

PRODUCT DATA SHEET



AIRLOK® SHEET 400 NP

Non-Permeable Air & Moisture Barrier Sheet Membrane

MANUFACTURER

Polyguard Products, Inc.
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PRODUCT DESCRIPTION

Basic Uses

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

Strengths – Traditional 40-mil rubberized-asphalt sheet for field membranes and works well as window and through wall flashings. Airlok® Sheet 400 NP can be applied at temperatures of 25° F (-4° C) and rising.

Limitations – 60-day UV exposure, maximum in-service temperature of 160° F, and limited NFPA 285 assembly.

Uses – Field membrane, window flashing and through wall flashing for assemblies such as brick facades.

ACCESSORIES

- Detail Sealant PW™ 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 400 NP offers many advantages over other air and moisture barrier systems:

- **Strong, yet flexible:** The Airlok® Sheet 400 NP can be used to accommodate various dynamic movements and change of plane.
- **All-Season:** Available in both summer-and winter-grade formulations.
- **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 400 NP is a 40-mil, laminated, modified-asphalt, self-adhesive, non-permeable sheet membrane bonded to a cross-laminated polyethylene sheet.

TECHNICAL DATA

See physical properties table.

INSTALLATION

Surface Preparation

Clean all surfaces of dust, dirt and foreign matter. Eliminate sharp protrusions which may puncture the membrane. Surfaces should be dry prior to application

of 650 LT Liquid Adhesive, 650 WB Liquid Adhesive, or California Sealant, and the Airlok® Sheet 400 NP.

Priming: Apply 650 LT Liquid Adhesive or California Sealant at a rate of 250-300 square feet per gallon, or 650 WB Liquid Adhesive at a rate of 350-400 square feet per gallon; 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 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 400 NP is adhered to primed substrate. Vertical and reverse laps will be detailed with Detail Sealant PW™.

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

Airlok® Sheet 400 NP is used for ambient and substrate surface temperatures of 25° F (-4° C) and rising.

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

Details/Penetrations: Detail Sealant PW™ 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.

LIMITATIONS

Airlok® Sheet 400 NP cannot be applied in areas that will be permanently exposed to sunlight. Airlok® Sheet 400 NP should be covered within 60 days to prevent impaired performance due to prolonged exposure to sunlight.

STORAGE

Unload and store the Airlok® Sheet 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 www.polyguard.com. 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.
P.O. Box 755, Ennis, TX 75120-0755
Sales: (615) 217-6061 • Tech Support: (214) 515-5000
Email: archtech@polyguard.com
Website: www.polyguard.com

| PROPERTY | TEST METHOD | TYPICAL VALUE |
|--|---------------------------|---|
| MEMBRANE THICKNESS | ASTM D 1000 | 40 Mils |
| COLOR | - | 36" width: pre-printed white 6" to 24" widths: black |
| SERVICE TEMPERATURE | - | -40° F to 160° F (-40° C to 71° C) |
| AIR PERMEANCE | ASTM E 2178 | 0.00 CFM/SF (0.0003 L/s*m ²) |
| STRUCTURAL PERFORMANCE | ASTM E 330 | Pass |
| WATER RESISTANCE | AATCC 127-08 | Pass |
| CRACK BRIDGING | ASTM C 1305 | Pass |
| TENSILE STRENGTH - MEMBRANE | ASTM D 412 Modified Die C | 574 PSI (MD) 585 PSI (TD) |
| TENSILE STRENGTH - MEMBRANE | ASTM D 882 Modified | 650 PSI (MD) 868 PSI (TD) |
| BREAKING STRENGTH | ASTM D 882 Modified | 27.4 lbs/in (MD) 36.1 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 A | 0.00 Perms (0.19 ng/Pa*s*m ²) |
| PERMEANCE TO WATER VAPOR TRANSMISSION | ASTM E 96 Method B | 0.03 Perms (1.97 ng/Pa*s*m ²) |
| PUNCTURE RESISTANCE - MEMBRANE | ASTM E 154 | 53.3 lbf |
| NAIL SEALABILITY | ASTM D 1970 | Pass |
| LOW TEMPERATURE FLEXIBILITY | ASTM D 1970 | Pass |
| TEAR INITIATION & TEAR PROPAGATION | ASTM D 4073 | 15.58 lbf |
| PULL ADHESION - CONCRETE | ASTM D 4541 | 35.7 PSI |
| PULL ADHESION - DENSGLASS® | ASTM D 4541 | 31.7 PSI |
| PEEL ADHESION - CONCRETE | ASTM D 903 | 9.51 lbs/in. width |
| PEEL ADHESION - DENSGLASS® | ASTM D 903 | 8.39 lbs/in. width |
| LAP PEEL ADHESION | ASTM D 1876 | 10.5 lb/in |
| SYSTEM PROPERTIES | TEST METHOD | TYPICAL VALUE |
| AIR PERMEANCE OF AN ASSEMBLY | ASTM E 2357 | 0.012 cfm/ft ² @ 1.57 psf |
| EVALUATION OF FIRE PROPAGATION OF BUILDING MATERIALS | NFPA 285 | Compliant* |

