

ELASTOFLEX SA POLAR BASE®

SELF-ADHERED LOW-TEMPERATURE SBS ROOF MEMBRANE

PRODUCT DESCRIPTION

Elastoflex SA Polar Base membrane is a self-adhered, elastomeric base ply for low-slope roofing. This product is specially designed for colder weather applications. It is manufactured using patented ADESO® Dual-Compound Self-Adhered Technology, whereby a “true” Styrene-Butadiene-Styrene (SBS) modified asphalt compound is applied on the top layer and an aggressive self-adhesive compound is applied on the bottom layer. Elastoflex SA Polar Base membrane is built with a high performance reinforced polyester mat to enhance puncture and tear resistance, and a proprietary “low-temp” self-adhered compound to enhance adhesion at lower temperatures.

When used in conjunction with Elastoflex SA P Polar Cap or other approved Polyglass cap sheets, Elastoflex SA Polar Base provides cleaner application, improves application speed and removes the need for torches, hot asphalt or bonding adhesives on the job site.

Elastoflex SA Polar Base membrane is finished with a polyolefin film displaying preprinted laylines on the top surface, and a split release film on the bottom surface.



TYPICAL APPLICATIONS

- Designed for cold weather applications; 25°F – 60°F (-4°C – 16°C)
- Applications include new construction, re-roofing, and BUR repair installation
- Base or interply for most multi-ply systems
- Base or interply for self-adhered and Stick-1 Torch-1 systems

FEATURES AND BENEFITS

- Excellent long-term adhesion and application to multiple substrates and base plies
- Exceptional physical properties and long-term weathering performance
- Low temp flexibility and dimensional stability
- Suitable for cold weather climates, extends self-adhered roofing season

TECHNICAL DESCRIPTION

Properties		Type B, Grade 3	Tested Value	
Thickness – mm (mils)		2.2 (85)	2.5 (100)	
Seldge thickness – mm (mils)		2.2 (85)	2.5 (100)	
Mass per unit area – kg/m ² (lbs/100 ft ²)		2.6 (53)	2.9 (59)	
Back surface coating thickness (only for heat-welded sheets), min. – mm (mils)		1.0 (40)	1.1 (43)	
			Before Heat Conditioning	After Heat Conditioning
Strain energy, min. – kN/m (lbf/in)	At 23 ± 2°C (73.4 ± 3.6°F)	5.5 (31)	MD - 9.5 (54) XMD - 8.6 (49)	MD - 12.4 (71) XMD - 11.9 (68)
	At -18 ± 2°C (-4 ± 3.6°F)	3.0 (17)	MD - 13.1 (75) XMD - 13.0 (74)	MD - 11.2 (64) XMD - 11.0 (63)
Peak load, min. – kN/m (lbf/in)	At 23 ± 2°C (73.4 ± 3.6°F)	See Tested Value	MD - 20.7 (118) XMD - 15.2 (87)	MD - 22.2 (127) XMD - 15.8 (90)
	At -18 ± 2°C (-4 ± 3.6°F)	See Tested Value	MD - 22.6 (129) XMD - 17.0 (97)	MD - 27.0 (154) XMD - 22.1 (126)
Elongation at peak load, %	At 23 ± 2°C (73.4 ± 3.6°F)	See Tested Value	MD - 71 XMD - 81	MD - 50 XMD - 57
	At -18 ± 2°C (-4 ± 3.6°F)	See Tested Value	MD - 57 XMD - 82	MD - 49 XMD - 52
Ultimate elongation at 23 ± 2°C, %		See Tested Value	MD - 78 XMD - 91	MD - 55 XMD - 62
Dimensional stability, max., %		1.0%	MD - 0.1 / XMD - 0.5	
Low temperature flexibility, max. – °C (°F)		-18 (-4)	MD - Pass XMD - Pass	MD - Pass XMD - Pass
Compound stability, min. – °C (°F)		102 (215)	Pass	
Resistance to puncture		Pass	Pass	

PRODUCT DATA

Net Coverage (Approx) ...15 m² (161 sq ft)
 Weight (Approx)43.5 kg (96 lbs)
 Thickness (Nominal) 2.5 mm (100 mils)
 Roll Size15 m × 1 m (49'3" × 39'3/8")
 Rolls/Pallet 20

APPLICABLE STANDARDS

- ASTM D1970; ASTM D6164
- UL Classified



PRODUCT CODES

- EPPB25SACHD



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APPLICATION INSTRUCTIONS

Elastoflex SA Polar Base is intended to be used as a base sheet or interply for new or re-roof low-slope applications when applied to acceptable insulations and/or coverboards for commercial and residential structures. Elastoflex SA Polar Base may also be applied directly to approved wood deck substrates of non-occupied spaces such as carports, sheds, canopies, etc. For additional substrate requirements and information refer to Polyglass published acceptable substrate list.

- Apply Elastoflex SA Polar Base membrane only in dry weather and when air and surface temperatures are between 25°F (-4°C) and 60°F (16°C).
- Apply over clean, dry, dust and debris free substrates. Prime concrete decks prior to application with PG 100 Asphalt Primer. Consult Polyglass Technical Service for other allowable primers.
- When re-roofing, remove all prior roofing materials down to a clean debris free substrate and properly close off all abandoned roof penetrations.
- Concrete or Steel decks shall be designed with proper expansion devices.
- Wood decks shall be properly supported by the structural framing.
- Ensure the installation of Elastoflex SA Polar Base does not prevent the ventilation of existing construction
- Do not apply directly to shingles or other granulated surface roof systems.
- While installing Elastoflex SA Polar Base:
 1. Start at the low point of the roof.
 2. Unroll the material and allow to relax.
 3. Start by removing the first 18–24" of release film.
 4. Press the membrane into place with firm and even pressure. Roll the edges with a silicone hand roller to ensure complete adhesion.
 5. Gradually remove the remaining release film applying pressure from the center to the edges as you go.
 6. Position successive rolls providing a minimum 6" end lap and 3" side lap. Laps can be sealed for additional water tightness with a hot air welder.
 7. Roll with an 75# split-face linoleum roller. Take care on sloped roofs by securing the roller and applicator with the appropriate safety equipment. Intermittent rolling is recommended.
 8. When addressing the field details of the seaming intersection treatment (cutting 45 degree at T-Joints), additional care must be taken to ensure the required Polyglass detail is performed. Complete installation instructions can be found on packaging or by calling Polyglass Technical Services.

Details and flashing may be installed using Elastoflex SA Polar Base with a hot air welder or with PG 500 Roof Cement. Check project details for proper installation requirements.

MANUFACTURING FACILITIES

- Fernley, NV
- Hazleton, PA
- Waco, TX
- Winter Haven, FL

CORPORATE HEADQUARTERS

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Technical Service: (866) 802-8017

Questions? technical@polyglass.com

Product Disclaimer: Unless otherwise incorporated into or part of a supplemental manufacturer's warranty, Polyglass warrants its product(s) against manufacturing defects in its product that directly results in leakage for a period of 2 years.

Refer to safety data sheet (SDS) for specific data and handling of our products. All data furnished refers to standard production and is given in good faith within the applicable manufacturing and testing tolerances.

Polyglass U.S.A., Inc., reserves the right to improve and change its products at any time without prior notice. Polyglass U.S.A., Inc. cannot be held responsible for the use of its products under conditions beyond its own control. For most current product data and warranty information, visit www.polyglass.ca