# **PRODUCT DATA SHEET**



## AIRLOK® SHEET UV ULTRA 400 NP

Non-Permeable Aluminum Air & Moisture Barrier Sheet Membrane

#### **MANUFACTURER**

Polyguard Products, Inc. Ennis, TX75119 (214) 515-5000 www.polyguard.com

## PRODUCT DESCRIPTION

#### **Basic Uses**

Airlok® Sheet UV Ultra 400 NP Air and Moisture Barrier is a non-permeable sheet membrane, available in various sizes, designed for air and moisture protection in both field and flashing applications.

Airlok® Sheet UV Ultra 400 NP, when applied to a structural substrate, will give excellent resistance to air leakage and vapor diffusion.

Strengths – Functions as the traditional 40-mil rubberized-asphalt sheet for field membranes and window flashings, receives a wide range of sealants and has two years of UV exposure with extensive NFPA 285 assembly. Can be applied at temperatures of 40° F (4° C) and rising.

Limitations – Maximum in-service temperature of 160° F and cannot be used for through wall flashings in masonry facade.

Uses – Field membrane and window flashings for assemblies that will be exposed to UV exposure due to long construction schedules.

#### **ACCESSORIES**

- Detail Sealant PW<sup>™</sup> is a single-component, STPE, 100% solid moisture-cured, elastomeric sealant. It is an environmentally friendly, non-isocyanate product that replaces silicone and urethane sealants. It is a low VOC/HAPS free, cold-applied, self- adhesive, elastomeric sealant.
- 650 LT Liquid Adhesive, a rubber-based, tacky adhesive which is specifically formulated to provide excellent adhesion.
- 650 WB Liquid Adhesive a water-based, rubber-based adhesive which is specifically formulated to provide excellent adhesion.
- California Sealant is a rubber-based sealant which is specifically formulated to provide excellent adhesion.

### **PRODUCT FEATURES**

Airlok® Sheet UV 400 NP offers many advantages over other air and moisture barrier systems:

- UV Resistant: Airlok® Sheet UV Ultra 400 NP resists sunlight for up to 2 years.
- Strong, yet flexible: Airlok® Sheet UV Ultra 400 NP can be used to accommodate various dynamic movements and change of plane.
- Fully adhered: The rubberized-asphalt membrane adheres tenaciously to the surface and itself, eliminating membrane blow-off and tears before exterior wall finish installation.

- Permanent: Once installed and covered with cladding, the membrane will not rot or decay from mildew or mold
- **Self-adhered:** The rubberized-asphalt properties allow for the membrane to adhere to itself and other materials; such as wood, metal, concrete, as well as fasteners that are left in place.

#### **COMPOSITION & MATERIALS**

Airlok® Sheet UV Ultra 400 NP is a 40-mil, laminated, modified-asphalt, self-adhesive sheet membrane bonded to a cross-laminated polyethylene sheet with a top protective layer of aluminum.

#### **TECHNICAL DATA**

See physical properties table.

#### INSTALLATION

#### **Surface Preparation**

Clean all surfaces of dust, dirt and foreign matter. Eliminate sharp protrusions which may puncture membrane. Surfaces should be dry prior to application of 650 LT Liquid Adhesive, 650 WB Liquid Adhesive, California Sealant, or a low-rise spray adhesive and the Airlok® Sheet UV Ultra 400 NP.

**Priming:** Apply 650 LT Liquid Adhesive or California Sealant at a rate of 250-300 square feet per gallon or, or 650 WB Liquid Adhesive at a rate of 350-400 square feet per gallon, or a low-rise spray adhesive; and allow the adhesive to dry tacky to the touch before covering with associated accessories. Do not thin/reduce liquid adhesive/sealant. If a substrate has been coated with Polyguard® Airlok Flex® or Airlok Flex® VP.; and the coating is cured, priming with a liquid adhesive/sealant is not necessary.

**System Application:** Pre-cut Airlok® Sheet UV Ultra 400 NP material into pieces easy to handle. Peel the silicone-coated release sheet off, then start applying the membrane with pressure. Use a hand roller to assure that the Airlok® Sheet UV Ultra 400 NP is adhered to primed substrate. Vertical and reverse laps will be detailed with Detail Sealant  $PW^{TM}$ .

All overlaps of air barrier membrane require at a minimum of 2 1/2-inch side lap and 4-inch end lap.

Install Airlok® Sheet UV Ultra 400 NP in ambient and substrate surface temperatures of 40° F (5° C) and rising. Conduct a field adhesion test at temperatures below 40° F (5° C) prior to application.

A possible adhesion enhancement would be to apply 650 LT Liquid Adhesive or California Sealant.

**Details/Penetrations:** Detail Sealant PW<sup>™</sup> shall be used to seal any exposed edges in the membrane due to side/end laps, tie wires, pipes and other penetrations.

#### Window Openings & Flashings:

Various terminations, transitions, and penetrations; such as window openings, thru-wall flashings, and pipes are addressed with the various cut-sizes of the membrane in conjunction with the accessories listed previously.

#### **STORAGE**

Unload and store the Airlok® Sheet UV Ultra 400 NP System components in a manner that prevents damage to the materials. Protect all containers from weather and fasten all can lids securely.

#### **SAFETY**

SDS documents for all Polyguard products can be obtained at our website <a href="www.polyguard.com">www.polyguard.com</a>. Call Polyguard Products, Inc. at (214) 515-5000 with questions.

#### WARRANTY

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product are beyond our control; such as weather, workmanship, equipment utilized and prior condition of the substrate. We will replace at no charge product proved to be defective within twelve (12) months of purchase, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided.

