

# Blueskin<sup>®</sup> SA

Self-Adhesive Air/Vapour Barrier Membrane

## **Physical Properties**

-Colour	Blue	-Low Temperature Flexibility @ -30°C	Pass
-Thickness	1.0 mm (40 mils)	(CGSB 37-GP-56M)	
-Application Temp	Minimum + 5°C	-Water Vapour Transmission	49 ng/Pa.s.m <sup>2</sup>
-Service Temp	Minus 40°C to 70°C	(ASTM E96) water method	0.86 perms
-Elongation	200% minimum		
(ASTM D412-modified)		(ASTM E96) desiccant method	2 ng/Pa.s.m <sup>2</sup>
-Tensile Strength	3.4 MPa minimum		0.03 perms
(Membrane)		-Lap Peel Strength @ 4°C (39.2°F)	> 4378.4 N/m
(ASTM D412- modified)		(ASTM D903 180° bend)	(25.0 lbf/in)
-Tensile Strength (Film)	40 MPa minimum	-Moisture absorption	0.2%
(ASTM D882)		(ASTM D570)	
-Minimum Puncture	178 N	-Air Leakage @ 75 Pa	0.003 L/s.m <sup>2</sup>
Resistance – Membrane		(ASTM E283-91)	
(ASTM E154)		-Air Leakage After 3000 Pa Test	No change
-Watertightness	Pass	(ASTM E330-90)	
(CAN/CGSB-37.58-M86)		-Assembly Air Leakage @ 75 Pa	0.005 L/s.m <sup>2</sup>
-Nail Sealability	Pass	(ASTM E-2357)	
(ASTM D1970)			

## Packaging

-Thickness	1.0 mm (40 mils)	-Gross Coverages	
	· · · · · ·	9	$222 - \frac{1}{2} (222 - \frac{1}{2})$
-Roll length	22.86 m (75 ft.)	914 mm (36″)	20.9 m <sup>2</sup> (225 ft <sup>2</sup> )
-Roll width	1219 mm (48″)	457 mm (18″)	10.5 m <sup>2</sup> (112.5 ft <sup>2</sup> )
	914 mm (36"), 457 mm	-Net Coverages*	
	(18")	914 mm (36″)	19.7 m <sup>2</sup> (212 ft <sup>2</sup> )
	300 mm (12"), 225 mm (9")	457 mm (18")	9.3 m <sup>2</sup> (100 ft <sup>2</sup> )
-Top Surface	150 mm (6"), 100 mm (4")		
	Blue film	*Based on 50 mm (2") laps	
-Bottom Surface		both sides and end.	
	Siliconized Release Film		

## Description

**Blueskin<sup>®</sup> SA** is a self-adhering membrane consisting of an SBS rubberized asphalt compound which is integrally laminated to a blue engineered thermoplastic film. **Blueskin<sup>®</sup> SA** is specifically designed to be self-adhered to a prepared substrate, providing an air/vapour/water barrier.

#### Features

- SBS modified membrane, flexible at low temperatures
- Impermeable to air, moisture vapour and water
- Assemblies of Blueskin SA, primer and sealant meet ASTM E-2357 air barrier performance standard
- Thickness controlled at point of manufacture
- Excellent adhesion to prepared substrates of concrete, concrete block, primed steel, aluminum mill finish, anodized aluminum, galvanized metal, gypsum board and plywood
- Excellent compatibility with most Bakor adhesives and liquid air barrier membranes
- Self-gasketing when penetrated and under compression with self-tapping screws

## Storage

Store rolls on end, on original pallets or elevated platform. Protect from weather or store in an enclosed area not subject to heat over 40°C or -10°C. Double stacked pallets are not recommended. If double stacking is necessary, use a plywood sheet to distribute the load.

## 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/vinyl membranes or gaskets. Some sealants may discolor if in contact with the asphalt compound or may soften the asphalt compound. Contact sealant manufacturer for more information.

