



## **Rub-R-Wall® Airtight Vapor Permeable (VP) Air Barrier System Guide Specification**

Rub-R-Wall® Airtight Vapor Permeable (VP) Air Barrier System provides a seamless, continuous membrane around the building envelope. It is designed to stop air infiltration and exfiltration in the building envelope while allowing the transmission of water vapor to prevent condensation in the wall assembly. It can be spray applied directly to concrete, CMU, exterior sheathing, and most other building materials. Rub-R-Wall® Airtight Vapor Permeable (VP) Air Barrier System may be used as part of tested NFPA 285 wall assemblies.

Since 1992, Rubber Polymer Company has delivered the highest quality products for the waterproofing industry. We developed our products to be environmentally friendly by providing asphalt free formulas that are easy to apply, create a membrane protective barrier and help us all to be environmentally responsible.

Consult Rubber Polymer Company for assistance in editing this section for your project. Visit [www.rpcinfo.com](http://www.rpcinfo.com) to locate a sales manager in your region.

**This section is based on the products of Rubber Polymer Company, Cumming, GA: (770) 410-1545; [sales@rpcinfo.com](mailto:sales@rpcinfo.com).**

### **Choose The Right Rubber Polymer Company Product for Your Application**

To allow the regulation of temperature, humidity, filtration, and rate of air change, the interior atmospheres of buildings must first be enclosed and confined. To accomplish this function, *air barriers* are used to control air infiltration and exfiltration while *vapor barriers* manage the movement of water vapor.

**Rub-R-Wall® Airtight Air and Vapor Barrier (AVB) System** provides both an air and vapor barrier.

**Rub-R-Wall® Airtight Vapor Permeable (VP) Air Barrier System** creates a barrier to air movement but allows water vapor to pass freely.

The selection and placement of the correct barrier system must be carefully considered to prevent condensation within exterior wall assemblies. Before selecting the appropriate Rubber Polymer Company product, Architects may wish to apply a hygrothermic analysis program such as WUFI® to predict vapor diffusion and liquid transport based on specific building materials and project climate. For technical assistance and additional information contact Rubber Polymer Company.

## SECTION 072726.2 – FLUID-APPLIED MEMBRANE AIR BARRIERS (VP)

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Fluid-applied, water-based water-vapor-permeable air barrier membrane.
2. Accessories.

#### 1.2 REFERENCES

Specifier: [If retaining this Article, edit list to correspond to references retained after editing.](#)

A. References, General: Versions of the following standards current as of the date of issue of the project or as required by applicable code apply to the Work of this Section.

B. ASTM International:

1. ASTM C836/C836M - Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course
2. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension.
3. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials.
4. ASTM E2178 - Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials.

C. National Fire Protection Association (NFPA):

1. NFPA 285 - Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components

#### 1.3 SUBMITTALS

A. Product Data. Manufacturer's technical literature including standard application details for each product specified.

B. Manufacturer Instructions: Include manufacturer's written instructions for substrate preparation.

C. Shop Drawings: For conditions not addressed by manufacturer's standard details.

1. Show locations and extent of membranes and accessory materials.
2. Include details at substrate joints and cracks, penetrations, corners, and terminations.

#### 1.4 QUALITY ASSURANCE

Specifier: [Verify availability of approved installers in your area by contacting Rubber Polymer Company, \(770\) 410-1545.](#)

A. Installer: Firm with record of successful installations on projects of similar scope and employing workers and supervisors trained and approved by manufacturer.

- B. Mock-Ups: To set quality standards for materials and execution.
  - 1. Install at location acceptable to Architect.
  - 2. Size: [As shown in Drawings] [100 sq. ft. minimum].
- C. Pre-Installation Meeting: Discuss handling and installation techniques, coordination of other work, protection, and scheduling of work to cover membranes.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to project site in original unopened packages with manufacturer's labels intact.
- B. Comply with manufacturer's instructions for storage. Protect against damage.
- C. Store materials above 50 deg. F.

