Applicable Standards:
AAMA 714-19
ASTM E84, Class A Rating

AVM INDUSTRIES INC

TECH DATA SHEET
Section - 072726

Aussie Shield® 300-PLM
Permeable Liquid Membrane (Air Barrier)
Silyl Terminated Polymer (STP) Technology

Section 072726
Fluid-Applied Membrane Air-Barrier

Product Name

Aussie Shield® 300-PLM

Permeable Liquid Membrane (Air Barrier)
Silyl Terminated Polymer (STP) Technology

By

AVM Industries, Inc.
8245 Remmet Ave, Canoga Park, CA 91304
888.414.1041 818.888.0050
www.avmindustries.com

Product Description

Aussie Shield® PLM-300 is one-component Silyl Terminated Polymer (STP) Membrane intended for use as a sprayable/rollable permeable liquid applied Air Barrier Membrane. (In some applications, it may also be used as a Permeable Liquid Applied Flashing) **Aussie Shield® 300-PLM** is solvent free, isocyanate free, and bonds to most common building materials without priming. It forms a seamless flexible barrier that prevents penetration of unwanted water and air through the building envelope while being breathable to allow damp surfaces to dry. It may be exposed to UV light and weather for up to 12 months. See AVM **Aussie Shield® 300-PLM** details and installation instructions for more information.

In addition, **Aussie Shield 300-PLM** is designed for permanent use with open-jointed exterior facade systems with open joints not to exceed 1 inch wide.

Applicable Standards

- ABAA S0008
- ASTM E2357
- ASTM E84, Class-A Rating
- AAMA 714-19
- NFPA 285

Where to Use

Aussie Shield® 300-PLM May be used on sheathing, such as Fiberglass Faced Gypsum Board, OSB, Plywood, CMU, Concrete and other common wall substrates. (It may also be used around windows, penetrations and other irregular surfaces when used as a Permeable Liquid Flashing).

Aussie Shield® 300-PLM adheres well to a wide variety of substrates, generally with no primer required. It can bond to damp substrates and cure in wet weather. It may be left exposed to U.V. up to 12 months. For longer exposers, contact AVM.

Substrate Preparation

Bonding surfaces must be structurally sound, clean, free of oxidation, mill oils, wax, and release agents that may interfere with adhesion. Surfaces may be damp/wet, but must be free of standing or ponding water.

Application

Aussie Shield 300-PLM may be spray applied or rolled. The recommended application thickness of the 300-PLM liquid membrane is 20 mils Dry Film Thickness. (Minimum 15 mils DFT and Maximum 30 mils DFT). The estimated coverage is 60-110 Sq.Ft. per gallon depending on surface porosity, application method and other factors. Surfaces must be clean and free of contaminants. It is recommended to test substrate compatibility with the **Aussie Shield® 300-PLM** prior to full application. Curing/drying times will vary based on temperatures, Humidity and other factors.

Substrate and Air Temperatures: -10°F (-23°C) to 110°F (43°C). Note that chemical reactions are controlled by temperature – the cooler the temperature the slower the cure, and the warmer the temperature, the faster the cure.

For additional extreme weather application information, please reference the Aussie Shield® Air Barrier System Installation Guide or Tech Bulletin 300: Aussie Shield 300 Surface & Air Temperature Guideline.

For installation details and further information regarding AVM's Pre-Treatment and Post-Treatment methods, please see the Aussie Shield® Air Barrier System Installation Guide.

If your project requirements do not conform to the above requirements, please contact your local AVM rep for further instructions.

Limitations:

- ICF: Do not apply over Insulated Concrete Forms (ICF). If using ICF, contact AVM for recommendations.
- Not for use in below grade waterproofing or roofing applications
- Not for use in submerged applications
- May be incompatible with some asphaltic materials or butyl adhesives. Always test to verify.

Limited Warranty

For complete warranty details, contact AVM Industries or consult with your applicator. AVM Industries, Inc., warrants this product to be free from defects. TO THE MAXIMUM EXTENT ALLOWED BY LAW, AVM INDUSTRIES DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. UNLESS OTHERWISE STATED IN THE LIMITED WARRANTY, THE SOLE REMEDY FOR BREACH OF WARRANTY IS TO SUPPLY SUFFICENT PRODUCT TO RE-TREAT THE SPECIFIC AREAS TO WHICH THE DEFFECTIVE PRODUCT HAS BEEN APPLIED. AVM INDUSTRIES DISCLAIMS ANY LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES TO THE MAXIMUM EXTENT ALLOWED BY LAW. DISCLAIMERS OF IMPLIED WARRANTIES MAY NOT BE APPLICABLE TO CERTAIN CLASSES OF BUYERS AND SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. It is the buyer's obligation to test the suitability of the product for its intended use prior to using it. Any claim for a defective product must be filed within 30 days of discovery of a problem and must be submitted with written proof of purchase.

Key Features

- Can be applied to Damp Surfaces
- 20.5 Perms at 15 Mils Thick
- Sprayable and Rollable
- 99% Solids Black or White Color

Legal Disclaimer

All information contained herein is believed to be accurate as of the date of publication, is provided "as-is" and is subject to change without notice. This is not a warranty, an agreement, or substitute for expert or professional advice. AVM Industries expressly disclaims and assumes no liability for the use of the products or reliance on this information. It is the sole responsibility of the user to determine the suitability of any products for the user's application(s).

