

OVERVIEW

FlexBase E 80 is an 80-mil, SBS rubber modified base sheet that utilizes KEVLAR® fibers and a dual polyester and fiberglass combination reinforcement that offers the inherent strength and heat stability of fiberglass along with the ability of polyester to conform. 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 roofing system. It provides long-term performance in all types of new or retrofit construction uses.

FlexBase E 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 hot- or cold-applied systems.

Advanced Rubber Technology – The modifier utilized in FlexBase E 80 is SBS (Styrene-Butadiene-Styrene). When the SBS rubber 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.

Superior Performance Characteristics – FlexBase E 80 exceeded the requirements of ASTM D 4601 by more than 50%. FlexBase E 80 imparts the strength and flexibility your roof requires to stand up to and overcome the elements.

Superior Strength – FlexBase E 80 is reinforced with one layer of fiberglass and one layer of polyester. The superior strength provided by the KEVLAR fibers and the dual fiberglass and polyester combination resists the movement created by today's modern buildings. In addition, FlexBase E 80 provides tensile strength in excess of 500 pounds per inch (8929 kg/m) in the machine and cross machine direction. This translates to long-term resistance to splits and tears in the completed roof system.

APPLICATION

FlexBase E 80 can be used as the initial underlayment for any Garland HPR® roof system. Specifications for nailing to various decks are available. In addition, FlexBase E 80 is 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 E 80 Tested Value	
Thickness – mm (mils)		1.8 (70)	2.6 (103)	
Selvedge thickness – mm (mils)		1.8 (70)	3 (117)	
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 (lbf/in)	At 23 ± 2°C (73.4 ± 3.6°F)	5.5 (31)	MD: 24 (140) XMD: 33 (189)	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: 9.5 (54) XMD: 10.4 (59)
Peak load (before and after heat conditioning), min. – kN/m (lbf/in)	At 23 ± 2°C (73.4 ± 3.6°F)	See Tested Value	MD: 89 (504) XMD: 91 (518)	MD: 57 (324) XMD: 54 (308)
	At -18 ± 2°C (-4 ± 3.6°F)	See Tested Value	MD: 47 (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: 11% XMD: 16%	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: 23% XMD: 22%	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 @ -47 (-53) XMD: Pass @ -47 (-53)	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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