VAPROSHIELD®
Breathable Membrane Systems for Roofs & Walls

BlockShield™ SA Plus

a Self-Adhered Air and Vapor Barrier for Roofs
Roll Size: 60" Product No.: 37509299, Roll Size 30" Product No.: 37509199



USES

BlockShield SA Plus can be installed on roofs with a minimum slope of 1/4":12 in both commercial and residential construction creating a barrier against air and vapor.

DESCRIPTION AND FEATURES

BlockShield SA Plus is a self-adhered, non-asphaltic, high temperature, air/vapor barrier membrane. It consists of a proprietary polypropylene film with a very aggressive pressure-sensitive adhesive (PSA).

- Primer-free installation
- High pressure wind uplift
- All season installation, 20°F (-6.6°C) and rising
- Withstands 180 days weather exposure
- High heat stability, third party tested to 270°F (132°C)
- Single-person roll lift machinery to be used on the surface.

COMPATIBLE SUBSTRATES

- Gypsum/Fiber Roof Sheathing Boards
- Concrete (bull float finish or better)
- Plywood
- Pre-painted Steel
- Galvanized Metal
- Steel Deck
- Aluminum (Painted/Mill Finish)

ROOFING MATERIALS

- Metal Roofing
- Cedar Shingles/Shakes
- Slate and Tile
- Single-ply
- Modified BItumen
- Asphalt Shingles

BlockShield SA Plus has been reviewed and approved for use within many roofing manufacturers' assemblies and, in some cases, can be included in full system warranties. For more details, contact your local VaproShield representative.

TESTING AND APPROVALS

FM APPROVED

Florida Building Code Approvals FL 46829

NEMO|cert.® CERTIFIED

CLASSIFIED C UL US

BASE/PLY SHEET FOR ROOFING SYSTEMS
AS TO AN EXTERNAL FIRE EXPOSURE
SEE UL DIRECTORY OF PRODUCTS CERTIFIED FOR
CANADA AND UL ROOFING MATERIALS AND SYSTEMS
DIRECTORY (R40823)

STORAGE

Store materials on end in original packaging at temperatures between 40°F and 120°F (4.4°C and 48.9°C). Protect materials from direct sunlight and inclement weather until ready for use.

INSTALLATION

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.

INSTALLATION CON'T

Best Practice:

Install BlockShield SA Plus and related accessories according to manufacturer's separate written installation instructions. All side and head laps must be a minimum of 3" (8 cm).

After multiple runs of the product are installed, roll the entire section of installed membrane with a weighted roller, starting from the middle working outward, min. 70 lbs. Shingled laps are required. Ventilate as required per code. View installation instructions at VaproShield.com.

LIMITATIONS

BlockShield SA Plus should be covered within 180 days of installation with permanent roofing material.

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

BlockShield SA Plus is not compatible with coal tar pitch.

TECHNICAL DATA & ENVIRONMENTAL

No Red List Chemicals. Contains 18-20% post industrial recycled content.

PHYSICAL PROPERTIES		
PROPERTY	RESULT	
Color	White	
Thickness	10.2 mil (0.26 mm)	
Membrane Weight (without release film)	0.95 oz/yd² (289 g/m²)	
60" Roll Weight	41 lbs (18.6 kg) *With box*	39 lbs (17.7 kg) *Without box*
30" Roll Weight	21 lbs (9.5 kg) *With box*	19 lbs (8.6 kg) *Without box*
Roll Dimensions	60" x 100' (1.5 m x 30.5 m) 30" x 100' (.76 m x 30.5 m)	
Roll Coverage	60" 500 ft² (46.5 m²) gross 30" 250 ft² (23.2 m²) gross	
Primer	No Primer Required	
VOCs	None	
Field Exposure Before Roof/Cladding Materials	Roofs: 180 days	Walls: 365 days
Minimum Application Temperature	20°F (-6.6°C) and rising	
Service Temperature	minus 40°F (-40°C) - 270°F (132.2°C)	
Warranty	20 year material warranty	

TESTING DATA		
PROPERTY	STANDARD	RESULT
Performance		
Elongation	ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic	MD - 409%
Tensile Strength	ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension	MD - 16.96 MPa (2460 psi) XMD - 11.87 MPa (1721 psi)
Dry Tensile Strength	ASTM D882 Standard Test Method for Tensile Properties of Thin Plastic Sheeting	MD - 3.85 N/mm (22 lbf/in) XMD - 3.85 N/mm (22 lbf/in)
Elongation at Break	ASTM D882 Standard Test Method for Tensile Properties of Thin Plastic Sheeting	MD - 541% XMD - 617%
Dry Breaking Force (Grab method) MD ≥40 XMD ≥35	ASTM D5034 Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)	MD - 338 N (76 lbf) XMD - 356 N (80 lbf)
Elongation at Break	ASTM D5034 Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)	MD - 120% XMD - 157%
Minimum Puncture Resistance	ASTM E154 Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover	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	PASS
Wear Resistance	Wheelbarrow Testing	PASS
Self Adhering Flashing	AAMA 711-13 Voluntary Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products	Compliant
Water Vapor Transmittance		
Water Vapor Transmission Desiccant Method Procedure A 23°C (73.4°F) 0-50 %RH	ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials	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 Standard Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor	0.0193 Perm (grain/h•ft²•inchHg) 1.10 ng/Pa•s•m² (23°C 0-50 %RH)
Water Ponding	ICC-ES AC48 Acceptance Criteria for Self-Adhered Roof Underlayments for use as IBarriers	PASS
Air Resistance Testing		
Air Permeance	ASTM E2178 @75 Pa Standard Test Method for Air Permeance of Building Materials	0.00912 L/s•m² @ 75 Pa (0.0018 cfm/ft² @ 1.57 psf)
Air Permeance	CAN/ULC-S741-08 (2020) Standard for Air Barrier Materials	PASS
Air Leakage Rate	CAN/ULC-S742-11 Standard for Air Barrier Assemblies	Class A1
Water Resistance Testing		
Nail Sealability	ASTM D1970 Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection Section 7.9 referring to ASTM D7349 protocol 4 with modifications	PASS
Water Resistance (Control after Weathering)	AATCC 127 Hydrostatic pressure test (550 mm water column for 5 hours), American Association of Textile Chemists and Colorists	PASS
Fire Testing		
Flame Spread Smoke Developed	ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials	Class A Flame Spread 5 Smoke Developed 15
UL	UL790 Test Method of Fire Tests for Roof Coverings, CAN/ULC-S107	PASS
Surface Burning Characteristics	CAN/ULC-S102 Protective Underlayment, Permeable to Allow Drying, Provides an Air Barrier	Flame Spread Rating: 5 Smoke Developed Value: 15