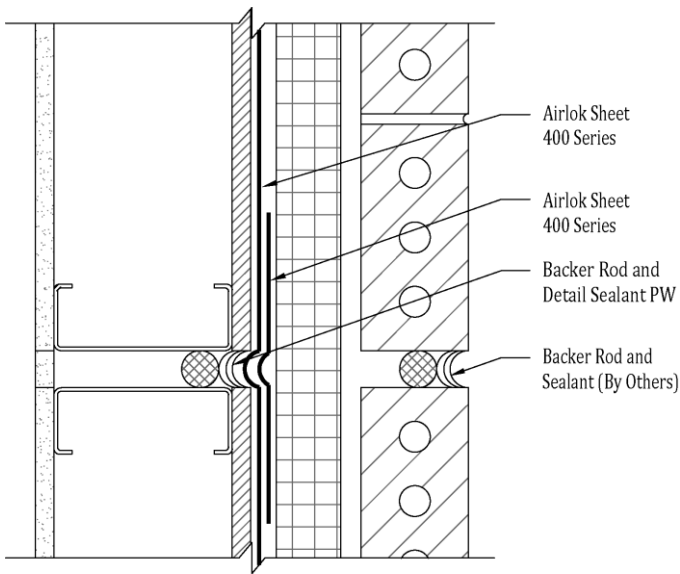
*Related to specific assemblies

| PACKAGING | PART NUMBER | UNIT SIZE |
|--|-------------------------------|---------------------|
| AIRLOK® SHEET 400 NP | varies/size | 75' roll |
| AIRLOK® SHEET 400 NP Accessories: | | |
| DETAIL SEALANT PW™ | DETAIL SEALANT PW – SAU 20 OZ | 20 sausages/ctn |
| 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 |

