and sealed with POLY WALL Hole Filler or POLY WALL Fiber Flash.
- H. Control joints can be filled prior to coating with POLY WALL Hole Filler or POLY WALL Fiber Flash, made flush with substrate before or after spray application. When filled prior to coating, apply specified coat of AIRLOK FLEX® providing a continuous membrane across the joint.

3.04 Field Quality Control

Measure application thickness with wet mil gauge. Check fresh application immediately.

3.05 Protection

For 24 hours after installation, protect completed membrane system against water filling block cores. Protect finish air barrier system from adjacent work.

