# POLYVAP™ SA S

# LOW SLOPE SELF-ADHERED AIR/VAPOR BARRIER

# **PRODUCT DESCRIPTION**

Polyvap SA S is a non-asphaltic self-adhered vapor and air barrier for use in commercial low-slope roofing applications. This membrane features a high strength polypropylene sheet with an aggressive acrylic based adhesive on the bottom that bonds to most substrates.

Polyvap SA S is a carrierless membrane and surfaced with a slip resistant top to enhance walkability. This membrane can be used as a temporary roof for up to 180 days.

The top surface is compatible with approved coverboards and Polytherm insulation; mechanically attached or adhered with Polyglass LRF (low-rise foam) adhesive. Polyglass offers a variety of waterproofing membranes to complete the roof assembly.

### **FEATURES AND BENEFITS**

- Aggressive self-adhesive for wind uplift performance
- Impermeable to air, moisture, and water
- Slip resistant top surface compatible with Polyglass LRF (low-rise foam) adhesive.
- Weather install temperatures from 20°F and rising
- Direct to metal deck application; no primer required

#### **TECHNICAL DESCRIPTION\***

Physical Properties	ASTM Method	Typical Performance
Elongation	ASTM D412	409% - MD 276% - XMD
Tensile Strength	ASTM D412	16.96 MPa (2460 psi) - MD 11.87 MPa (1721 psi) - XMD
Dry Tensile Strength	ASTM D882	3.85 N/mm (22 lbf/in) - MD 3.85 N/mm (22 lbf/in) - XMD
Elongation at Break	ASTM D882	541% - MD 617% - XMD
Dry Breaking Force (Grab method) MD ≥40 XMD ≥35	ASTM D5034	338 N (76 lbf) - MD 356 N (80 lbf) - XMD
Elongation at Break	ASTM D5034	120% - MD 157% - XMD
Minimum Puncture Resistance	ASTM E154	Deflection 5.84 cm (2.3) Max Load 249 N (56 lbf)
Cold Mandrel Bend Test	AC38 Section 3.3.4	PASS
Weathering Tests	AC38 Section 4.1.2 UV Exposure AC38 Section 4.1.3 Accelerated Aging	PASS
Water Vapor Transmission Desiccant Method Procedure A 23°C (73.4°F) 0-50 %RH	ASTM E96	0.0173 Perm (grain/h•ft²•inchHg) @23°C 100%RH 0.992 ng/Pa•s•m²
Water Vapor Transmission Using Modulated Infrared Sensor	ASTM F1249	0.0193 Perm (grain/h•ff²•inchHg) 1.10 ng/Pa•s•m² (23°C 0-50 %RH)
Air Permeance	ASTM E2178 @75 Pa	0.00912 L/s•m² @ 75 Pa (0.0018 cfm/ft² @ 1.57 psf)
Nail Sealability	ASTM D1970	PASS
Water Resistance (Control after Weathering)	AATCC 127	PASS
Flame Spread Smoke Developed	ASTM E84	Class A Flame Spread 5 Smoke Developed 15
UL	UL790	PASS
Uplift Strength	FM LPDS 1-52	Steel Deck 11.12 kN/m² (232.5 psf)
90-Degree Peel Strength	ASTM D3330	Steel Deck 879 N/m (5.02 lb/in) Gypsum Board 751 N/m (4.29 lb/in)
Wear Resistance	Wheelbarrow Testing	PASS

<sup>\*</sup>The properties in this table are "as manufactured" unless otherwise noted.



### **PRODUCT DATA\*\***

Net Coverage (Approx)473 ft <sup>2</sup> (44 m <sup>2</sup> )
Gross Coverage
Weight (Approx)
Thickness (Nominal) 10 mils (0.25 mm)
Roll Size $100' \times 60"$ (30.5 m × 1.5 m)
Rolls/Pallet60

<sup>\*\*</sup>All values are nominal at time of manufacturing

### **APPLICABLE STANDARDS**

• UL Classified



### **PRODUCT CODES**

PVSAS



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### **APPLICATION INSTRUCTIONS**

Polyvap SA S is a self-adhered, non-asphaltic air and vapor barrier designed for applications direct to deck, or over a thermal barrier.

# **Acceptable Substrates**

- Galvanized or painted steel deck
- Thermal board
- OSB
- Plywood
- Gypsum

For additional substrate requirements and information refer to a Polyglass Technical Representative

# **Surface Preparation**

Steel surfaces must be clear of any oil residue and moisture. Wood decks must be dry to the touch and clear of dirt and dust. Polyvap SAS can be installed in 20°F (-6°C) and rising temperatures without the use of a primer. Polyvap SAS surface is white, reducing the overall temperature gain during installation.

## **Application**

For steel decks align the membrane so both end laps hit the top of the flutes.

- 1. Before installing Polyvap SA S cut it into manageable lengths prior to placement on the roof deck. Position the material in place by starting at the lowest point of the roof pitch.
- 2. Once the sheet is position start by removing several inches off the top portion of the release film by pulling it upwards and away from the top of the sheet, press the exposed backside adhesive of the Polyvap SA S onto the roof deck to help prevent movement of the sheet.
- 3. Continue removing the rest of the release film by pulling the top half at a 45° angle.
- 4. Next apply firm, even pressure from the center to the outer edges ensuring full contact with the substrate.
- 5. Remove the remaining bottom half of the release film, by pulling the film in a downward and 45° angle pulling it smoothly from end to end.
- 6. Thoroughly roll the Polyvap SA S with a 75 lb split faced roller uniformly across the entire sheet to guarantee complete and even contact. Maintain the roller on the top flutes avoiding the center of the flutes and damaging the membrane.
- 7. Install the membrane so all laps shed water by position succeeding sheets with overlapping seams. Lineup side laps with the lay line provided on the surface of the membrane.
- 8. At the end of each roll, install a metal sheet plate (24 GA x 6"W) to support the end lap between flutes. Ensure 6" (15.2 cm) end laps are maintained on metal sheet plate for each course during installation. Hand roll end lap ensuring uniform even pressure to the seam.
- For end lap details and additional installation procedures refer to our website at www.polyglass.us

Caution: Release liners are slippery. To prevent injury, liner should be removed from under foot as soon as membrane is installed and disposed of properly.

### MANUFACTURING FACILITIES

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

Technical Service:

### **CORPORATE HEADQUARTERS**

Polyglass U.S.A., Inc. 1111 West Newport Center Drive Deerfield Beach, FL 33442 www.polyalass.us

General Line: (888) 410-1375 (954) 233-1330 Customer Service: (800) 222-9782

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 5 years.

(866) 794-9659

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.

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