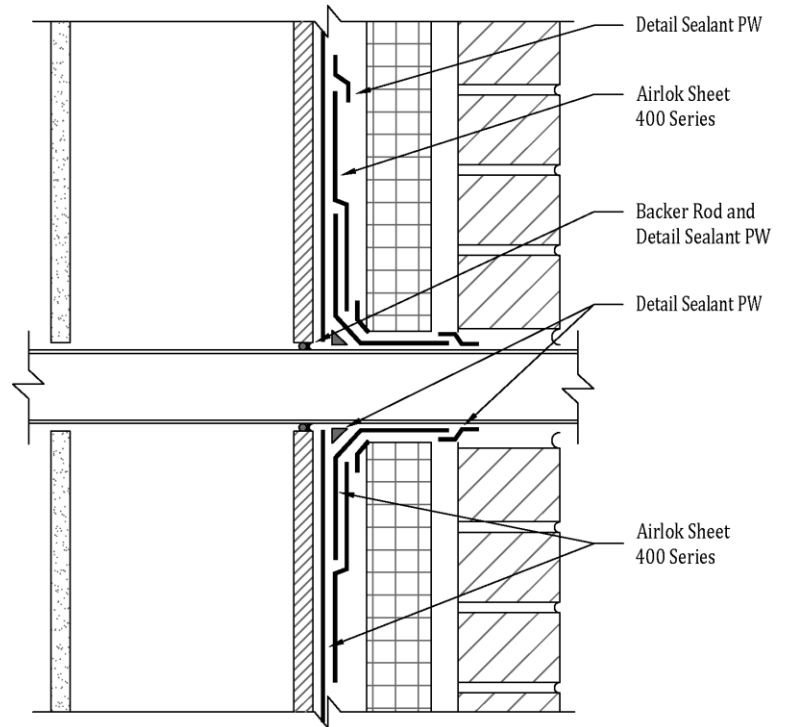
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Common Polyguard® Airlok Sheet 400 Series Applications

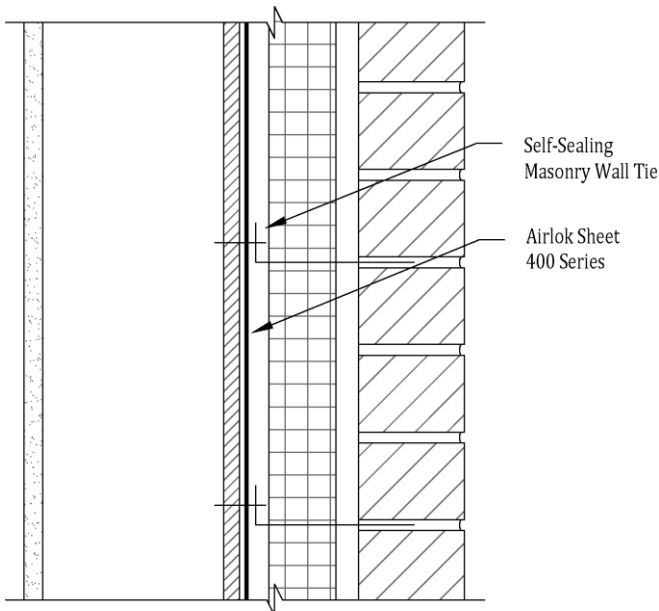
These diagrams are not intended to be application instructions, simply illustrations



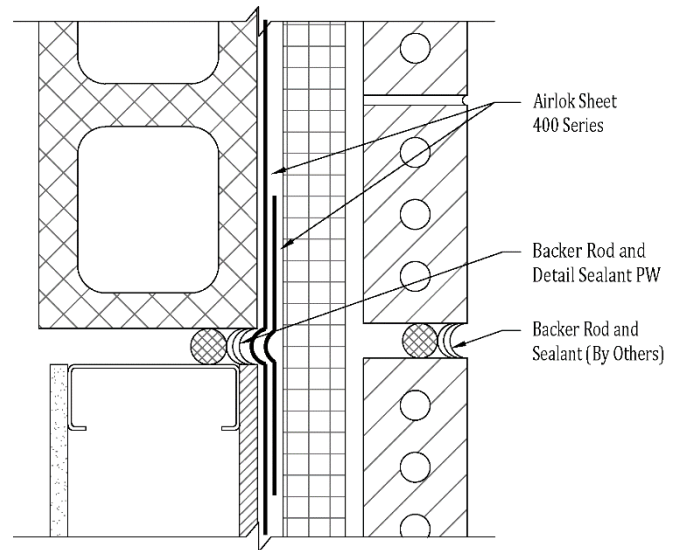
Airlok Sheet 400 Series - Expansion Joint



Airlok Sheet 400 Series - Wall Penetration



Airlok Sheet 400 Series - Typical Wall



Airlok Sheet 400 Series - Substrate Transition

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