

Aussie Shield™ Air Barrier System Installation Guide

INTRODUCTION

The AVM Aussie Shield[™] Air Barrier System is a high-performance, permeable liquid membrane designed for creating monolithic, durable air and vapor-permeable barriers. Utilizing advanced Silyl Terminated Polymer (STP) technology, this system provides superior adhesion and seamless protection against unwanted air and moisture infiltration.



PRODUCT DESCRIPTION

Aussie Shield[™] 300-PLF

- Material: One-component STP-based liquid membrane for Detailing
- Thickness: Recommended 15-30 mils dry film thickness
- UV Exposure: Up to 12 months
- Key Features:
 - Adheres to damp substrates
 - Gun grade consistency for rough opening preparation and repair applications
 - Primer-less to most substrates
 - Low VOC content (<20 g/L)
 - Moisture Vapor Permeable (13.7 perms ASTM E96)
 - Very High Solids Content (>97%)
 - Fully compatible with AVM Aussie Shield[™] 300 PLM for Air Barrier
 - Available in 10.3 ounce cartridges and 20 ounce sausages

Aussie Shield[™] 300-PLM

- Material: One-component STP-based liquid membrane for Detailing and Air Barrier
- Thickness: Recommended 15-30 mils dry film thickness
- UV Exposure: Up to 12 months
- Key Features:
 - Adheres to damp substrates
 - Sprayable and rollable application
 - Primer-less to most substrates
 - Low VOC content (<21 g/L)
 - Moisture Vapor Permeable (20.5 perms @ 15 mils ASTM E96)
 - Very High Solids Content (>97%)
 - Fully compatible with AVM Aussie Shield[™] 300 PLF for detailing
 - Available in Five (5) gallon Buckets

TOOLS AND EQUIPMENT

Aussie Shield[™] 300-PLF:

- Cartridge or Sausage gun
- Various spatulas, putty knives, trowels (steel or plastic)
- Cleaning rags and solvent for tool maintenance
- Personal protective equipment (PPE)

Aussie Shield[™] 300-PLM:

- Approved sprayer (See Product Data Sheet Graco 833/933/675 or Titan PowrTwin 12000/ Hydra X 4540)
- Rollers (minimum 1/2-inch nap)
- Spatulas, putty knives, trowels (metal or plastic), brushes or others for detail work
- Cleaning rags and solvent for tool maintenance the alcohols (denatured or isopropyl) work best for cleanup.
- Personal protective equipment (PPE)

SURFACE PREPARATION

Surfaces must be structurally sound, clean, and free of loose debris, oils, grease, or contaminants. Substrates may be damp but should not have standing or ponding water. Repair surface irregularities with AVM Aussie Shield[™] 300 PLF to ensure smooth application over depressions and transitions.

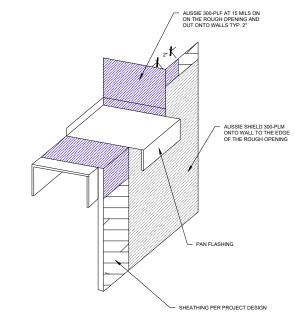
APPLICATION INSTRUCTIONS

General Guidelines

- See AVM Industries Aussie Shield[™] 300-PLF and AVM Industries Aussie Shield[™] 300-PLM Product Data Sheets for more information.
- Find AVM Air Barrier Details at www.avmindustries.com
- Both products may be used around window, penetrations and other irregular surfaces.
- Both products may be applied to fiberglass faced gypsum board, plywood, OSB, CMU, Precast or Cast in Place Concrete, and a variety of other common Construction Substrates.
- Both products adhere well to a wide variety of substrates, generally with no primer required. If you're not certain, please call AVM for assistance or perform field adhesion testing.

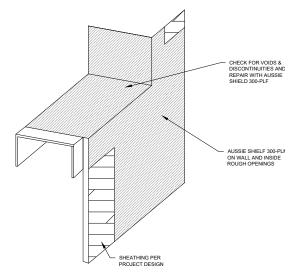


- Both products bond to damp surfaces and cure in wet weather.
- Bonding surfaces must be structurally sound, clean, free of oxidation, mill oils, wax, and release agents that may interfere with adhesion.
- Surfaces may be damp / wet, but must be free of standing / ponding water, and in colder applications, frost free.
- Substrate and Air Temperatures: 10°F (-23°C) to 110°F (43°C). Note that chemical reactions are controlled by temperature – the cooler the temperature the slower the cure, and the warmer the temperature, the faster the cure.
- **Cold Weather:** In lower temperature applications, keeping the product stored in a heated room before use and misting (Hudson Sprayer or other) the installed product with warm, clean water will help with the cure.
- Hot Weather: When substrate or air temperatures exceed 95°F (35°C), it is recommended to apply to walls and rough openings that are in the shade before substrate and air temperatures get to the daily maximum. Misting hot surfaces with clean water will help and will also provide water to help with the product cure in low humidity applications. Protect product containers (lids on, and in the shade) when not in use.
- Apply AVM Aussie Shield[™] 300 PLF by spatulas, putty knives, trowels, or other to achieve a uniform thickness of 15–30 mils (dry film).
- Apply AVM Aussie Shield[™] 300 PLM by spray or roller to achieve a uniform thickness of 15–30 mils (dry film).
- Ensure complete coverage without pinholes or voids. Use multiple coats if necessary to achieve specified thickness.



