



StressPly Flex

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 PE film backer to indicate when proper heat is obtained during application.

FEATURES AND BENEFITS

The Best 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.

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 and cross machine direction. This translates to long-term resistance to splits and tears in the completed StressPly Flex roof system.

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 150mm at the head laps so that waterproofing integrity is maintained.

Refer to specific specifications provided by your Regional Technical Manager.

TECHNICAL DATA

Reinforcement type:

Reinforced and stabilized non-woven polyester mat.

Compound type:

Bitumen modified with thermoplastic rubber (SBS).

Surface finishing:

Upper side: coloured slate granules.

Lower side: PE film.

Laying method:

For lower side finishing with polymeric films: Propane-gas light flame

StressPly Flex

Characteristic	Test Method	Expression of result	Value	Units	Tolerance
Length	EN 1848-1	MLV	7.5	m	
Width	EN 1848-1	MLV	1	m	
Thickness	EN 1849-1	MDV	4.2	mm	± 10%
Weight	EN 1849-1	MLV	5.5	kg/m ²	± 10%
Watertightness	EN 1928:2000 Method B	Pass	100	kPa	
External fire performance	EN 13501-5	MDV	F _{ROOF}	-	-
Reaction to fire	EN 13501-1	EN 13501-1	Euroclass E	-	-
Peel resistance of joint	EN 12316-1	MDV	-	N/50 mm	± 20 N
Shear resistance of joint	EN 12317-1	MDV	250/120	N/50 mm	± 20 %
Maximum tensile force	EN 12311-1	MDV	1000/1000	N/50 mm	± 20 %
Elongation	EN 12311-1	MDV	40/40	%	± 15 %
Resistance to impact	EN 12691 Method A	MLV	1000	mm	
Resistance to static loading	EN 12730	MLV	20	Kg	
Resistance to tearing (nail shank)	EN 12310-1	MDV	450	N	± 10 %
Dimensional stability	EN 1107-1	MLV	-0.3/0.3	%	
Flexibility at low temperature	EN 1109	MLV	-25	°C	
Flow resistance at elevated temperature	EN 1110	MLV	100	°C	
Softening point of bitumen	ASTM D36	MDV	120	°C	
Water vapour transmission properties	EN 1931	μ = MDV or 20,000	20,000	-	

For specific application recommendations, please contact your regional Garland Technical Manager or the Garland Technical Department.

