

AIR & VAPOR BARRIER

Self-Adhering, Fluid-Applied Membranes & Flexible Flashings

The Significance of Air Barriers in Building Construction

The National Institute of Standards and Technology* confirms that air barriers reduce building energy use from heating and cooling by up to 37%. The economic benefit of energy savings is obvious, as the cost of energy continues to skyrocket. Air barriers also play a major role in improving environmental quality. Residential and commercial buildings use 40% of U.S. energy and contribute about 38% of carbon dioxide emissions. This growing awareness has resulted in mandatory air barrier requirements for government buildings and projects seeking LEED® certification.

Requirements for Air Barriers

Continuous air barriers are required per the 2012 International Energy Conservation Code (IECC) in climate zones 4–8. The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 90.1-2010 “Energy Standard for Buildings Except Low-Rise Residential Buildings” requires continuous air barriers in all zones with the exception of single wythe CMU in Zone 2B and semi-heated structures in Zones 1–6. Air barriers also significantly contribute toward LEED credit requirements.

Membrane Air Barrier Systems Offered by CCW

CCW is a recognized leader and expert in the growing air barrier industry. Our fully adhered membrane air barrier systems easily fulfill the toughest code requirements and specifications. Choose from any of the systems indicated in the table below.

Product	Description	Advantages
Fire Resist Barritech VP	Fire-resistant spray- or roller-applied vapor-permeable air barrier	Fire resistant ready substitute for vapor-permeable building wrap. Fast installation. Monolithic coverage.
Fire Resist Barritech NP™/NP-LT	Fire-resistant spray- or roller-applied vapor, air and water-resistive barrier	Fire resistant. Fast installation. Monolithic coverage.
CCW-705	Self-adhering air & vapor barrier	Factory-controlled thickness and composition. All-season application.
Fire Resist 705FR-A	Self-adhering, sheet-applied	Fire, heat and UV resistant aluminized facer
Fire Resist Barritech 705 VP	Self-adhering, sheet-applied	Fire Resistant, vapor permeable
Barriseal®	Spray and roller-applied air & vapor barrier	Fast installation. All-season application. Monolithic coverage.

Flexible Flashings

CCW also manufactures high-quality flashing materials, which are essential for moisture and air leakage protection at critical areas of the building. These products are pre-cut to convenient sizes. CCW's flexible flashings are indicated in the table below.

Product	Description	Advantages
CCW-705 Air & Vapor Barrier Strips	40-mil self-adhering flashing	Window openings, joints, terminations, transitions
Barritape™	20-mil self-adhering flashing	Sheathing joint tape
CCW-705 TWF	40-mil self-adhering through-wall flashing	Through-wall flashing for cavity wall construction
Pre-Kleened™ EPDM TWF	40-mil EPDM through-wall flashing	

Air & Vapor Barrier Membranes

These are ideal for use in wall systems that require both an air and vapor barrier in climates with long, cold winters or in persistently warm, humid climates. Combining the air and vapor barrier into one application provides efficiency and better performance. This practice also eliminates sheet plastic vapor retarders from the interior side of wall assemblies in cold climates. As shown in Wall Design A, properly constructed walls that use combined air and vapor barriers keep the dew point outside of the membrane year-round. This strategic layering prevents trapping or moisture accumulation. In the event of leaks or built-up moisture, the wall can also dry readily to the interior.

Self-Adhering Sheet Membranes

CCW-705 / 705 XLT

CCW-705 Air & Vapor Barrier is a 40-mil-thick membrane, made of a tough, cross-laminated HDPE film fully coated with polymer-modified asphalt adhesive. The membrane is coated with a disposable silicone paper release liner offered in convenient roll sizes of 36" x 75', 24" x 100' and 18" x 100'. Through simple peel-and-stick application, the product can be applied to diverse substrates including concrete, concrete block, gypsum sheathing, plywood, OSB and many others. All surfaces require preparation with a CCW contact adhesive to ensure strong, permanent adhesion. CCW-705 is cut from the roll to manageably sized pieces, and adhered to the substrate. Installation is sequenced to provide shingled laps of adjacent pieces. Non-shingled laps, end laps, corner details, brick tie penetrations and similar potential leak paths are sealed with CCW-704 or LM-800XL detail mastic. CCW-705 LT Air & Vapor Barrier is also available to enable installation at lower ambient temperatures. CCW-705 Air & Vapor Barrier with accessory products is a complete system of factory-controlled thickness and composition that can be installed in just about any season without the use of special tools or equipment.

