

Senershield-VB

A one-component fluid-applied air/water-resistive barrier that can also function as a Class I vapor retarder

COLOR

Reddish Brown

PACKAGING

27.2 kg per 19-liter pail (60 lbs per 5-gallon pail)

4" Sheathing Fabric: 101.5 mm x 54.8 m
(4" x 180 ft) roll

6" Sheathing Fabric: 152.4 mm x 54.8 m
(6" x 180 ft) roll

9" Sheathing Fabric: 228.5 mm x 54.8 m
(9" x 180 ft) roll

COVERAGE* (@ 26 MILS WFT)

Substrate

Over ASTM C1177 Type Sheathing

27 m² (290 ft²) per pail

Over Cement Board

27 m² (290 ft²) per pail

Over Plywood**

24 m² (265 ft²) per pail

Over Oriented Strand Board (OSB)*

24 m² (265 ft²) per pail

Over Concrete Masonry Units (CMU)*

7-14 m² (80-150 ft² varies with CMU porosity)
per pail

Over Poured Concrete

27 m² (290 ft²) per pail

Sheathing Fabric

4" Sheathing Fabric

192 m (630 ft) per pail

6" Sheathing Fabric

128 m (420 ft) per pail

9" Sheathing Fabric

85 m (280 ft) per pail

*Roll or spray / backroll for optimum coverage rate. Other application methods may provide less coverage. Actual results may vary depending on surface porosity, roughness, moisture uptakes, or other factors.



DESCRIPTION

Senershield-VB is a one-component fluid-applied air/water-resistive barrier that can also function as a Class I vapor retarder¹. This water-resistant, resilient membrane may be spray-, roller-, or brush-applied directly to approved above grade wall substrates. It provides excellent secondary moisture protection behind most wall claddings including brick, siding, metal panels, EIFS and stucco. A slipsheet is required for stucco claddings.

USES

For use over the following exterior wall substrates:

Poured concrete/unit masonry, ASTM C1177 type sheathings, including DensGlass[™] and DensElement[™] exterior sheathing, eXP[™] sheathing, GlasRoc[®] sheathing, Securock[™] glass-mat sheathing, Weather Defense[™] Platinum sheathing, GreenGlass[®] sheathing, PermaBase[™] cement-board by National Gypsum and other cement-boards (ASTM C1325 Type A Exterior), Untreated Exposure I or exterior plywood sheathing (grade C-D or better), Untreated Exposure I OSB, gypsum sheathing (ASTM C79/ASTM C1396). Do not use Senershield-VB for below-grade applications or on surfaces subject to water immersion.

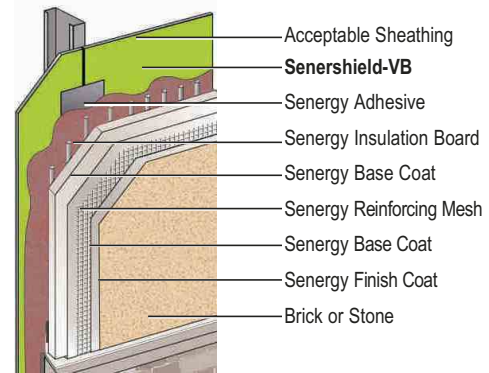
Do not use Senershield-VB for below-grade applications or on surfaces subject to water immersion.

ADVANTAGES

- Meets ASTM E2357 Air Leakage of Building Assemblies requirements specified by the ABAA and listed in ASHRAE 189.1
- Meets requirements of ICC-ES AC 148; can be used as a flexible flashing in rough openings or through-wall penetrations
- Self-sealing; meets ASTM D 1970 Nail Sealability requirements
- Approved for Senergy Wall Systems; full system warranty with Senergy EIFS and stucco wall claddings
- Liquid-applied, continuously-bonded membrane; eliminates seams, lap joints and staples; transmits wind loads directly to the substrate
- One component, water-based, very low VOC content; safe for workers and the environment, low odor, easy application
- Nonflammable as applied; promotes workplace safety
- Spray-, roller- or brush-applied; versatile, applicator-friendly performance
- Compatible with lightweight, low-cost spray equipment; fast, easy, economical application
- No primer required; single pass application on most substrates
- Asphalt and plasticizer-free; easy cleanup, will not dry out or leach plasticizer after application
- 180-day maximum outdoor exposure; can schedule application before cladding installation

