

Fluid applied air barrier system for robust connections and details

# ADVANTAGES & PROPERTIES

VISCONN is a fluid applied air barrier system made from water-based acrylic dispersion. VISCONN can be applied using an airless sprayer, AEROFIXX application tool, paint brush or roller to air seal masonry walls, CMU, concrete, wood, and common air sealing connections such as rim joists. The membrane forms a seamless, elastic air barrier and vapor permeable membrane once cured.

- The ready-to-use fluid applied membrane ensures swift application to large surface areas such as historic masonry walls
- Creates a reliable bond thanks to excellent adhesive properties on all common wood, masonry, and metal construction materials
- Offers robust air sealing: permanent elasticity and high durability after curing
- Integratable with plaster or paint, as well as Pro Clima tapes
- For interior and exterior applications that are shielded from UV exposure
- Low VOC per SCAQMD limits
- LEED v4 passed CDPH v1.2 for Private Office and School Classroom (PO and SC)
- Living Building Challenge RED list free

#### SIZES & DIMENSION

SKU	Product	Color
1AR01106	VISCONN 10L bucket	BLUE dries BLACK
1AR01740	VISCONN 10L bucket	WHITE
1AR02711	VISCONN Fibre 5L bucket	WHITE
1AR02612	VISCONN 600ml sausage	BLUE dries BLACK
1AR02749	VISCONN 600ml sausage	WHITE
1AR02633	VISCONN Fibre 600ml sausage	BLUE dries BLACK
1AR02750	VISCONN Fibre 600ml sausage	WHITE



#### **TECHNICAL DATA**

Attribute	Norm	Value			
Material		Modified aqueous acrylic dispersion			
Percentage of Solids		VISCONN: 48.144% VISCONN FIBRE: 50.153%			
Colors		See SIZES & DIMENSIONS			
Surface Weight	EN 1849-2	0.66 oz/ft <sup>2</sup> (200 g/m <sup>2</sup> ) (cured)			
Application Thickness		20 wet mils/0.5mm/500 µm			
Application Temperature		41°F to 95°F (5°C to +35°C)			
Long term temperature resistance		-40°F to 176°F (-40°C to 80°C)			
Airtightness	ASTM E2178	0.000000 L/(pa*m <sup>2</sup> *s)			
Perm Rating	ASTM E96 Procedure A (dry cup)	0.9 perms			
	ASTM E96 Procedure B (wet cup)	28 perms			
Vapor Variability	ISO 12572	VISCONN: sd: 0.13 - 10.00 m VISCONN FIBER: sd: 0.15 - 5.00 m			
Water Column	AATCC 127	6' 7" (2000 mm)			
Water Resistance	ASTM E331	Passed per IBC 1403.2: 2 hours at 6.24PSF			
Adhesion Strength	ASTM D7234	166 PSI			
Surface Buring Characteristic	ASTM E84 - Class A material	Flame Spread: 10 Smoke Development: 5			
Dry time		6 - 48 hours (at 68 °F (20 °C) 65% rel. humidity) depending on substrate / applied thickness			
Storage Temperature		41 °F - 77 °F (5 °C - 25 °C)			
UV / Weather Exposure		Maximum 3 months			



CODE COMPLIANCE		
IBC - 1403.2	Complies per passed ASTM E331 test	
IRC - R703.1	Complies per passed ASTM E331 test	
NBC 2020 - 9.36.2.9	020 - 9.36.2.9Air Barrier Systems Passed air leakage <0.02 L/(s·m²) @75 (ASTM E2357)	

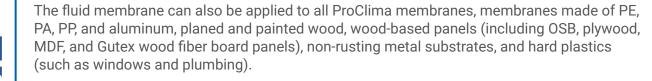
COVERAGE			
VISCONN	~0.75 l/m²	2.36 US fl oz/ft <sup>2</sup>	Coverage dependant on substrate and
VISCONN FIBRE	~0.4 - 0.8 l/m²	1.26 - 2.51 US fl oz/ft <sup>2</sup>	applied thickness

## **APPLICATION & SUBSTRATES**

VISCONN can be applied using an airless sprayer, AEROFIXX application tool, paint brush or roller. Adheres to walls, ceilings and floor surfaces, such as non-plastered masonry, CMU, plywood, oil free OSB, woodfiber board, wood. It simplifies air sealing of difficult junctions such as windows, roofs, walls, ceilings and floors connections. Can also be used for bonding/stabilizing dusty substrates prior to tape application.

VISCONN is a high-quality, water-based acrylic dispersion membrane that forms a seamless airtight membrane. It is elastic and vapor-retarding protective layer once it has dried. Adheres to all standard construction materials, wood, steel, masonry, all ProClima membranes, WRB, roof underlayments and membranes made of aluminium and paper.

Ensure the substrate is suitable for applying the fluid-applied membrane. The substrate should be dry, dust-free, and structurally sound, without oil, grease, or silicone. Gaps larger than 1/8" should be pretreated with VISCONN FIBER, while other gaps may require CONTEGA SOLIDO IQ. Uneven substrates should be leveled with mortar and stucco as needed. Ensure substrate and ambient temperature is above 40 °F (+5 °C). Application is possible on moist but not wet substrates. VISCONN adheres to standard construction materials, including mineral substrates like concrete, masonry (such as sand-lime bricks, other bricks, aerated concrete, and pumice), as well as concrete or plaster substrates that may be sandy or crumbling to a small extent. Additionally, it can be applied to all ProClima membranes (with SOLITEX ADHERO VISTO needing pre-treatment with primer), membranes made of PE, PA, PP, and aluminum, unplaned, planed, or painted wood, wood-based panels (including chipboard, OSB, plywood, MDF, and Gutex wood fiber board panels), non-rusting metal substrates, and hard plastics (such as pipes and windows). Movement joints can not be sealed due to expected relative motion. Transitions like floor-wall joints should be coated with the required minimum layer thickness (20 wet mil/0.5mm/500µm) along their entire lengths in the area to be sealed.