ROUGH OPENING SILL - PRE-TREATMENT METHOD

- Treat inside and outside corners with AVM Aussie Shield[™] 300 PLF to smooth transitions.
- Apply AVM Aussie Shield[™] 300 PLF using a trowel or brush to create a uniform, flush surface.
- Add sill flashing, if required.
- Allow to cure before applying AVM Aussie Shield[™] 300 PLM over the treated area.

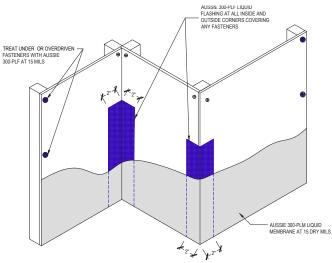


ROUGH OPENING SILL - POST TREATMENT METHOD

- Spray, Roll, or brush AVM Aussie Shield[™] 300 PLM from the Wall into the Rough Opening without the need to pretreat.
- Add sill flashing, if required.

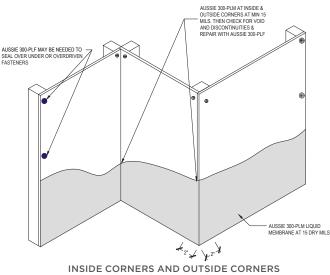


 Inspect all coated areas, especially fasteners, sheathing joints, and Rough Opening corners and edges, for voids and discontinuities, then repair with AVM Aussie Shield[™] 300 PLF using a spatula, putty knife, trowel or other to patch the holiday.



INSIDE AND OUTSIDE CORNERS - PRETREATMENT METHOD

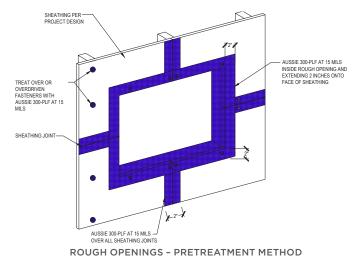
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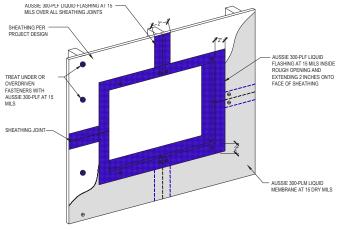


- POST TREATMENT METHOD

• Spray, Roll, or brush AVM Aussie Shield[™] 300 PLM from the Wall into the Rough Opening without the need to pretreat.

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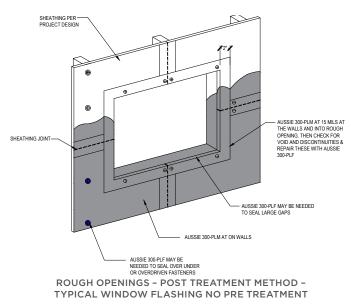




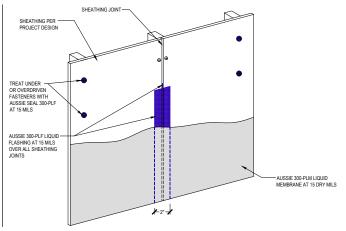
TYPICAL WINDOW FLASHING FULL ASSEMBLY

- Apply AVM Aussie Shield[™] 300 PLF directly to the rough opening, extending onto adjacent sheathing to ensure a continuous barrier.
- For any irregularities or gaps, Use AVM Aussie Shield[™] 300 PLF for any irregularities or gaps, to level the surface before applying AVM Aussie Shield[™] 300 PLM to the sheathing.



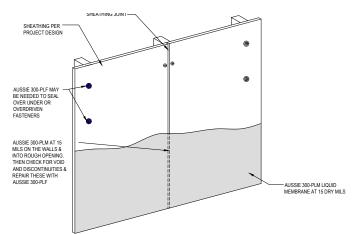


- Apply AVM Aussie Shield[™] 300 PLF to the sheathing joints to bridge gaps and create a continuous membrane.
- Ensure proper coverage and film thickness to maintain performance.
- Apply AVM Aussie Shield[™] 300 PLM over the sheathing joint.



