



AIR & VAPOR BARRIER

FIRE RESIST Barritech VP

Description

Barritech VP is a fluid-applied membrane made from inherently fire-resistant materials. Barritech VP is applied to exterior wall assemblies where it functions as an air barrier and a water-resistive barrier. Barritech VP may be installed down to 20°F. Barritech VP is vapor-permeable — moisture vapor can diffuse directly through the membrane. Barritech VP can be applied over concrete block, concrete, exterior gypsum sheathing, plywood, OSB and many other common building materials. The product is fully adhered to the substrate, flexible and rubber-like. Barritech VP is a single-component, air-drying product applied by spray or roller at nominal 0.040" (40 mils) dry film thickness. The high film thickness and flexible, elastic properties enable Barritech VP to bridge cracks and seal around penetrations, which creates a truly continuous, monolithic air and water barrier.

Features and Benefits

- Fire-retardant chemistry permits use in many wall assemblies requiring NFPA 285
- Dries to a distinctive blue color for easy identification (lighter blue color when wet)
- 180-day UV resistance and ability to install below freezing allows flexibility in schedule
- Vapor-permeable feature permits use in wall assemblies where a vapor barrier is not needed
- Low VOC, low-emitting product – contributes to safety during installation and contributes to LEED v4 credit EQ Low Emitting Materials
- Easy, water clean-up of tools & equipment reduces harmful chemicals on the jobsite
- Spray-through standard, one-part equipment provides a simple and quick installation
- Monolithic coverage and self-sealing properties around fasteners enable an air and watertight installation
- Non-asphalt composition permits contact with many window and joint sealants
- Barritech VP is a warranted air/vapor barrier system from Carlisle Coatings & Waterproofing



Project Conditions

Building codes and project specifications require continuity of the air barrier installation. It is the installer's responsibility to understand the extent and sequencing of air barrier installation on the project. Do not proceed with installation until substrate and project conditions conform to requirements specified in this document. Identify any membranes, coatings, sealants, tapes and joint compounds by others which will come into contact with Barritech VP and CCW accessories, and verify compatibility through CCW. All surfaces accepting Barritech VP and CCW accessories shall be clean, dry, frost free and of sound condition. Verify that wall assemblies are dried in, such that water intrusion will not occur from above, behind or around the membrane installation. Gaps and cracks shall be filled with materials and technique approved by CCW. Large gaps such as those commonly found in electrical/mechanical penetrations, structural steel penetrations, columns/beams, expansion/seismic joints, shelf angles, tie-ins to fenestration and transitions to other building assemblies require extra work and materials to

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provide suitable surfaces for continuous installation of the air barrier. Please consult CCW's Barritech VP details for guidance.

Substrate Inspection

Concrete

Shall be cured in place 7 days minimum. It shall be smooth, with sharp protrusions such as cold joints ground flush. Honeycomb and holes/cracks exceeding ¼" across shall be filled with grout or mortar.

Concrete Masonry Unit (CMU)

Mortar joints shall be struck flush and shall be free of voids. Mortar droppings shall be removed from brick ties and all other surfaces accepting Barritech VP and CCW accessories. Mortar joints shall be allowed to cure 3 days minimum before installation of Barritech VP.

Gypsum Sheathing

Sheathing boards shall be flush at joints, with gap between boards according to building code and sheathing manufacturer's requirements. Sheathing boards shall also be securely fastened to the structure with proper fastener type, technique and spacing according to building code and sheathing manufacturer's requirements. Sheathing boards shall be repaired or replaced if inspection reveals moisture damage, mechanical damage or if sheathing boards have exceeded the exposure duration or exposure conditions as required by the sheathing manufacturer.

OSB, Plywood, Lumber, Pressure-Treated Wood

Wood sheathing inspection carries the same protocol given for gypsum sheathing. Also, moisture content, measured with a wood moisture meter in the core of the substrate, shall be below 20%. Do not cover any wooden materials with Barritech VP or CCW accessories if moisture content is 20% or above. Do not encapsulate wood (such as nailers) with membrane, as this will cause premature rot. In most cases fire- and pressure-treated wood must be kiln dried to accommodate the less than 20% moisture content requirement.

Surface Preparation

Apply CCW contact adhesive to ALL surfaces accepting CCW self-adhered flashings. CCW-702, CCW-702LV, CCW-702 WB, CCW-715, CAV-GRIP™ and Travel-Tack are all acceptable for this application. Apply SURE-SEAL® primers to all surfaces accepting P/S Eastoform. SURE-SEAL EP-95, HP-250 and Low-VOC Primer are all acceptable for this application. Follow the application instructions on the respective contact adhesive/ primer product data sheet.

Installation

In sheathing over stud construction, sheathing joints shall be detailed with either of the following methods: 1) 2" width x 40 mil thickness ribbon of Barribond centered over joint; 2) 4" DCH reinforcing fabric centered over

joint and imbedded in Barritech VP. Window openings, inside-outside corners, base of wall, roofline, control joints and other transitions shall be covered with CCW self-adhered flashing, CCW liquid flashing or imbedded reinforcement as shown in Barritech VP details. P/S Elastoform may be used to detail expansion joints and window wall transitions.

Please consult CCW details for guidance.

Apply Barritech VP over surfaces at minimum 0.060" (60 mils) wet in a single or multiple coats through approved spray equipment. Recommended spray tip sizes are GHD 635 for high coverage and GHD 429 for detail coat. Please consult CCW's Spray Equipment Brochure for detailed information. Theoretical application rate is 25 ft²/gal in one coat. Barritech VP may also be applied with a paint roller. For roller application, apply a minimum of two 0.030" (30 mils) wet thickness coats. Theoretical application rate is 50 ft²/gal for each coat. For roller application, allow Barritech VP to dry firm between coats.

CCW self-adhered flashing details are best applied to the substrate but can also be applied over cured Barritech VP. All surfaces shall be prepped with CCW Contact Adhesive before installation of CCW self-adhered flashing. Follow application instructions on the CCW Contact Adhesive product data sheet. Installer shall apply CCW Contact Adhesive in a sufficient footprint to extend a minimum of 1" beyond the edges of CCW self-adhered flashing. Neighboring pieces of CCW self-adhered flashing shall lap 2" minimum. Seal terminating edges of CCW self-adhered flashing with a 1" width X 40 mil thickness ribbon of Barribond or LM 800 XL.

For installation of LiquiFiber in Barritech VP details, fill all gaps with Barribond or LM 800 XL. Apply a base coat of Barritech VP at 30 wet mils thickness. Lay LiquiFiber into Barritech VP and press in place with chip brush or drywall knife. Set the LiquiFiber tight into corners (no bridging), and then smooth over surface. Overlap neighboring pieces of LiquiFiber at least 2" and apply Barritech VP into the laps. Immediately encapsulate the LiquiFiber with a second coat of Barritech VP. Cover all LiquiFiber with Barritech VP the same day of installation. Liquifiber is ideal for detailing window openings as it can be used on inverted surfaces, and it will conform to complex multi-plane details without precise cutting and fitting.

Installation of DCH Reinforcing Fabric is performed like Liquifiber, with the following differences: fill all gaps exceeding ¼" with Barribond or LM 800 XL. DCH Reinforcing Fabric is best used over straight-run conditions such as board joints and corners.

Cold Temperature Installation:

For installation below 40°F, store Barritech VP pails, drums and spray equipment in a heated area until use. If applying product over Barribond sealant details, apply a scratch coat of Barritech VP (approx 10 mils) over Barribond. Allow scratch coat to dry to touch, then apply the remaining product thickness. A 60 mil coat of Barritech VP requires minimum 48 hours