Delivery, Storage, and Handling

a. Delivery of the **Aussie Shield® 300-PLM** materials to the job site must be in their original sealed containers, with manufacturer's name and label intact.
b. Shelf Life: 18 months from date of manufacture when stored in an unopened package and in a dry place at temperatures between 41°F to 86°F (+5°C to + 30°C). High temperature may significantly reduce shelf life. Do not store materials in direct sunlight or where they may be damaged by water or rain.
c. Failure to comply with the recommended storage conditions may result in premature deterioration of the product.
d. Keep all materials out of the reach of children.

Quality Control

a. Visually inspect all coated surfaces to ensure a full and proper application, especially at penetrations, seams, corners, drainage footings and other hard-to-reach areas.
b. All unsatisfactory areas shall be repaired prior to final acceptance.

Availability and Cost

Contact AVM Industries or your approved applicator for pricing and availability.

Technical Services

Technical services are available by contacting our offices at: **888.414.1041** or **818.888.0050** or visit **www.avmindustries.com**

Product Specifications

All properties described in this document are derived from testing conducted in laboratory conditions. Properties and performance will vary depending on environmental conditions and application technique. Test and evaluate to determine appropriate usage. Visit **www.avmindustries.com** for the Safety Data Sheet and pertinent documentation.

Description	Results
Basic Composition	Silyl Terminated Polymer
Application Temperature	-10°F (-23°C) to 110°F (43°C)
Application Thickness	15-20 mils Dry Film Thickness (DFT)
Temperature Resistance	248°F (120°C)
UV and Weather Resistance	Excellent
Skin Time	40-50 min (highly dependent on humidity and temperature)
Sag	Negligible at thicknesses of 14-60 mils
Hardness, Shore A (ASTM C661)	21
Tensile Strength (ASTM D412)	180 psi (1.24 MPa)
Elongation at Break (ASTM D412)	230%
Water Vapor Transmission (ASTM E96)	20.5 perms (15 mil thickness)

ABAA S0008-2021: Standard for Air and Water-Resistive Barriers – Fluid Applied Membrane – Material Specification

Test	Criteria	Results
Water Vapor Transmission (ASTM E96)	Report	Wet Cup: 20.5 perms Dry Cup: 13.6 perms
Air Permeance (ASTM E2178)	≤0.2 L/s.m2 at 75 Pa	Pass
Alkali Resistance (ASTM D543)	No deleterious effects	Pass
Elongation at Break (ASTM D412)	≥200%	Pass
Tensile Strength (ASTM D412)	Report	183 psi
Freeze Thaw Resistance (ASTM E2485)	No surface changes	Pass
Fungi Resistance (ASTM C1338)	No growth	Pass
Gap Bridging (ABAA T0004)	No adverse surface effects	Pass
Low Temperature Flexibility (ASTM D522)	No surface changes	Pass
Peel Adhesion to Concrete (ASTM C794)	≥5 pli	Pass
Pull Adhesion (ABAA T0002)	≥16 psi	Pass
Water Absorption by Diffusion (ASTM C1498)	Report	1.2%
Water Resistance (ASTM D2247)	No adverse surface effects	Pass

AAMA 714-19: Voluntary Specification for Liquid-Applied Flashing used to Create a Water-Resistive Seal around Exterior Wall Openings in Buildings

Test	Criteria	Results
Adhesive Strength to Substrates (ASTM C794)	≥5 pli	Pass
Water Penetration Around Nails (ASTM D1970)	Shall pass 1.2 in (31 mm) of water	Pass
Accelerated UV Aging (ASTM G154, ASTM C794)	≥5 pli	Pass
Elevated Temperature (AAMA 711, ASTM C794)	≥5 pli	Pass
Thermal Cycling (AAMA 711, ASTM C794)	≥5 pli	Pass
Crack Bridging (ASTM C1305)	Water holdout of 550mm for 24hr with 1/16" crack	Pass
Water Immersion (AAMA 711, ASTM C794)	≥5 pli	Pass

Recommended Spray Equipment

Equipment	Graco	Titan
Sprayer: >3500 psi >3 gpm Direct Immersion	 833 Direct Immersion 933 Direct Immersion 675 Direct Immersion	 PowrTwin 12000di Direct Immersion Hydra X4540
Hose: Up to 200 ft	½" ID, ≥4000psi	½" ID, ≥4000psi
Whip: 3 to 10 ft	⅜" whip and gun swivel	¼"-⅜" whip and Gun swivel

ASTM E2357: Standard Test Method for Determining Air Leakage of Air Barrier Assemblies

Test	Criteria	Results
System Air Leakage	≤ 0.2 L/s.m² at 75 Pa	Pass
	≤ 0.04 cfm/ft² at 1.57 psf	Pass

ASTM E84: Surface Burning Characteristics (Class A)

Test	Criteria	Results
Flame Spread	≤25	25
Smoke Developed	≤450	90
NFPA 285 Engineering Judgement	Approved to NFPA 285 for multiple wall/insulation assemblies	Please contact AVM Technical Representative for additional information regarding NFPA 285

Packaging

Item/Component	Item Size	Qty per Pallet	Weights		VOC
			Bucket	Pallet	
300-PLM	5-Gal Bucket	36 Buckets	50 Lbs	1900 Lbs	<21 g/l

System Specifications

See pages 2 and 3.

For a complete list of details in CAD or PDF, please visit our website at **www.avmindustries.com**.

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