Notes

- 1. Based on 2012 IBC definitions



Multi-Clad Wall Assembly using Senershield-VB

Test Results

TEST	RESULT
Air Leakage of Air Barrier Assemblies ASTM E 2357	0.0055 l/s.m ² (0.0011 cfm/ft ²) @ 75 Pa (1.57 psf) positive / post conditioning 0.0001 l/s.m ² (0.0000 cfm/ft ²) @ 75 Pa (1.57 psf) negative / post conditioning
Air Permeance of Building Materials ASTM E 2178	0.0001 l/s.m ² @ 75 Pa (0.0000 cfm/ft ² @ 1.57 psf)
Rate of Air Leakage ASTM E 283	0.0185 l/s m ² @ 75 Pa (0.0037 cfm/ft ² @ 1.57 psf)
Water Vapor Transmission ASTM E 96 Method A	0.09 Perms (grains/Hr. in Hg. ft ²) @ 26 mils wet film thickness 0.18 Perms (grains/Hr. in Hg. ft ²) @ 10 mils wet film thickness
Pull-Off Strength of Coatings ASTM D 4541	Pass - Min. 110 kPa (15.9 psi) or substrate failure (Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood; pvc and galvanized flashing)
Nail Sealability (without Sheathing Fabric) ASTM D 1970	Pass - No water penetration at galvanized roofing nail penetration under 127 mm (5") head of water after 3 days at 4 °C (40 °F)
Surface Burning ASTM E 84	Class A flame speed <25 Class A smoke developed index <450
Radiant Heat Multi-Story Tests NFPA 268, NFPA 285	Pass using many wall designs (EIFS cladding with 12" EPS insulation) Engineering analyses available on request
Water-Resistive Barriers under EIFS ASTM E 2570	Pass (Meets all criteria in the standard)
Compound Stability (Elevated Temperature) ASTM D5147 Section 15	No flowing, dripping, or drop formation up to 177 °C (350 °F)
Fire Resistance ASTM E119/UL 263	Will not add or detract from the rating of a fire resistive wall assembly
Drainage Efficiency ASTM E 2273	99%

Test Results

ICC-ES AC 212 Acceptance Criteria for Water-Resistive Coatings used as Water-Resistive Barriers over Exterior Sheathing

Sequential Testing - Structural, Racking, Restrained Environmental Conditioning and Water Penetration

1. Structural: ASTM E 1233 Procedure A	No cracking at joints or interface of flashing
2. Racking: ASTM E 72	No cracking at joints or interface of flashing
3. Restrained Environmental Conditioning: ICC-ES AC 212	No cracking at joints or interface of flashing
4. Water Penetration: ASTM E 331	No water penetration after 90 min @ 299 Pa (6.24 psf) Tested over OSB and gypsum sheathing

Sequential Testing - Weathering

1. UV Light Exposure: ICC-ES AC 212	No cracking or bond failure to substrate
2. Accelerated Aging: ICC-ES AC 212	No cracking or bond failure to substrate
3. Hydrostatic Pressure Test: AATCC 127-1985	No water penetration under 55cm (21.7") head of water for 5 hours

Freeze-Thaw ASTM E 2485 (Method B)	No sign of deleterious effects after 10 cycles (Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood)
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Water Resistance ASTM D 2247	No sign of deleterious effects after 14 day exposure (Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood)
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Tensile Bond ASTM C 297	>103 kPa (15 psi) Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood, CMU; pvc and galvanized flashing
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Tensile Bond (before & after freeze-thaw) ASTM C 297	>103 kPa (15 psi) avg; no failure of the lamina after 10 cycles freeze-thaw (Tested over various substrates)
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ICC-ES AC 148 Acceptance Criteria for Flexible Flashing Materials

Sequential Testing - Weathering

1. UV Light Exposure: ICC-ES AC 148	No cracking or bond failure to substrate
2. Accelerated Aging: ICC-ES AC 148	No cracking or bond failure to substrate
3. Hydrostatic Pressure Test: AATCC 127-1985	No water penetration

Peel Adhesion ASTM D 3330 Method F	Tested over ASTM C1177 glass-mat sheathing, OSB, plywood, pvc and uncoated aluminum
After UV Exposure	Pass
After Accelerated Aging	Pass
After Elevated Temperature Exposure	Pass
After Water Immersion	Pass

