StressPly Flex Plus *4-108/4-111*

Technical Data Sheet

Product Description

StressPly Flex Plus is a high strength, polyester reinforced, SBS modified roofing membrane designed to be used in torching applications. The membrane offers not only high strength, but also a high percentage of quality blended Styrene- Butadiene-Styrene (SBS) rubber compound. StressPly Flex Plus incorporates a burn-off PP film backer to indicate when proper heat is obtained during application.

Features:

- ✓ The Best Rubber Technology
  - StressPly Flex Plus has been formulated using only the highest grade of SBS rubber. The StressPly Flex Plus 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 Plus 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. This unique combination minimises dependance on perfect workmanship, contact adhesive seaming, etc.
- ✓ Superior strength
  - The StressPly Flex Plus membrane is reinforced with high strength polyester. The superior strength provided by the polyester scrim resists the movement created by today's modern buildings. In addition, the polyester scrim in StressPly Flex Plus provides tensile strength in excess of 1000 Newtons in the longitudinal direction. This translates to long-term resistance to splits and tears in the completed StressPly Flex Plus roof system.

Uses

StressPly Flex Plus can be used in conjunction with other Garland High Performance Roofing products and underlays. Specifications for torch applied roofing systems are available. It can also be used to repair splits; cracks or other deteriorated areas of existing asphalt based roofing systems.

Application Instructions

The laying deck shall be clean, smooth and dry. For a better adhesion it may be previously treated either with Garland Garla-Prime. The membrane is then laid by melting the lower side with light propane gas flame. Edges shall be overlapped, always by torch, by at least 75mm on the sides and 150mm at the head laps so that waterproofing integrity is maintained.

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:	PP film
Laying method:	For lower side finishing with polymeric films: Propane-gas light flame

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

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Issue date: 28/10/2025
Revision: V1.0

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Properties	Norms	Unit	Value	Tolerance
Physical Data				
Type of compound			SBS	
Type of reinforcement			Reinforced polyester mat	
Finish upper face			Slate granules	
Finish lower face			PP film	
Length	EN 1848-1	m	5	±1%
Width	EN 1848-1	m	1	±1%
Thickness	EN 1849-1	mm	5.2	±10%
Mechanical Data				
Water vapour transmission	EN 1931	μ = MDV	20,000	
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	1000/800	±20%
Shear resistance of joint L/T	EN 12317-1	N/50mm	800/700	±20%
Elongation at break L/T	EN12311-1	%	40/40	±15 ABS
Nail tear strength L/T	EN12310-1	N	450/450	±10%
Dimensional stability	EN 1107-1	%	-0.3/0.3	
Static puncture resistance	EN 12730	kg	20	≥
Dynamic puncture resistance	EN 12691	mm	1000	≥
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		NPD	
Application Data				
Minimum application temp		°C	5	
Minimum slope		%	1.5	

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