## APPLICATION & SUBSTRATES CONT.

To protect adjacent materials/surfaces, shield them during application, especially visible surfaces like wood, glass, ceramics, clinker bricks, natural stone, paint/varnish, and metal. Promptly wash away any splashes with plenty of water; do not wait until they harden. Clean tools with water immediately after use. Dispose of the wash water according to locally applicable regulations (e.g., European waste code: 080416).

Avoid using VISCONN to adhere overlaps of ProClima INTELLO PLUS; use TESCON VANA instead.

#### **GENERAL CONDITIONS**

Spraying should be carried out at a distance of approximately 20 cm (8 inches) from the substrate to achieve reliable airtight seals. Application in multiple layers can be done without the need for drying periods. Ensure the necessary minimum layer thickness of 20 wet mils/0.5mm/500 µm has been achieved, forming a seamless, slightly wavy surface ('orange peel') on the substrate. Cracks and pores in the substrate can be fully filled or flooded to ensure perfect airtightness, using VISCONN for cracks/pores up to 1/8 inch (3 mm), or VISCON FIBRE for larger ones, by spraying or flooding. Cracks wider than 1/8 inch (3 mm) must be pretreated with VISCONN FIBRE, CONTEGA SOLIDO IQ, or parged. VISCONN FIBRE should be applied in gaps no larger than 3/4 inch (20 mm), ensuring deep penetration into the crack. The best coverage is achieved by spraying horizontally and then vertically. Complete airtightness can only be achieved with a consistently applied 20 wet mils/0.5mm/500 µm of VISCONN. Verify with a 475 Depth gauge. The membrane needs to be protected against moisture (e.g. rain) during drying.

For rougher substrates, backroll the wet-applied VISCONN with a 3/4-inch (20 mm) nap roller to help seal and fill any pinholes. VISCONN changes from blue to black when dry, while VISCONN White retains its color. Protect the moist film from additional moisture until fully dried. After spraying, flush and clean the sprayer according to the manufacturer's recommendations until the flushing water runs clear, indicating complete removal of VISCONN residues. For additional information, consult the manufacturer's guidelines for the spraying equipment.

**Airless Application -** Use an airless sprayer with a capacity of at least 1.8 liters/min (60 oz/min). Recommended nozzles sizes: 317, 521, and 210. The first digit of the nozzle designation specifies the spray angle x 10°, the second and third digits represent the diameter of the nozzle in 0.0xx inches. The 210 nozzle is best for fine detailing. The 317 and 521 nozzles work best for large surface applications. Set pressure for a uniform spray finish that is free of streaks. If streaks are visible next to the spray area, increase the pressure. If this does not help, clean or replace the filter in the gun. The optimal pressure is between 80 - 150 bar (1200 – 2200 psi), depending on the nozzle used. A mesh size of 60 is recommended for the gun filter. Always stir the material before spraying it. Flush the airless sprayer once with clear water and then fill the line completely before putting it into service. VISCONN FIBRE White (1AR02711) can not be applied using airless sprayers; in this case, use the <u>AEROFIXX</u> application gun.



### **GENERAL CONDITIONS**

Layer thickness and drying - Spraying should be carried out at a distance of approx. 8" (20 cm) from the substrate. Reliably air tightness is achieved when one layer is first sprayed on horizontally and then sprayed over vertically in a cross pattern. Application in a number of layers can be carried out without any need for drying periods between them. Minimum layer thickness of 20 wet mils/0.5mm/500 µm has been achieved when a seamless, slightly wavy, but non-running surface ('orange peel') is formed on the surface of VISCONN during the spraying process - verify with VISCONN Depth Gauge. Cracks and pores up to 1/8" (3 mm) can be closed with VISCONN by completely filling them / flooding entire cavity to achieve perfect airtightness. The thickness should be checked at various points across the entire sprayed surface using the measuring gauge immediately after the last layer has been applied. For rougher substrates backroll the wet applied VISCONN with a 3/4" (20mm) nap roller to help seal and fill any pinholes. VISCONN changes color from blue to black when it dries. VISCONN White does not change color. The moist film is to be protected against additional moisture (e.g. rain) until it has fully dried. Immediately after the spraying work has been completed, flush/clean the sprayer with water and as per manufacturer's recommendation Repeat until the flushing water is no longer visibly cloudy - the sign that VISCONN residues have been completely removed. For additional information (e.g. operating instructions), contact the manufacturer of the airless sprayer.

**Protective equipment -** Wear personal protective equipment consisting of a mask, protective glasses and gloves.

**Brush Application -** All VISCONN products can be applied using a brush, ensuring a minimum layer thickness of 20 wet mils/0.5mm/500 µm.

**Storage** - If this product has been in storage for a long period, water (~5%) can be mixed into it to achieve a consistency that is suitable for spraying. Do not over dilute the material (risk of excessive flow and poor coverage of cracks). Closing the container in an airtight manner and covering it within an airtight plastic bag will help to prevent premature drying.

