

VISCONN



Liquid-applied air barrier
for robust connections
and details

BENEFITS

VISCONN is a high-quality, water-based acrylic dispersion air barrier. Apply with airless sprayer, paint brush or roller to air seal CMU, concrete, wood, joist bays, weather resistant barriers and all Pro Clima membranes. The liquid-applied acrylic membrane forms a seamless, elastic air and vapor variable membrane once cured.

PRODUCT PROPERTIES

- Product contents: 2.46 Gallons (10 L).
- Coverage per container: ~145ft² (13m² at 750 g/m²) depending on applied thickness •
- Time-saving: liquid ready-to-use with airless sprayer.
- Reliable bonding thanks to excellent adhesive properties on all standard construction surfaces.
- For robust airsealing: permanent elasticity and high durability once it has dried • Improves surfaces: forms a bonding course between subsurfaces and subsequent coatings.
- Can be plastered/painted over, Pro Clima adhesive tapes can be bonded onto it (or can be sprayed over all TESCON/CONTEGA Pro Clima tapes).
- Use for interior and exterior areas shielded from UV/direct weather exposure. thanks to its vapor variability.
- Low VOC per SCAQMD limits,
- LEEDv4 passed CDPH v1.2 for Private Office and School Classroom (PO and SC)
- Living Building Challenge RED list free

TECHNICAL SPECS

Attribute	Norm	Value
Material		Modified aqueous acrylic dispersion
Colors		- Blue when wet / Black when cured - White when wet / White when cured
Surface Weight	EN 1849-2	0.66 oz/ft ² (200 g/m ²) (cured)
Application Thickness		8 - 39 mils (0.2 - 1.0 mm) wet film for material to be airtight / waterproof



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TECHNICAL SPECS (Continued)

Attribute	Norm	Value
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 ² *s)
Perm Rating	ASTM E96	0.9 perms (dry cup)
Vapor Variability	ISO 12572	0.33 - 25 perms (sd: 0.13 - 10.00 m)
Water Column	AATTC 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	Flame Spread: 10 Smoke Development: 5 Class A fire class material
Dry time		12 - 48 hours (at 68 °F (20 °C) 65% rel. humidity) depending on substrate / applied thickness
Connections		Pro Clima adhesive tapes can be applied on to dry VISCONN
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	Air Barrier Systems Passed air leakage <0.02 L/(s·m ²) @75 Pa (ASTM E2357)
NFPA285	Several approved assemblies available



APPLICATION

VISCONN liquid-applied airbarrier can be applied as a spray or using a brush for both interior or exterior use. Apply to walls, ceilings and floor surfaces, such as non-plastered masonry, CMU, wood sheathing, fiberboard, joists or joist bays. It simplifies air sealing of difficult junctions such as windows, roofs, walls, ceilings and floors connections.

- Can also be used for bonding/stabilizing substrates in the case of renovations.
- The humidity-variable diffusion resistance of this product means that it can be used on the interior and exterior of building components.

VISCONN is a high-quality, water-based acrylic dispersion paste 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 Pro Clima membranes, WRB, roof underlayments and membranes made of aluminium and paper.

SUBSTRATES

Before application, check whether the substrate is suitable for a liquid film. It may be necessary to apply a number of coats in the case of uneven or rough surfaces. Gaps (pieces broken out of the substrate) or significant unevenness may need to be closed using CONTEGA SOLIDO tape or VISCONN FIBER before application. Substrates should be cleaned.

Application temperature above +5 °C (+40 °F) substrate and air temperature. There must be no water-repellent substances (e.g. grease or silicone) on materials to be coated. Substrates must be sufficiently dry and stable. Application to moist, but not wet substrates is possible. The liquid film adheres to all standard construction materials, e.g. mineral substrates such as concrete and masonry (e.g. bricks, aerated concrete). It can be acceptable to apply to lightly sandy/fraying concrete, mortar or plaster substrates. Can also be applied to all pro clima membranes, membranes made of PE, PA, PP and aluminium, to planed and painted wood, wood-based panels (OSB, plywood, MDF and Gutex wood fiber board panels), non-rusting metal substrates and hard plastics (windows, plumbing, etc).

Materials/surfaces beside the areas to be coated should be protected; this applies particularly to visible surfaces such as wood, glass, ceramics, clinker bricks, natural stone, paint/varnish and metal. Wash away any splashes immediately with copious amounts of water. Do not wait until they have hardened. Clean tools with water immediately after use. Collect the water used for washing and dispose of it in accordance with local regulations

Great and fast application to wood fiber board (Gutex) panels' butt joints in corners or valley (also possible with AEROFIXX tool)

Expansion joints cannot be sealed if the seasonal movement is not accounted for properly, inquiry at technical@foursevenfive.com when in doubt. Transitions such as floor-wall joints are to be coated with the minimum layer thickness of 20 wet mil /0.5mm /500 µm. Thickness has to be consistent along their entire lengths of sealed area.

Do not use VISCONN to adhere overlaps of ProClima membrane (INTELLO, MENTO) - use TESCON VANA instead.

GENERAL CONDITIONS

Cracks that are wider than 3 mm (1/8") must be covered with CONTEGA SOLIDO, filled with VISCONN FIBER or parged. The best coverage is achieved by spraying horizontally and then vertically. Complete airtightness can only be achieved with a consistently applied 20 wet mils of VISCONN (0.5mm/500 µm thickness). Verify with a 475 Depth gage.

Airless Application

Airless sprayer with capacity of at least 1.8 litres/min (60 oz/min). Recommended nozzles sizes: 3-17, 3-19, and 3-25. 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. For details use a 210 nozzle, Use 3-25 nozzle for large surface applications. Set pressure for a uniform spray finish that is free of streaks. If streaks are visible next to spray area, increase the pressure. If this does not help, clean or replace the filter in the gun. The optimal pressure is between 80 - 200 bar (1160 – 2900 psi), depending on the nozzle used. A mesh size of 60 is recommended for the gun filter. Stir the material before spraying it. Flush the airless sprayer once with clear water and then fill line completely before putting it into service.

Layer thickness and drying

Spraying should be carried out at a distance of approx. 20 cm (8") from the substrate. Reliably airtightness 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 3 mm ;1/8") in the substrate 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 20mm (3/4") 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 remove. 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.

Application with a brush

All VISCONN products can be applied using a brush. Recommend is a brush ≥ 50 mm (2") wide. Check the minimum layer thickness of 20 wet mils/0.5mm/500 µm using a measuring gauge.

Storage

If this product has been in storage for a longer 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.

