

OVERVIEW

FlexBase Plus 80 is an 80-mil membrane with a fiberglass/polyester reinforcement sandwiched by Styrene-Butadiene-Styrene (SBS) in a high penetration index asphalt mixture. The result is a high strength, puncture and fatigue resistant rubber modified base sheet designed for application as the interply waterproofing and reinforcement layer of a modified or built-up roof system. It provides long-term performance in all types of new or retrofit construction uses.

FlexBase Plus 80 can be used as the initial underlayment for any Garland HPR® roof system, used in conjunction with Weatherking® and Green-Lock® for a cold-applied system or used with hot asphalt or Garlastic® as a multi-ply BUR. It can also be used as a base flashing or interply in Garland's for hot- or cold-applied systems.

Advanced Rubber Technology – When the SBS rubber in the FlexBase Plus 80 sheet is properly dispersed throughout the high penetration asphalt, the rubber provides increased thermal shock resistance, UV protection, heat resistance, elongation, and low temperature flexibility. To ensure proper dispersion, a special high shear mixer is used in manufacturing.

Exceptional Strength – FlexBase Plus 80 is reinforced with a fiberglass/polyester scrim. This unique scrim provides FlexBase Plus 80 with tensile strength in excess of 300 pounds per inch (53.57 k/m) in the machine and cross machine direction. The superior strength provided by the fiberglass/polyester scrim resists the movement created by today's modern buildings. This translates to long-term resistance to splits and tears in the roof system.

Security in Multi-Ply Construction – FlexBase Plus 80 is the base component of a multi-ply roof 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 minimizes dependence on perfect workmanship, contact adhesive seaming, etc.

APPLICATION

FlexBase Plus sheets can be used as the initial underlayment for any Garland HPR® roof system. Specifications for nailing to various decks are available. In addition, FlexBase Plus 80 can be used as the underlayment in Garland's two (2) or three (3) ply hot asphalt or cold applied Weatherking and Green-Lock systems and also can be used in three (3) or four (4) ply BUR's.

Note: All rolls must be cut in 18 ft. (5.5 m) lengths and allowed to relax prior to application.

Properties		CSA A123.23 Criteria: Type C, Grade 3	FlexBase Plus 80 Tested Value	
Thickness – mm (mils)		1.8 (70)	2.7 (106)	
Selvedge thickness – mm (mils)		1.8 (70)	2.7 (107)	
Mass per unit area – kg/m ² (lbs/100 ft ²)		2.2 (45)	3.2 (66)	
Back surface coating thickness (only for heat-welded sheets), min. – mm (mils)		1.0 (40)	N/A	
			Before Heat Conditioning	After Heat Conditioning
Strain energy (before and after heat conditioning), min. – kN/m (lb/in)	At 23 ± 2°C (73.4 ± 3.6°F)	5.5 (31)	MD: 27 (153) XMD: 9 (56)	MD: 13 (77) XMD: 7 (42)
	At -18 ± 2°C (-4 ± 3.6°F)	3.0 (17)	MD: 8.8 (50) XMD: 7.2 (41)	MD: 9 (54) XMD: 10 (59)
Peak load (before and after heat conditioning), min. – kN/m (lb/in)	At 23 ± 2°C (73.4 ± 3.6°F)	See Tested Value	MD: 53 (301) XMD: 58 (327)	MD: 57 (324) XMD: 54 (308)
	At -18 ± 2°C (-4 ± 3.6°F)	See Tested Value	MD: 57 (267) XMD: 53 (302)	MD: 58 (332) XMD: 57 (325)
Elongation at peak load (before and after heat conditioning), %	At 23 ± 2°C (73.4 ± 3.6°F)	See Tested Value	MD: 13% XMD: 9%	MD: 9% XMD: 8%
	At -18 ± 2°C (-4 ± 3.6°F)	See Tested Value	MD: 7% XMD: 8%	MD: 8% XMD: 7%
Ultimate elongation at 23 ± 2°C (before and after heat conditioning), %		See Tested Value	MD: 18% XMD: 16%	MD: 13% XMD: 8%
Dimensional stability , max., %		0.5%	0.0%	
Low temperature flexibility (before and after heat conditioning), max. – °C (°F)		-18 (-0.4)	MD: Pass @ -34 (-30) XMD: Pass @ -34 (-30)	MD: Pass @ -18 (-0.4) XMD: Pass @ -18 (-0.4)
Low temperature flexibility after UV weathering (Grades 1 and 2 only), max. – °C (°F)		-12 (10)	MD: N/A XMD: N/A	MD: N/A XMD: N/A
Compound stability , min. – °C (°F)		91 (195)	Pass @ 91 (195)	
Resistance to puncture		Pass	Pass	
Granule embedment (Grade 1 only), max. – g (oz)		N/A	N/A	
Moisture content , max., % *		N/A	N/A	

* Applicable only for APP-modified membranes



This product meets the requirements of CSA 123.23.

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Tests verified by independent laboratories. Actual roof performance specifications will vary depending on test speed and temperature. Data reflects samples randomly collected. ± 10% variation may be experienced. The above data supersedes all previously published information. Consult your local Garland Representative or the home office for more information.

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