Nail Sealability after Thermal Cycling ASTM D 1970 (Modified), AAMA 711	Pass
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Tensile Strength after UV Exposure ASTM D 5034, AAMA 711	All samples meet the minimum requirement of 3.5 N/mm (20 lbs/in)
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Cold Temperature Pliability ASTM D 1970, AAMA 711	No cracking after bending around a 25 mm (1") mandrel after 2 hour exposure to -18 °C (0 °F)
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Resistance to Peeling AAMA 711	No signs of distress or failure after 24 hours of exposure at room temperature, 50 °C (122 °F), 65 °C (149 °F), 80 °C (176 °F)
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MIXING

1. Use directly from original packaging or prepare in a container that is clean and free of foreign substances. Do not use a container which has contained or been cleaned with a petroleum-based product.
2. Mix Senershield-VB with a clean, rust-free paddle and drill until thoroughly blended. Dilution of Senershield-VB is not recommended.
3. Additives, other than LT ADDITIVE, are not permitted.
4. Close container when not in use.
5. Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

APPLICATION

JOB CONDITIONS

Do not apply Master Builders Solutions materials in ambient temperature below 4 °C (40 °F). Provide supplementary heat during installation and drying period (at least 24 hours after installation and until dry) when temperatures less than 4 °C (40 °F) prevail. Do not apply Master Builders Solutions materials to frozen or frost-laden surfaces.

Limit the weather exposure of Senershield-VB to a maximum of 180 days. Verify surfaces are free of dirt, contaminants, or other deleterious conditions before application of cladding. Report and correct any such conditions prior to cladding application. Dry/cure times of adhesively applied EPS insulation board installed over Senershield-VB may be prolonged, particularly in cool and/or damp weather. Non-cementitious adhesives are not recommended for EPS insulation board attachment to Senershield-VB. Proper application is the responsibility of the user.

SURFACE PREPARATION

Substrate shall be dry, clean, sound and free of release agents, paint or other residue or coatings. Verify substrate is flat, free of fins or planar irregularities greater than 6.4 mm in 3 m (1/4" in 10'). Unsatisfactory conditions shall be reported to the general contractor and corrected before application of Senershield-VB.



EQUIPMENT

Use a 20 mm (3/4") nap roller or paint brush. If spraying, refer to Spray Application technical bulletin for spray application equipment and application instructions.

Note: If using roller application, it is necessary to pre-wet the synthetic roller pad with water and spin out the excess water. The pre-wetting only needs to be done once at the start of application.

PROCEDURE

1. Substrate shall be of a type acceptable by Master Builders Solutions and shall be installed per substrate manufacturer's instructions and local code requirements.
2. Rough openings and sheathing joints can be treated with Maxflash Liquid Flashing Membrane or Sheathing Fabric saturated with Senershield-VB. See following sections for additional steps.

USING MAXFLASH

FLASHING ROUGH OPENINGS:

1. Apply a bead of Maxflash in each corner of the rough opening and tool Maxflash into corners, ensuring that corners are fully sealed. Where wood bucks are used, tool Maxflash into gaps between bucks and between the buck and building structure. Apply additional Maxflash in a zigzag pattern onto head, sill, jambs and exterior substrate. Spread Maxflash evenly across the rough opening to form a uniform, continuous, void- and pinhole-free membrane with a 12-30 mil thickness. Spread Maxflash before it skins, typically within 2-3 minutes of application.

2. Extend Maxflash membrane minimum 4-inches onto the exterior wall, maintaining 12-30 mil thickness.
3. Allow Maxflash to skin before applying Master Builders Solutions fluid-applied air/water-resistive barrier to sheathing. Lap air/water-resistive barrier a minimum of 2-inches onto Maxflash, creating a continuous, monolithic air/water-resistive barrier.
4. Allow Maxflash to cure before installing windows.

SHEATHING JOINTS:

MAXFLASH CAN BE USED TO FILL SHEATHING JOINTS UP TO 1/2" WIDE.

1. Apply a thick bead of Maxflash to sheathing joints.
2. Spread Maxflash evenly 1-inch beyond the joint on either side. Apply 20-30 mils of Maxflash across the sheathing joint.
3. Spot fastener heads with Maxflash or Master Builders Solutions fluid-applied air/water-resistive barrier.
4. Allow Maxflash to skin before applying subsequent coat of air/water-resistive barrier.

See the Maxflash product bulletin for coverages and additional product highlights.