#### 1.6 FIELD CONDITIONS

- A. Environmental Limitations: Apply membranes within the range of ambient and substrate temperatures recommended by manufacturer.
- B. Do not apply to a wet substrate or during snow or rain.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURER

- A. Manufacturer: Rubber Polymer Company, <https://www.rpcinfo.com/>, [sales@rpcinfo.com](mailto:sales@rpcinfo.com), (770) 410-1545.
- B. Substitutions: [None acceptable] [In accordance with Instructions to Bidders and Division 01 General Requirements].
- C. Source Limitations: Obtain membrane materials and accessories from single manufacturer.

#### 2.2 REGULATORY REQUIREMENTS

- A. Flame Propagation: Passes NFPA 285 testing as part of an approved assembly.

#### 2.3 VAPOR-PERMEABLE AIR BARRIER MEMBRANE

- A. Vapor Permeable Air Barrier Membrane: Fluid-applied, seamless membrane capable of preventing air infiltration and exfiltration exceeding air leakage limits specified while allowing the transmission of water vapor to prevent condensation in the wall assembly.
  - 1. Product: [Rub-R-Wall® Airtight Vapor Permeable \(VP\) Air Barrier System](#) by Rubber Polymer Company.
  - 2. Vapor Permeance: Minimum 12 perms (290 ng/Pa x s x sq. m); ASTM E96/E96M Procedure B, Water Method.
  - 3. Elongation: Greater than 1,000 percent; ASTM D412, modified.
  - 4. Tensile strength: 300 psi; ASTM D412.
  - 5. Low Temperature Flexibility: Pass at -26 degrees C; ASTM C836/C836M.
  - 6. Crack Bridging: Pass at -26 degrees C; ASTM C836/C836M.

7. Air Leakage Rate: Maximum 0.004 cfm/sq. ft. of surface area at 1.57-lbf/sq. ft. pressure difference; ASTM E2178.

## 2.4 ACCESSORIES

- A. Accessories, General: Provide substrate repair materials, primers, transition strips, and other accessory materials compatible with air-barrier membrane as required to complete the work and as recommended by air-barrier manufacturer.
- B. Primer: Manufacturer's standard liquid-applied factory-formulated primer.
  1. Product: Rub-R-Wall® SA Primer by Rubber Polymer Company.
- C. Substrate Repair Materials: Manufacturer's standard heavy-bodied vapor permeable rubber mastic; trowel grade.
  1. Product: Rub-R-Wall® VP Mastic by Rubber Polymer Company.
- D. Reinforcement Strips: Self-adhering SBS-modified-bitumen sheet membrane, 40 mil thickness, for repair and reinforcement of cracks and joints.
  1. Product: Rub-R-Wall® SA by Rubber Polymer Company.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examination: Verify conditions with installer present to confirm that substrates are sound, free of oil, dirt, or other contaminants and ready for installation of membrane.
  1. Concrete Substrates: Concrete walls may be sprayed 24 hours after the form stripping process is complete, provided any excess water due to subsequent rains is not present.
  2. Masonry Joints: Verify that masonry joints are flush and completely filled with mortar.
- B. Correct defects before proceeding.

### 3.2 SURFACE PREPARATION

- A. Clean substrates of dirt, sand, soil, or any other materials that would prevent full adhesion of the membrane. The substrate must be free of any visible water.
- B. Patch all voids, cracks, and holes with mastic to provide a smooth surface for air barrier installation.
- C. Exterior Sheathing: Drive fasteners flush with wall panel surface. Tape joints with 2" wide exterior sheathing tape prior to spray application.
- D. Detail around window, door openings, penetrations, and transitions between dissimilar materials. Provide minimum 6-inch transition strip to support a continuous barrier.

### 3.3 INSTALLATION

- A. Comply with manufacturer's written installation instructions.

- B. Prime all areas to receive membrane using manufacturer's recommended primer and application rates. Allow to cure as recommended by manufacturer.
- C. Spray apply membrane material in multiple coats to achieve a wet film thickness 60 mils for non-porous substrates and 80 mils for block and other porous surfaces. Verify thickness with wet mil gauge.

#### 3.4 PROTECTION AND REPAIRS

- A. Protect installed membrane from damage.
- B. Allow membrane to fully cure for 24 hours.
- C. Repair all scratches and minor defects to provide a complete seamless air-barrier membrane.

END OF SECTION