## Uses

**Blueskin<sup>®</sup> SA** is designed for use as a self-adhered sheet air and vapour barrier. Its principal application is on walls of either masonry, concrete or gypsum board. It can also be used as a transition sheet in conjunction with **Bakor Liquid Membranes** where greater movement is anticipated, due to its high strength. **Blueskin<sup>®</sup> SA** is also used for tying into metal on curtain walls, windows and door frames.

## Preparation

Acceptable substrates are precast concrete, cast-in place concrete, concrete block, primed steel, aluminum mill finish, anodized aluminum, galvanized metal, gypsum board including DensGlass Gold<sup>®</sup>.

All surfaces to receive **Blueskin<sup>®</sup> SA** must be clean of oil, dust and excess 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 14 days and must be dry before **Blueskin<sup>®</sup> SA** is applied. Where curing compounds are used they must be clear resin based, without oil, wax or pigments. For best adhesion on Oriented Strand Board (OSB), install **Blueskin<sup>®</sup> SA** on smooth of OSB panel.

All surfaces to receive **Blueskin<sup>®</sup> SA** must be primed with **Blueskin<sup>®</sup> Primer**, applied by lambs wool roller, brush or spray equipment at the rate of 1 litre per 2-6 m<sup>2</sup> depending on porosity and texture of surface and allowed to dry for 30 minutes before **Blueskin<sup>®</sup> SA** is applied. Ensure that all primed surfaces receive **Blueskin<sup>®</sup> SA** in the same day. Alternatively, prime with **Aquatac<sup>™</sup>**. Allow to dry to a tacky film.

## Application

Refer to **Blueskin<sup>®</sup> SA** Guide Specification for detailed application information. Material should be conditioned at room temperature for ease of application.

**Blueskin**<sup>®</sup> **SA** must be lapped a minimum of 50 mm on both sides and end laps. Position **Blueskin**<sup>®</sup> **SA** for alignment, remove protective film and press firmly in place. When **Blueskin**<sup>®</sup> **SA** is entirely in place, roll membrane including seams with a counter top roller to ensure full contact. When using **Blueskin**<sup>®</sup> **SA** with brick ties, position **Blueskin**<sup>®</sup> **SA**, 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 **Air-Bloc 21**, **Air-Bloc 21 FR**, **Bakor 230-21**, **POLYBITUME**<sup>®</sup> **570-05 or HE925 BES Sealant**. **Blueskin**<sup>®</sup> **SA** applied to the underside of the substrate (i.e. ceilings) requires mechanical fastening through wood or galvanized metal strapping or have insulation mechanically fastened. Fastening must take place immediately after installation of **Blueskin**<sup>®</sup> **SA**. Space strapping on 450 mm centres, running perpendicular to the side laps.

Detail work must be carefully carried out to ensure continuous air tightness of **Blueskin<sup>®</sup> SA**. It is recommended that mechanical attachment be made to all window and door frames, or a properly designed sealant joint be provided.

#### **Insulation Application over Membrane**

The use of mechanical fasteners through **Blueskin<sup>®</sup> SA** along changes in plane, such as inside corners, may be required by some insulation manufacturers. Consult insulation manufacturer prior to installation of insulation.

**Insulation Clips:** Insulation clips should be mechanically fastened through **Blueskin<sup>®</sup> SA** into the substrate with a self-tapping screw. Apply number of insulation clips as recommended by the insulation manufacturer.

**Insulation Adhesive: Bakor 230-21 Rigid Insulation Adhesive** should be applied to insulation boards in a serpentine pattern to restrict movement of air behind the insulation. Alternatively, a full coat notched trowel application of **Bakor 230-21 Rigid Insulation Adhesive** may be applied to the back of the board. Press insulation firmly in place. **Air-Bloc 21** or **Air-Bloc 21 FR** are also acceptable as adhesives.