

Blueskin[®] Breather

Self-Adhesive Vapour Permeable Transition Air Barrier Membrane

U.S. Patent: 6,901,712

Physical Properties

-Colour	White	-Water Vapour Permeance (ASTM E96)	<u>Membrane:</u> 2115 ng/Pa·m ² ·s (37 Perms)														
-Thickness	0.43 mm (17 mils)		<u>Membrane with Aquatac Primer:</u> 450 ng/Pa·m ² ·s (8 perms)														
-Application Temp	Minimum +5°C																
-Service Temp	-40°C to 70°C																
-Elongation (ASTM D412)	65%	-Air Permeability (ASTM E283)	<table border="1"> <thead> <tr> <th rowspan="2">Pressure (Pa)</th> <th colspan="2">Air Leakage Rate</th> </tr> <tr> <th>(lbs/ft²)</th> <th>(L/s·m²) (CFM/ft²)</th> </tr> </thead> <tbody> <tr> <td>75</td> <td>(1.6)</td> <td>0.010 (0.002)</td> </tr> <tr> <td>250</td> <td>(5.2)</td> <td>0.031 (0.006)</td> </tr> <tr> <td>500</td> <td>(10.5)</td> <td>0.063 (0.012)</td> </tr> </tbody> </table>	Pressure (Pa)	Air Leakage Rate		(lbs/ft ²)	(L/s·m ²) (CFM/ft ²)	75	(1.6)	0.010 (0.002)	250	(5.2)	0.031 (0.006)	500	(10.5)	0.063 (0.012)
Pressure (Pa)	Air Leakage Rate																
	(lbs/ft ²)	(L/s·m ²) (CFM/ft ²)															
75	(1.6)	0.010 (0.002)															
250	(5.2)	0.031 (0.006)															
500	(10.5)	0.063 (0.012)															
-Tensile Strength (ASTM D412)	md 7.4 MPa (1074 psi) xd 4.6 MPa (665 psi)	Applied to a concrete block wall over Aquatac Primer incorporating a lap joint															
-Puncture Resistance (ASTM E154)	133 N (30 lbf)	-Resistance to Sustained Wind Load	Resists a suction pressure of 1000 Pa (20.9 lbs/ft ²) maintained for 1 hour with no increase in air leakage rate when tested at 75 Pa (1.6 lbs/ft ²)														
-Low Temperature Flexibility @ -40°C (ASTM D3111)	Pass																
-Hydrostatic Water Resistance (ASTM D751 Procedure A)	122 kPa (18 psi)																
-Watertightness (CGSB 37.58-M86)	Pass																

Packaging

-Thickness	0.43 mm (17 mils)	
-Roll Length	30.4 m (100 ft)	
-Roll Width	914 mm (36") 300 mm (12"), 225mm (9"), 150mm (6"), 75 mm (3")	
-Top Surface	75 mm (3")	
-Bottom Surface	Microporous film Siliconized release paper	

Description

Blueskin[®] Breather is a self-adhering membrane consisting of a microporous film laminate, backed with a specially applied adhesive, which allows water vapour to permeate through while acting as a barrier to air and bulk water.

Features

- High water vapour permeance allows wall assembly to "breathe".
- Resists hydrostatic water pressure and wind driven rain.
- Excellent adhesion to prepared substrates of concrete, concrete block, metal, drywall, plywood and OSB.
- Self-adhesive system prevents lateral air movement and eliminates the need for mechanical fasteners.
- Bridges crack and joints in substrates.
- Light in weight to provide ease of application.

Uses

Blueskin[®] Breather is typically for use as a vapour permeable, self-adhered transition sheet air barrier membrane in conjunction with **Bakor Vapour Permeable Liquid Membranes** such as **Air-Bloc 07** and **Air-Bloc 31**. **Blueskin[®] Breather** can also be used as a self-adhered window flashing membrane or to tape the joints between sheathing and insulation panels.

Limitations

Not designed for permanent exposure. Good practice calls for covering as soon as possible. Not to be used in direct contact with flexible PVC membranes or gaskets.

Surface Preparation

Acceptable substrates are precast concrete, cast-in-place concrete, concrete block, steel, aluminium mill finish, anodized aluminium, galvanised metal, plywood, OSB, gypsum board including Dens-Glass Gold and rigid insulation panels.

All surfaces to receive **Blueskin® Breather** must be clean of oil, dust and excessive mortar. Strike masonry joints flush.

Concrete surfaces must be smooth and without large voids, spalled areas or sharp protrusions. Concrete must be cured a minimum of 7 days and must be dry before **Blueskin® Breather** is applied. Where curing compounds are used, they must be of the permanent type, without oil or wax and should be recommended by the manufacturer as being suitable to receive subsequent adhesives and coatings.

Better adhesion on Oriented Strand Board (OSB) is obtained by installing **Blueskin® Breather** to the smooth side of the OSB panel.

Metal surfaces do not require priming. All other surfaces to receive **Blueskin® Breather** must be primed with **Aquatac™ Primer**, applied by roller, brush or spray equipment at the rate of 6 to 12 m² per liter (250 to 500 ft²/gal US) and allowed to dry to a tacky film before applying the membrane. Ensure that all primed surfaces receive **Blueskin® Breather** the same day.

Application

Refer to **Bakor Vapour Permeable Guide Specifications for Air-Bloc 07 and Air-Bloc 31** for detailed application information. Install **Blueskin® Breather** at transition areas prior to the installation of a liquid applied vapour permeable membrane.

Blueskin® Breather must be lapped a minimum of 50 mm (2") on both side and end laps. Position membrane for alignment; remove release paper and press firmly in place. When membrane is entirely in place, roll membrane including seams with a counter top roller to ensure full contact. When using membrane with brick ties, position membrane, press in place and cut for ties or projections. Seal around any openings and at leading edge at the end of the day's work with any of the following: **Air-Bloc 07, Air-Bloc 31, Air-Bloc 33, Air-Bloc 21, Bakor 230-21, Polybitume® 570-05, Blueskin® Breather, HE925 BES Sealant**. Membrane applied to the underside of the substrate (i.e. ceilings) requires mechanical fastening through treated wood or galvanized metal strapping or by having the insulation mechanically fastened. Fastening must take place immediately after installation of the membrane. Space strapping on 450 mm (18") centers, running perpendicular to the side laps.

Detail work must be carefully carried out to ensure continuous air tightness of the membrane around all window and door frames and fasteners. It is recommended that mechanical attachment be made at window and door frames, or a properly designed sealant joint be provided.

For liquid applied vapour permeable air barrier systems, overlap **Blueskin® Breather** transition a minimum of 25mm.