StressPly Flex *4-110/4-102*

Technical Data Sheet

Product Description

StressPly Flex 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 incorporates a burn-off PP film backer to indicate when proper heat is obtained during application.

Features:

- ✓ Security in multi-ply applications
  - StressPly Flex 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 dependence on perfect workmanship, contact adhesive seaming, etc.
- ✓ Superior strength
  - The StressPly Flex 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 provides tensile strength in excess of 1000 Newtons in the machine direction. This translates to long-term resistance to splits and tears in the completed StressPly Flex roof system.
- ✓ Advanced rubber technology
  - StressPly Flex has been formulated using only the highest grade of SBS rubber. The StressPly Flex SBS compound ensures superior low temperature flexibility. Adequate mixing provides proper phase inversion, which optimises the rubber's performance.

Uses

StressPly Flex 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 100mm at the head laps so that waterproofing integrity is maintained. For further application information please refer to specific specifications provided by your Garland Technical Manager.

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 (Grey or Brown)
Lower side:	PP film
Laying method:	For lower side finishing with polymeric films: Propane-gas light flame

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since 1895

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	7.5	±1%
Width	EN 1848-1	m	1	±1%
Thickness	EN 1849-1	mm	4.6	±5%
Mechanical Data				
Watertightness	EN 1928	kPa	100	≥
Cold temperature flexibility	EN 1109	°C	-25	≤
Visible defects	EN 1850-1		NO	
Flow resistance	EN 1110	°C	100	≤
Tensile strength L	EN 12311-1	N/5 cm	1000	±20%
Tensile strength T	EN 12311-1	N/5 cm	800	±20%
Elongation at break L	EN12311-1	%	40	±15 ABS
Elongation at break T	EN 12311-1	%	40	±15 ABS
Nail tear strength L	EN12310-1	N	450	±10%
Nail tear strength T	EN12310-1	N	450	±10%
Dimensional stability	EN 1107-1	%	-0.3/0.3	
Static puncture resistance	EN 12730	kg	20	≥
Shear strength joints	EN 12317-1	N/5 cm	800 / 700	±20%
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	

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

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