

StressPly Signature

PRODUCT DESCRIPTION

StressPly Signature is a superior performing modified bitumen membrane with dual-compound technology. The middle and upper surface is formulated with APP modifiers offering excellent UV resistance, durable impact and marking capabilities. The lower surface is formulated with SBS modifiers which allows for ease of application with low-melt properties and extreme cold bending flexibility. The membrane has superior tensile strength, offering in excess of 1200 N/50mm in the machine direction, utilising a composite polyester/fibreglass reinforcement. The cold bending performance of the membrane is the highest we currently offer and performs to the current standards down to -30 degrees Celsius.

MATERIAL

APP/SBS modified bitumen reinforced with a composite polyester/fibreglass scrim.

PRODUCT ADVANTAGES

- Permanently weather-resistant
- High UV resistance
- Superior strength
- Extreme low temperature flexibility
- Quick and easy installation due to low-melt SBS lower surface
- Non-marking and durable during install

Modifier Technology

StressPly Signature has been formulated using only the highest grade of SBS and APP modifiers. The StressPly Signature compound ensures superior low temperature flexibility and UV resistance for long-term performance.

Security in Multi-Ply Application

StressPly Signature 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 maximises roof performance and long-term waterproofing capability.

Superior Strength

The StressPly Signature membrane is reinforced with a composite high strength polyester and fibreglass scrim. This superior strength resists the movement created by today's modern buildings. In addition, the composite scrim in StressPly Signature provides tensile strength in excess of 1200 Newtons in the machine direction. This translates to long-term resistance to splits and tears in the completed StressPly Signature roofing system.

USES

Used as part of a multi-ply modified bituminous waterproofing system for flat roof installation. StressPly Signature can be used in conjunction with other Garland high performance roofing membranes and underlays.



ROLL SIZE & PACKAGING

5 x 1 m - 30 rolls per pallet - 30 kg/roll

COLOURS

Charcoal, Brown, Green

STORAGE

Rolls should be stored up-right in cool conditions and out of direct sunlight. Never lay the rolls on their side.

APPLICATION INSTRUCTIONS

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

Refer to specific specifications provided by your Regional Technical Manager.

TECHNICAL DATA

Reinforcement type:

Composite polyester/fibreglass mat.

Compound type:

Bitumen modified with styrene-butadiene-styrene rubber (SBS) and atactic polypropylene (APP).

Surface finishing:

Upper side: coloured slate granules.
Lower side: polyethylene film.

Laying method:

Propane-gas lit flame.

Characteristic	Test Method	Expression of result	Value	Units	Tolerance
Compound type			SBS/APP		
Reinforcement type			Composite		
Upper surface finish			Mineral Slate		
Lower surface finish			PE Film		
Length	EN 1848-1	MLV	5	m	
Width	EN 1848-1	MLV	1	m	
Thickness	EN 1849-1	MDV	5.5	mm	± 10%
Weight	EN 1849-1	MLV	6.0	kg/m ²	± 10%
Watertightness	EN 1928:2000 Method B	Pass	60	kPa	
Reaction to fire	EN 13501-1	EN 13501-1	F	-	
Resistance to fire	EN 13501-5	MDV	F ROOF		
Shear resistance of joint	EN 12317-1	MDV	1100/900	N/50 mm	± 20 %
Maximum tensile force L/T	EN 12311-1	MDV	1200/1000	N/50 mm	± 20 %
Elongation at break L/T	EN 12311-1	MDV	40/40	%	± 10 %
Resistance to impact	EN 12691 Method A	MLV	1750	mm	≥
Resistance to static loading	EN 12730	MLV	25	Kg	≥
Resistance to tearing (nail shank)	EN 12310-1	MDV	250/250	N	± 10 %
Dimensional stability	EN 1107-1	MLV	-0.3/0.3	%	≤
Flexibility at low temperature	EN 1109	MLV	-30	°C	
Flow resistance at elevated temperature	EN 1110	MLV	120	°C	
Loss of mineral	EN 12039	MDV	30	%	≤
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.