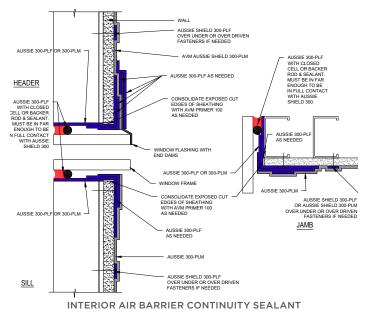
SHEATHING JOINTS - PRETREATMENT METHOD

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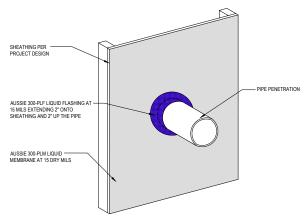
SHEATHING JOINTS - POST TREATMENT METHOD

- Apply AVM Aussie Shield[™] 300 PLM directly over sheathing joints to bridge gaps and create a continuous membrane. Upon pre-installation inspection, large gaps are found it may be better to prefill them with AVM Aussie Shield[™] 300 PLF.
- Ensure proper coverage and film thickness to maintain performance.
- With this Post Treatment Method, Inspect the AVM Aussie Shield[™] 300 PLM looking for voids, discontinuities, or other, and repair with AVM Aussie Shield[™] 300 PLF.



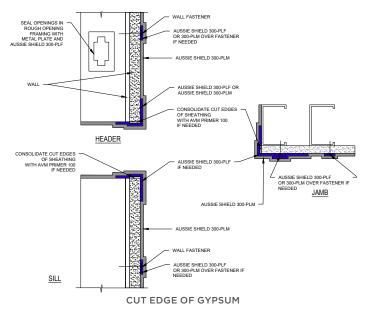
• Use AVM Aussie Shield[™] 300-PLF. For continuity it must be in full contact with the Air Barrier and the window.



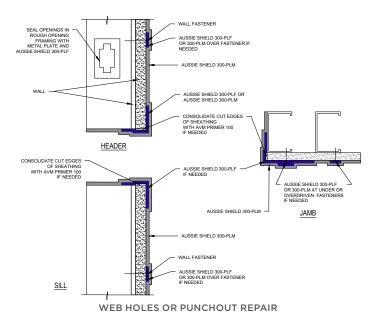


PIPE AND MECHANICAL PENETRATIONS

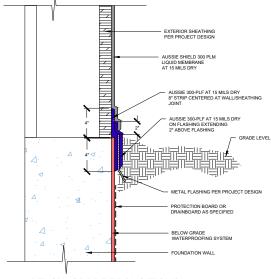
 Use AVM Aussie Shield[™] 300-PLF to ensure continuity. Frequently the use of backer rod or other space filling materials will be required.



• Where required use AVM Primer 100 to consolidate the raw / cut edge of Gypsum board



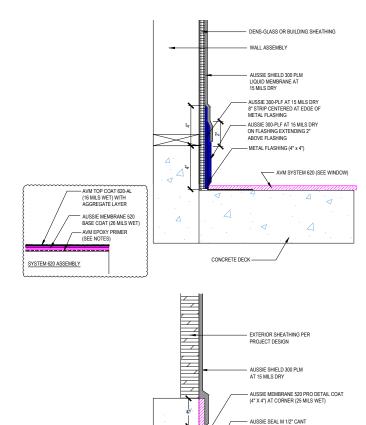
• Repair with AVM Aussie Shield[™] 300-PLF and a piece of metal, stainless steel flashing, or other.



BELOW GRADE TRANSITIONS

 There are many variations of this detail, but generally AVM Aussie Shield[™] 300-PLM married over top of AVM Aussie Shield[™] 300-PLF is the answer.







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AVM TOP COAT 620-AL

(16 MILS WET) WITH AGGREGATE LAYER

 AUSSIE MEMBRANE 520
BASE COAT (26 MILS WET)
AVM EPOXY PRIMER (SEE NOTES) AVM SYSTEM 620 (SEE WINDOW)

QUALITY CONTROL AND INSPECTION

Inspect all coated surfaces visually to confirm full and proper application. Ensure critical areas such as penetrations, inside corners, and sheathing joints are free of voids or pinholes. Repair any deficiencies immediately using AVM Aussie Shield[™] 300 PLF or 300 PLM as needed.

COVERAGE AND STORAGE

• **Coverage:** 60–110 sq. ft. per gallon, depending on substrate porosity and application method.

• Storage:

- Store in original, unopened containers between 41°F and 86°F.
- Protect from direct sunlight and freezing conditions.
- Shelf life: 18 months from the date of manufacture when properly stored.

EXTRA ITEMS

- Rain Screen: AVM Aussie Shield[™] 300-PLM is acceptable for Rain Screen applications with a maximum spacing of one (1) inch.
- AVM Aussie Shield[™] 300 PLM over CMU: Most CMU around the world is very porous. This means that it will absorb a coating like a sponge. Industry experience shows that a light coat of AVM Aussie Shield[™] 300 PLM, allowed to cure for an hour, then followed by normal application (roll or spray) will significantly reduce the absorption of the CMU. This procedure may also cut down the need to back roll over CMU.
- Cut Edge of Gypsum: Where required use AVM Primer 100 to consolidate the raw / cut edge of Gypsum board

TECHNICAL SUPPORT

For additional guidance or technical assistance, contact AVM Industries at:

- Phone: 888.414.1041 or 818.888.0050
- Email: info@avmindustries.com
- Website: <u>www.avmindustries.com</u>

