

StressPly Flex SA SA-106/SA-103

Technical Data Sheet



since 1895

Product Description

StressPly Flex SA is a SBS polymer modified self-adhesive roofing membrane. This membrane is reinforced with nonwoven composite polyester fabric stabilised with fibreglass which provides high mechanical resistance and high dimensional stability. The bottom face of the membrane is coated with a self-adhesive elastomeric compound which adheres via pressure to the laying surface. This face is protected by a silicone release film which is removed during the application process. The upper face of the membrane is protected by mineral slates excluding one side lap, which is covered by a strip of silicone release film.

StressPly Flex SA is designed to offer the security of traditional torch applied membrane at critical areas in the contraction of the waterproofing flat roofs. The laps are one such critical areas and these can be either torch sealed or hot air welded to guarantee watertightness. The bottom face of the side lap is covered with a polypropylene textured fabric allowing for a partial self-adhesive bond of the membrane, this feature allows flame to be used to seal the laps and not risk burning heat sensitive insulation board or other materials.

Features:

- ✓ The Best Rubber Technology
 - StressPly Flex SA has been formulated using only the highest grade of SBS rubber. The StressPly Flex SA SBS compound ensures superior low temperature flexibility. Adequate mixing provides proper phase inversion, which optimises the rubber's performance.
- ✓ Security in Multi-Ply Applications
 - StressPly Flex SA is the top component of a multi-ply roofing system. It combines the inherent advantages and proven performance of multi-ply protection with the strength, flexibility and elongation of elastomeric systems.
- ✓ Safety
 - The StressPly Flex SA membrane is designed to be applied without using a naked flame and is therefore inherently safer than traditional torch applied membranes where there is a risk of causing fire within sensitive roof details.

Uses

StressPly Flex SA should be used in conjunction with Garland's SA Flex Base Sheet as a two layer waterproofing system. This system can be applied over wood, concrete or foil faced insulation board.

Application Instructions

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 8 cm and 2 cm beyond the non-slatted area on the upper surface. Ensure to press the overlap area very carefully so that the self-adhesive 2 cm strip on the lower face is met, this will act as a flame barrier seal for the subsequent hot air sealing method of the remaining 6 cm. By doing this the thermal insulation or underlying substrate is not damaged by the high temperatures of the hot air welder or flame. The head laps should be hot air welded and overlapped by at least 15 cm.

Technical Data

Reinforcement type:	Reinforced and stabilised non-woven polyester mat
Compound type:	Bitumen modified with thermoplastic rubber (SBS)
Surface finishing:	Upper side: coloured slate granules
Lower side:	Silicone release film



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Properties	Norms	Unit	Value	Tolerance
Physical Data				
Type of compound			SBS	
Type of reinforcement			Non-woven polyester mat	
Finish upper face			Slate granules	
Finish lower face			Silicone release film	
Length	EN 1848-1	m	10	±1%
Width	EN 1848-1	m	1	±1%
Thickness	EN 1849-1	mm	4.2	±10%
Weight	EN 1849-1	kg/m ²	4.0	±10%
Mechanical Data				
Watertightness	EN 1928	kPa	60	≥
Cold temperature flexibility	EN 1109	°C	-25	≤
Visible defects	EN 1850-1		NO	
Flow resistance	EN 1110	°C	100	≤
Tensile strength L/T	EN 12311-1	N/50mm	700/500	±20%
Shear resistance of joint L/T	EN 12317-1	N/50mm	600/400	±20N
Elongation at break L/T	EN12311-1	%	40/45	±15 ABS
Nail tear strength L/T	EN12310-1	N	200/200	±10%
Dimensional stability	EN 1107-1	N	-0.3/0.1	≤
Static puncture resistance	EN 12730	kg	15	≥
Dynamic puncture resistance	EN 12691	mm	1250	≥
Flow resistance at high temp	EN 1110	°C	100	
Softening point of bitumen	ASTM D36	°C	120	
Fire Performance				
Fire resistance	EN 13501-5		B _{ROOF(t4)}	
Fire reaction	EN 13501-1		E	
Application Data				
Minimum application temp		°C	5	
Minimum slope		%	1.5	

Note - StressPly Flex SA 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 underlying surface or membrane. This may require gentle heating of the membrane using heating appliances or a very light flame if necessary.

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



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