

BlockShield™ SA Plus For Roofs

a self-adhered air and vapor barrier membrane

Roll Size: 60" Product No.: 37509299, Roll Size 30" Product No.: 37509199

Product Description

BlockShield SA Plus is a self-adhered, non-asphaltic, high temperature, air and vapor barrier membrane. This product is designed for applications either direct to deck or over a thermal barrier board. BlockShield SA Plus is made from a proprietary high strength polypropylene sheet with a very aggressive adhesive layer that effectively bonds to virtually all substrate types.

BASIC USE

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

MATERIALS

BlockShield SA Plus consists of a proprietary polypropylene film with a very aggressive pressure-sensitive adhesive, that **does not require primer on most roofing substrates**. The adhesive is protected by a siliconized release film, which is removed during installation.

BENEFITS

Impermeable to air, water, and moisture vapor.

Non-asphaltic product eliminates the melting issue of traditional "peel and stick" underlayments

Extremely durable, 180 days exposure, slip resistant, UV stable, walkable, and allows heavy machinery to be used on the surface.

All weather installation, can be applied in virtually all weather conditions including 20°F (-6.6°C) and rising **without the use of primer**.

Compatible with many building sealants: no adverse reaction with synthetic rubber, butyl, polyurethane, silicone and silane terminated hybrid sealants.

Ensures crew safety and a healthy building, no VOC exposure, no Red List Chemicals, or protective gear required for installation

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)

Contact VaproShield Technical – if you have additional substrate or technical questions.

Roofing Materials

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

Class A UL Fire Rating

BlockShield SA Plus has a Class A UL Fire Rating, UL 790 and CAN/ULC-S107. Utilizing a 1/4" thermal board applied to the roof deck will create a UL Class A roof assembly.

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/yd ² (289 g/m ²)
60" Roll Weight (with release film)	48 lbs (22 kg)
30" Roll Weight (with release film)	25 lbs (11 kg)
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 ft ² (46.5 m ²) gross 30" 250 ft ² (23.2 m ²) gross
Primer	No Primer Required*
VOCs	None
Field Exposure Before Permanent Roofing Materials	180 days
Minimum Application Temperature	20°F (-6.6°C) and rising
Service Temperature	minus 40°F (-40°C) - 250°F (121°C)
Certifications	Passes UL fire certification for roofs UL 790 and CAN/ULC-S107
Warranty	20 year material warranty

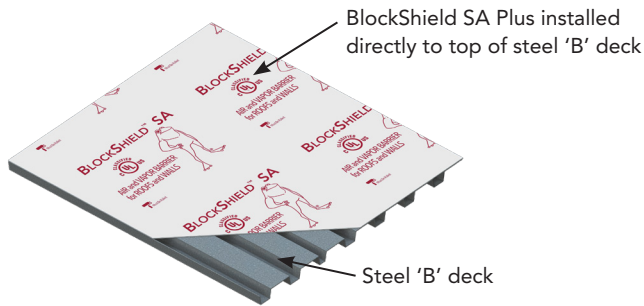
*See installation instructions for concrete substrates.

PRODUCT DATA SHEET

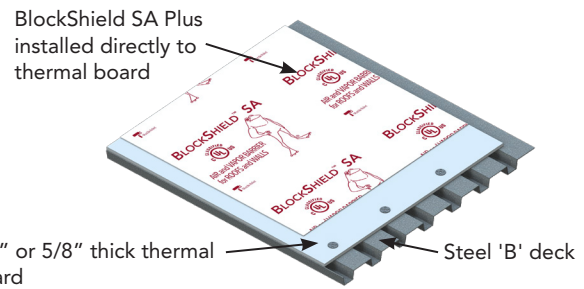
BlockShield SA Plus for Roofs - 60" Roll Product No.: 37509299, 30" Roll Product No.: 37509199

Low Slope

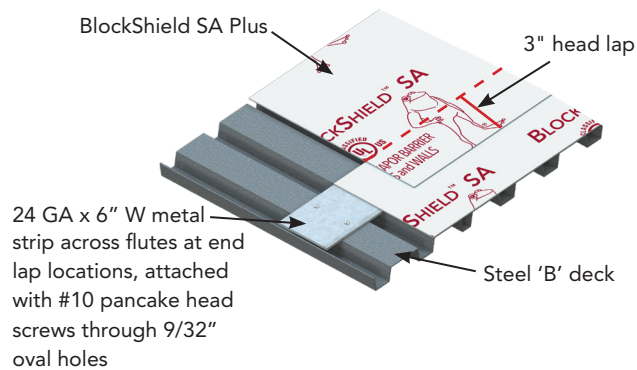
BlockShield SA Plus Installed Directly To Steel Deck



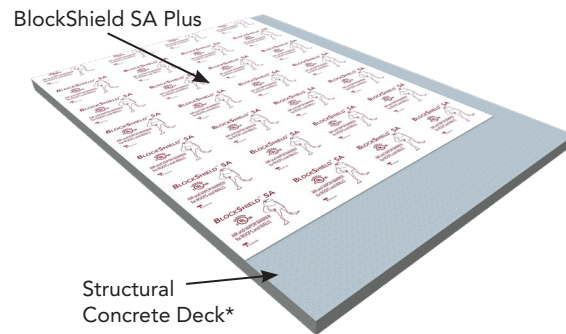
BlockShield SA Plus Installed on Thermal Board