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Barricure

Barricure is provided in 5-gallon pails as a liquid concentrate, which is diluted at a 3:1 ratio by volume with tap water. The Barricure solution provides instant set of Barriseal when sprayed through approved equipment. Unlike calcium chloride flakes, Barricure is clean and easy to use, non-abrasive and non-corrosive. Use of Barricure solution instead of calcium chloride flakes ensures longevity of spray equipment and compliance with specifications for chloride-free systems.

DCH Reinforcing Fabric

CCW DCH Reinforcing Fabric is a white polyester fabric designed to work in conjunction with CCW and Liquid-Applied Membranes. The DCH fabric is for use in horizontal and detailing applications (see TDS for fluid waterproofing and/or air and vapor barrier details for proper installation).

Aluma-Grip 701

Aluma-Grip 701 is self-adhering flashing made of a heavy-duty aluminum foil facer coated with an asphalt-free butyl adhesive. May be used over plywood, OSB, lumber, steel, aluminum, faced gypsum sheathing, polystyrene foam, concrete and masonry. Ideal for flashing window and door openings and for use over joints, at angle changes, and at similar interruptions in substrate continuity.

LiquiFiber™

LiquiFiber is used to provide coverage and reinforcement at joint and corner details in Barritech VP and Barriseal-S/R systems.

LiquiFiber is packaged in 24' rolls of 4', 6" and 12" widths.

CCW Contact Adhesive

CCW offers three different contact adhesives, any one of which shall be applied to the substrate to ensure consistent, aggressive and permanent adhesion of CCW self-adhering membranes and flashings. Choose the best one for your application.

CCW-702 Solvent-based. Applied by brush or roller. Packaged in 5-gallon pails and 1-gallon cans. Can be applied at cold ambient temperatures.

CCW-702 WB Water-based. Applied by brush, roller or spray. Packaged in 5-gallon pails. Applied at ambient temperatures above 40°F.

CCW-702 LV Solvent-based. Applied by brush, roller or spray. Packaged in 5-gallon pails, Can be applied at cold ambient temperatures.

CAV-GRIP Aerosol spray. VOC-compliant formula. Packaged in 40# pressurized cylinders. Sprayed through hose and pistol-grip gun attached to cylinder. Can be applied year-round as long as cylinders are maintained above 60°F. Provides fast, clean coverage and instant drying.

CCW-715

CCW-715 adhesive is designed to allow adherence of CCW sheet membranes to damp or partially cured concrete surfaces. This allows installation of membrane as soon as forms are removed. Do not apply where visible water is present as trapped water may cause blistering. Keep direct sunlight off membrane and backfill immediately.

CCW AWP

Single-component latex-based contact adhesive used as an accessory product for CCW waterproofing membranes. Sets concrete dust to promote adhesion of membrane to the substrate,

Liquid Flashing & Detail Sealant

This critical accessory product is a non-sag, paste-like material used to seal non-shingled laps, end laps, penetrations, corner details and similar defects on the film side of CCW's self-adhering membranes and flashings. CCW Detail Mastics are formulated for adhesion to and compatibility with the polymeric film on the self-adhering products. Choose either of the products listed below.

GreenBond WB is a fair weather, single-component, solvent-free, water-based, liquid polymer emulsion adhesive/sealant. GreenBond WB may not be used where ambient and substrate temperatures fall below 40°F and it must not be allowed to freeze.

LM-800XL Quick-drying, solvent-based synthetic rubber. Will not cold-flow. Compatible with most joint sealants, including silicone. Packaged in 5-gallon pails and in 29-fl-oz cartridges.

CCW-704 Solvent-based polymer-modified asphalt. Not compatible with many joint sealants, including silicone. Keep product minimum ½" back from finished exterior. Packaged in 5-gallon pails and in 30-fl-oz cartridges.

Sure-Seal® Lap Sealant Designed for sealing splice edges of cured butyl membranes. Extremely durable material that dries to the touch in approximately 30 minutes. Packaged in 5-gallon pails and 10.2-oz. cartridges.