#### **TECHNICAL SERVICES**

Technical assistance, information and Polyguard's products are available through a nationwide network of distributors and architectural representatives, or contact Polyguard Products, Inc.

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PROPERTY	TEST METHOD	TYPICAL VALUE
MEMBRANE THICKNESS	ASTM D 1000	40 Mils
COLOR	-	36" width: non-printed silver 6" to 12" widths: silver
SERVICE TEMPERATURE	-	-40° F to 160° F (-40° C to 71° C)
AIR PERMEANCE	ASTM E 2178	0.00 CFM/SF (0.0005 L/s*m²)
AIR LEAKAGE	ASTM E 283	Pass
WATER RESISTANCE	AATCC 127-08	Pass
TENSILE STRENGTH - MEMBRANE	ASTM D 412 Modified Die C	656 PSI (MD) 767 PSI (TD)
TESNILE STRENGTH – MEMBRANE	ASTM D 882 Modified	943 PSI (MD) 992 PSI (TD)
BREAKING STRENGTH	ASTM D 882 Modified	35.9 lbs/in (MD) 43.1 lbs/in (TD)
ELONGATION – ULTIMATE FAILURE OF RUBBERIZED ASPHALT	ASTM D 412 Modified Die C	> 800%
PERMEANCE TO WATER VAPOR TRANSMISSION	ASTM E 96 Method B	0.00 Perms
PUNCTURE RESISTANCE – MEMBRANE	ASTM E 154	78.6 lb <sub>f</sub>
NAIL SEALABILITY	ASTM D 1970	Pass
LOW TEMPERATURE FLEXIBILITY	ASTM D 1970	Pass
PULL ADHESION - CONCRETE	ASTM D 4541	33.8 PSI
PULL ADHESION - DENSGLASS®	ASTM D 4541	34.0 PSI
PEEL ADHESION - CONCRETE	ASTM D 903	9.51 lbs/in. width
PEEL ADHESION - DENSGLASS®	ASTM D 903	9.51 lbs/in. width
LAP PEEL ADHESION	ASTM D 1876	4 lbs/in. width
SYSTEM PROPERTIES	TEST METHOD	TYPICAL VALUE
AIR PERMEANCE OF AN ASSEMBLY	ASTM E 2357	0.012 cfm/ft <sup>2</sup> @ 1.57 psf
EVALUATION OF FIRE PROPAGATION OF BUILDING MATERIALS	NFPA 285	Compliant*

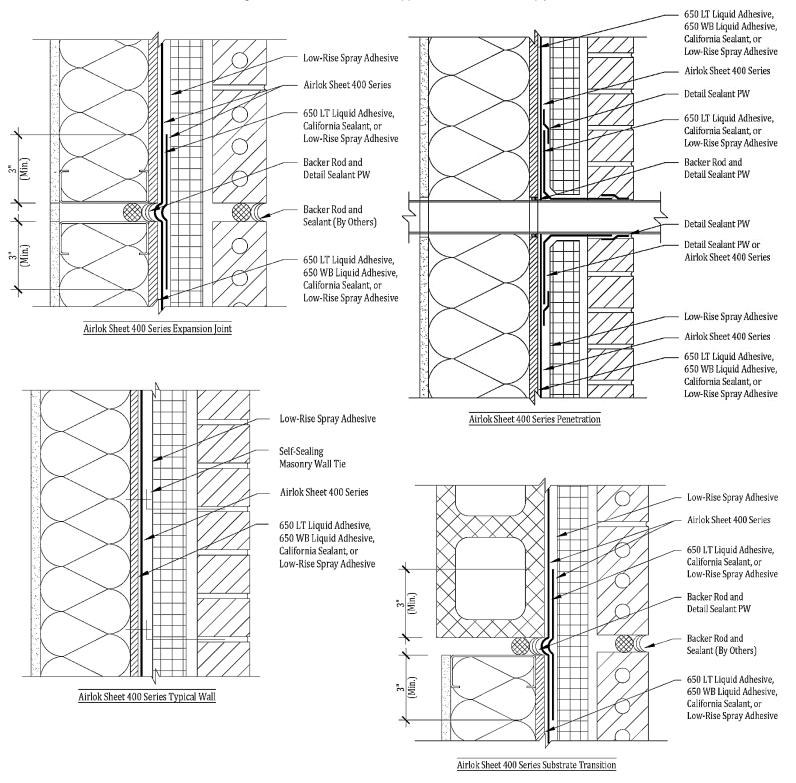
<sup>\*</sup>Related to specific assemblies

PACKAGING	PART NUMBER	UNIT SIZE
AIRLOK® SHEET UV ULTRA 400 NP	Varies/size	75' roll
AIRLOK® SHEET UV ULTRA 400 NP Accessories:		
DETAIL SEALANT PW™	DETAIL SEALANT PW - SAU 20 OZ	20 sausages/ctn
DETAIL SEALANT PW™	DETAIL SEALANT PW – 3 GAL	3-gallon pail
650 LT LIQUID ADHESIVE	650-5 LIQ ADH 5 GA	5-gallon pail
650 LT LIQUID ADHESIVE	650-5 LIQ ADH 1 GA	4 – 1 gal pails/ctn
650 WB LIQUID ADHESIVE	650-5 WB ADH	5-gallon pail
CALIFORNIA SEALANT	CALSEAL5	5-gallon pail

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## Common Polyguard® Airlok Sheet 400 Series Applications

These diagrams are not intended to be application instructions, simply illustrations



<u>Please Note</u>: Not intended to be full details. For full application detail on these configurations, see Polyguard Airlok Sheet 400 Series details, or contact Polyguard Products.