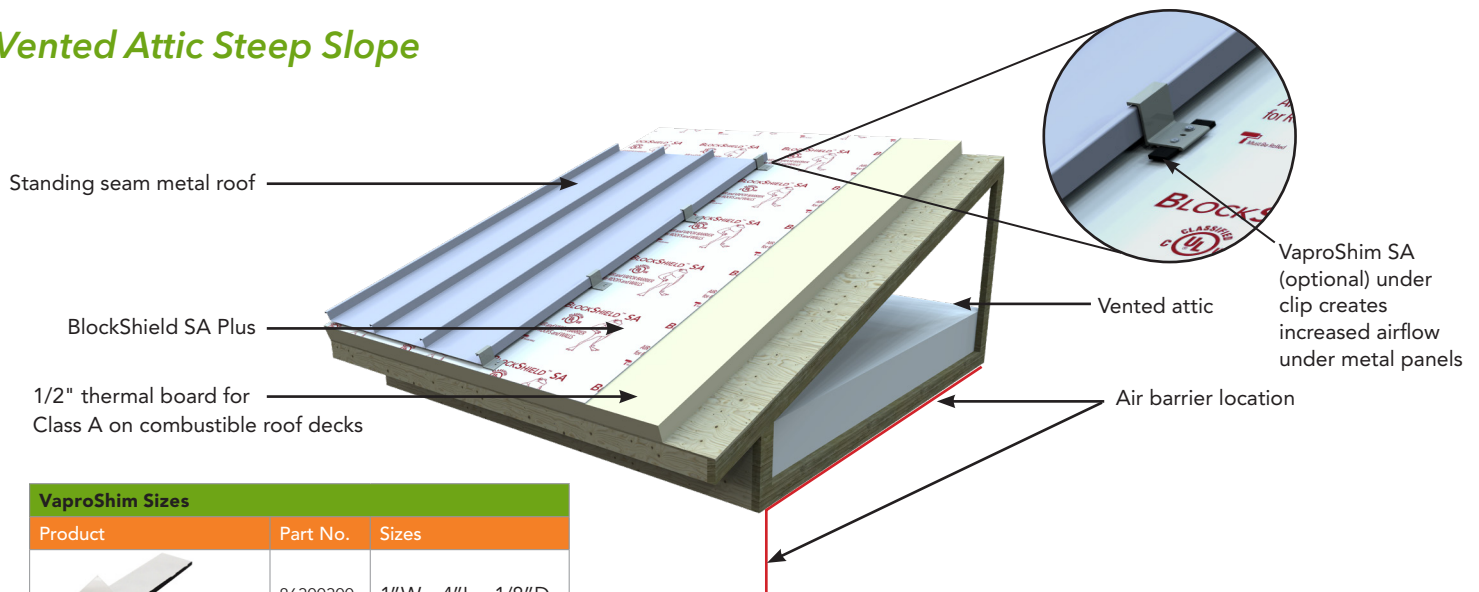
BlockShield SA Plus Head Lap over Metal Deck



Structural Concrete* Roof Decks



Vented Attic Steep Slope



VaproShim Sizes

Product	Part No.	Sizes
	86300300	1"W x 4"L x 1/8"D
	86300400	1"W x 4"L x 1/4"D
	86303599	3"W x 4" L x 1/8"D

Custom sizes available

*See installation instructions for concrete substrates.

ROOF PRODUCT DATA SHEET

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BlockShield SA Plus Wheelbarrow Test



BlockShield SA Plus directly applied to steel roof deck after the Wheelbarrow Test.

AIR BARRIER

BlockShield SA Plus offers the creation of an air and vapor barrier that becomes a part of the total air barrier system for the building when tied to a wall air barrier. This continuity creates energy savings and meets current building codes. View corresponding VaproShield product data sheets.

Installation

STORAGE AND HANDLING

Store material in original packaging. Protect rolls from direct sunlight and inclement weather until ready for use.

SAFETY

Persons who access any roofs, involved with roof construction, repair or maintenance shall use appropriate personal protective equipment including, but not limited to, hard hats, eye protection, and leather gloves and must be trained on safe practices relevant to their work.

Where the use of ladders, scaffolds, platforms, or temporary floors are utilized, safety lines and safety harnesses shall be used. Please access the OSHA Web site at www.osha.gov, contact your local OSHA office, or visit the local federal bookstore to obtain the most current information on OSHA 29 CFR 1926.

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.

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. BlockShield SA Plus can be installed in 20°F (-6.6°C) and rising temperatures. BlockShield SA Plus surface is white, reducing the overall temperature gain during installation.

BEST PRACTICE INSTALLATION

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.

If desired adhesion is not attained between membranes due to site conditions, VaproShield recommends applying a bead of VaproBond as an additional solution to pressure rolling.

Availability

VaproShield products are available throughout North America, Central and South America, and New Zealand.

Warranty

A 20-year material warranty is available.

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TESTING DATA		
PROPERTY	STANDARD	RESULT
Strength		
Elongation	ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension	MD - 409% XMD - 276%
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 AC38 Section 4.1.3 Accelerated Aging	PASS
Wear Resistance	Wheelbarrow Testing	PASS
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)
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
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



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)