

# SA Flex Vapour Barrier – SA-105

Technical Data Sheet



## Product Description

A Flex Vapour Barrier is a Styrene-Butadiene-Styrene (SBS) modified metal lined membrane design to stop water vapour from entering the roof system causing condensation.

## Features:

- ✓ High-Tech formulation
  - The SA Flex Vapour Barrier has a high percentage of SBS rubber, high-strength fibre-glass reinforcement and monolithic aluminium foil throughout.
- ✓ Ultimate vapour barrier
  - The aluminium foil placed within the membrane offers the ultimate in vapour blocking and therefore condensation building up in the roofing system.
- ✓ Superior strength
  - The SA Flex Vapour Barrier membrane is reinforced with a high-strength fibreglass scrim. The superior strength provided by this reinforcement resists the movement created by today's modern buildings and has excellent dimensional stability.
- ✓ Advanced rubber technology
  - When the SBS rubber is properly dispersed throughout the high penetration asphalt, the rubber provides increased thermal shock resistance, UV protection, heat resistance, elongation, and low temperature flexibility. To ensure proper dispersion, a special high shear mixer is used in manufacturing.

## Uses

SA Flex Vapour Barrier is used as a VCL layer for any of Garland's torch-applied or self-adhesive membranes where you wish to prevent water vapour from entering the roof system. It is fully compatible with SBS modified membranes.

## Application Instructions

The substrate should be clean, dry, free of debris and dust. Porous materials such as concrete, wood, brick etc. should be primed with Garland's Garla-Prime bituminous primer prior to application. During low temperatures or on particularly difficult substrates the area must be first primed with Garland's SA Contact Primer prior to application. It is not necessary to use a primer on foil face insulation board. If in doubt you must consult your Garland Regional Technical Representative or contact the technical department.

Position the roll in place and remove the silicone-coated film from the underside of the membrane, simply overlap the sheets at the side by at least 10 cm and press with a weighted roller to ensure good adhesion. If necessary use hot-air welding equipment to ensure a watertight seal. The head laps should be hot-air welded and overlapped by at least 150 mm.

**Note** - SA Flex Carrier Membrane should not be applied in temperatures below 5°C. At temperatures below 10°C careful attention needs to be paid to ensure a good bond of the self-adhesive agent to the substrate and the SA Contact Primer must be used in these instances.

## Technical Data

Reinforcement type:	High strength fibreglass
Compound type:	Bitumen modified with thermoplastic rubber (SBS).
Surface finishing:	Upper side: Polypropylene textured film.
Lower side:	Silicone release film with self-adhesive elastomeric compound



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Properties	Norms	Unit	Value	Tolerance
<b>Physical Data</b>				
Type of compound			SBS	
Type of reinforcement			Fibreglass	
Finish upper face			Polypropylene textured film	
Finish lower face			Silicone release film with self-adhesive elastomeric compound	
Length	EN 1848-1	m	10	±1%
Width	EN 1848-1	m	1	±1%
Thickness	EN 1849-1	mm	3	±5%
<b>Mechanical Data</b>				
Watertightness	EN 1928	kPa	60	≥
Cold temperature flexibility	EN 1109	°C	-25	≤
Flow resistance	EN 1110	°C	100	≤
Tensile strength L	EN 12311-1	N/5 cm	1400	±20%
Tensile strength T	EN 12311-1	N/5 cm	1400	±20%
Elongation at break L/T	EN12311-1	%	4/4	±15 ABS
Nail tear strength L	EN12310-1	N	200	±30%
Nail tear strength T	EN12310-1	N	200	±30%
Static puncture resistance	EN 12730	kg	15	≥
Dynamic puncture resistance	EN 12691	mm	900	≥
<b>Fire Performance</b>				
Fire resistance	EN 13501-5		F ROOF	
Fire reaction	EN 13501-1		E	
<b>Application Data</b>				
Minimum application temp		°C	5	
Minimum slope		%	1.5	

If you require any further information please contact your local Garland Technical Manager.



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## Recommendations

The rolls shall be stored in an upright position, preferably indoors in a dry and ventilated conditions and shall be protected from extreme cold, temperature should be above 0°C, to avoid possible deformation and or embrittlement of the same drainage system.

The rolls shall be stored in their original packaging and not stacked more than two pallets high, using appropriate wooden spacers.

The materials on stock should be rotated following a first in first out rotation.

The rolls shall be kept in a warm or heated storage area during application, should the workability of the material deteriorate or become stiff and difficult to install during application, these should be returned to the heated storage area and substituted with new rolls.

The rolls that are temporarily stored on the roof before application, shall be kept elevated by being left on their own pallets and shall be covered and protected from the weather.

The application surface must be smooth, free of moisture, ponding water and dust, the area must be provided with an adequate drainage system (minimum slope shall be 1.5%).

The application surface shall be primed with a bituminous based product and allowed to dry prior to application, do not apply in adverse weather conditions or in the presence of imminent rain.

In case of application on vertical (higher than 2 meters) or considerable slopes, appropriate mechanical fixings should be taken into consideration.

The minimum application temperature is + 5°C.

The material without mineral self-protection and used as a top layer (cap sheet) can be painted with an aluminium coating to improve and extend the performance and life expectancy, the material should be allowed to oxidize approx. 3-6 months before being coated.

The pallets on which the rolls are packaged are intended for normal warehouse use.

\* It is impossible to guarantee the colour uniformity on self protected mineral membranes as the suppliers of the same do not provide any also. All self protected mineral finished membranes undergo colour variations over time due to the exposure to atmospheric agents. Normally these variations in time will gradually become uniform



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