- OR -

USING SHEATHING FABRIC

FLASHING ROUGH OPENINGS:

Wrap openings with Sheathing Fabric. Applying a generous amount of mixed Senershield-VB to all surfaces and immediately embedding Sheathing Fabric, completely saturating the Sheathing Fabric. If necessary, apply a second coat of Senershield-VB to ensure a complete, void-free membrane.

SHEATHING JOINTS:

1. Spot all fasteners and precoat sheathing joints, terminations, inside and outside corners with mixed Senersshield-VB using a 101 mm (4") wide by 20 mm (3/4") nap roller, brush or spray.
- Immediately place and center Sheathing Fabric over wet Senersshield-VB at all sheathing joints, terminations, inside and outside corners, as well as knot holes and check cracks that may exist in plywood or OSB. Ensure Sheathing Fabric extends evenly on both sides of the sheathing joint. Completely saturate Sheathing Fabric with Senersshield-VB.
 - Lap Sheathing Fabric 63.5 mm (2 1/2") minimum at intersections.
 - If using roller, brush, or trowel application, allow to dry to the touch before applying Senersshield-VB to entire wall surface. If spraying, "wet on wet" application is acceptable.
- Apply Senersshield-VB to DensGlass™ or DensElement exterior sheathing, eXP™ sheathing, GlasRoc® sheathing, Securock™ glass-mat sheathing, Weather Defense™ Platinum sheathing, GreenGlass® sheathing, PermaBase™ cement-board by National Gypsum and other cement-boards (ASTM C1325 Type A Exterior), gypsum sheathing (ASTM C79/ASTM C1396) plywood, OSB or CMU substrate(s) with a 20 mm (3/4") nap roller or spray to a consistent, minimum 13 wet mil thickness. Prior to application of the second coat, visually inspect to assure sheathing surface is blister free and coating is free of voids and pinholes. Repair if needed and then apply a second coat after the initial coating is sufficiently dry. A minimum of two (2) 13 mil wet coats of Senersshield-VB is required. Senersshield-VB may be sprayed to a 26-mil thickness in one wet application. Backrolling may be needed to produce a pinhole-free film. If backrolling is required, a second spray application may be needed. **Note: Refer to Spray Application technical bulletin for spray application equipment and application instructions.**



DRYING TIME

Allow to dry completely, typically 2 to 10 hours, before proceeding with EIFS or other cladding installation. Protect from rain and from temperatures less than 4 °C (40 °F) for 24 hours.

FOR BEST PERFORMANCE

Prior to application of EPS insulation boards for EIFS or alternative claddings, visually inspect the Senersshield-VB. For voids, pinholes, surface deficiencies, etc. Repair deficiencies and areas that are not intact. Apply additional Senersshield-VB as necessary such that Senersshield-VB is free of voids, pinholes, etc. All sheathing joints, terminations, inside and outside corners must be reinforced with 4", 6" or 9" Sheathing Fabric or WS FLASH 4 or 9 or treated with MaxFlash. Reference.

LIMITATIONS

SHIPPING & STORAGE

Protect Master Builders Solutions materials during transportation and installation to avoid physical damage. Store Master Builders Solutions materials in a cool, dry place protected from freezing. Store at no less than 4 °C (40 °F). Protect from extreme heat and direct sunlight.

STACKING

Do not stack pallets.

SHELF LIFE

Approximately 2 years, properly stored in original containers.

TECHNICAL SUPPORT

Consult Master Builders Solutions Technical Services Department at +1 (800) 589-1336 for specific recommendations concerning all other applications. Consult the Wall Systems website at senergy.master-builders-solutions.com/en, for additional information about products and systems and for updated literature.

HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting senergy.master-builders-solutions.com/en, e-mailing your request to mbsbscst@mbcc-group.com or calling +1 (800) 433-9517. Use only as directed.

IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.

SOLIDS
74% solids

VOC CONTENT

11 g/l, or 0.09 lbs/gal less water and exempt solvents per ASTM D2369 (based in part on EPA method 24)

LIMITED WARRANTY NOTICE

Master Builders Solutions Construction Systems US, LLC ("Master Builders") warrants this product to be free from manufacturing defects and to meet the technical properties on the current Technical Data Guide, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. MASTER BUILDERS MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive remedy of Purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is shipment to purchaser of product equal to the amount of product that fails to meet this warranty or refund of the original purchase price of product that fails to meet this warranty, at the sole option of Master Builders. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. MASTER BUILDERS WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

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