PERM-A-BARRIER® ALUMINUM FLASHING

Self-adhesive, rubberized asphalt detail membrane for air and vapor barrier applications

Description

Perm-A-Barrier® Aluminum Flashing is ideal for protecting and sealing critical areas of the building superstructure from the damaging effects of the elements. By minimizing air and water vapor flow through the building exterior at transition areas, Perm-A-Barrier Aluminum Flashing:

- Seals transition and detail areas to provide a continuous air barrier
- Prevents premature deterioration of the building envelope

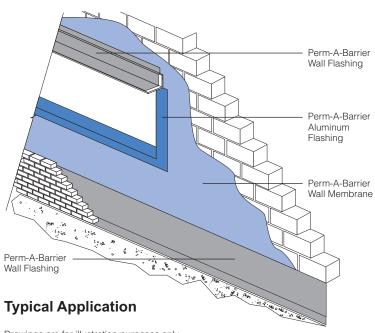
Advantages

- Fully bonded—transmits wind loads directly to the substrate
- Waterproof and impermeable to moisture—impermeable to the passage of liquid water and water vapor

- Aluminum faced film—provides extended UV exposure, improved sealant adhesion to film, dimensional stability, high tear strength, puncture and impact resistance
- **Cold applied**—no flame hazard; self-adhesive overlaps ensure continuity
- **Flexible**—accommodates minor settlement and shrinkage movement
- **Controlled thickness**—factory made sheet ensures constant, non-variable site application
- Aggressive, conformable adhesive allows self-sealing around mechanical fasteners
- Wide application window—Perm-A-Barrier Aluminum Flashing surface and ambient temperatures at 25°F (-4°C) and above

Product Advantages

- Fully bonded
- Waterproof and impermeable to moisture
- Air tight
- Aluminum faced film provides extended UV exposure
- Cold applied
- Flexible
- Controlled thickness
- Aggressive, conformable adhesive
- Wide application window



Drawings are for illustration purposes only. Please refer to graceconstruction.com for specific application details.

System Components

- Perm-A-Barrier Aluminum Flashing—
 Aluminum faced fully adhered flashing for protecting and sealing critical detail areas
- Perm-A-Barrier Primer Plus water-based vapor permeable primer used to facilitate tenacious adhesion of Perm-A-Barrier self-adhered membranes to the substrate
- Perm-A-Barrier WB Primer high tack, water-based primer for use with Perm-A-Barrier Aluminum Flashing on cementitious substrates and exterior gypsum wallboards
- Bituthene Primer B2 LVC—low VOC solvent-based primer for green concrete or damp surfaces
- Grace S100 Sealant—one part neutral curing, ultra low modulus silicone sealant for sealing penetrations, terminations, brick ties and final terminations.
- **Bituthene Mastic Trowel Grade**—rubberized asphalt mastic for sealing patches, terminations, brick ties, etc.
- Bituthene Liquid Membrane two component, trowel grade, asphalt modified urethane for sealing patches, terminations, brick ties, etc.

Installation

Safety

Perm-A-Barrier products must be handled properly. Vapors from the mastic and solventbased primer are harmful and flammable. For these products, the best available information on safe handling, storage, personal protection, health and environmental considerations has been gathered. Refer to product label and Material Safety Data Sheet before use. All users should acquaint themselves with this information prior to working with the material. Carefully read detailed precaution statements on the product labels and MSDS before use. MSDSs can be obtained from our web site at graceconstruction.com or by contacting us toll free at 866-333-3SBM (3726).

Surface Preparation

Surface must be smooth, clean, dry and free of voids, spalled areas, loose aggregate, loose nails, sharp protrusions or other matter that will hinder the adhesion or regularity of the flashing installation. Clean loose dust or dirt from the surface to which the flashing is to be applied by wiping with a clean, dry cloth or brush.

If the substrate is damp, allow to dry or use Bituthene Primer B2 LVC to prepare the area to receive the membrane. DO NOT apply any primer to Perm-A-Barrier Aluminum Flashing.

Temperature

Perm-A-Barrier Aluminum Flashing may only be applied in dry weather when air and surface temperatures are above 25°F (-4°C).

Application

Priming—Perm-A-Barrier Primer Plus and Perm-A-Barrier WB Primer are water-based primers which impart an aggressive, high tack finish on the treated substrate. They are packaged ready to use and are specifically designed to facilitate tenacious adhesion of Perm-A-Barrier Aluminum Flashing to various substrates including glass-mat faced gypsum sheathing. Refer to Technical Letter 2, Substrate Preparation for Application of Perm-A-Barrier Products to Glass-Mat Faced Gypsum Sheathing for priming requirements on specific glass-mat faced sheathing products.

Aluminum Flashing Application

Pre-cut Perm-A-Barrier Aluminum Flashing to easily handled lengths. Peel release paper from roll to expose rubberized asphalt and carefully position tape against substrate. Press firmly into place with a steel hand roller or the back of a utility knife as soon as possible, fully adhering the tape to the substrate to prevent water from migrating under the Perm-A-Barrier Aluminum Flashing. Overlap adjacent pieces 2 in. (51 mm) and roll overlap with a smooth seam roller.

When applying Aluminum Flashing to Perm-A-Barrier Wall Membranes and Wall Flashing—Apply a bead of Grace S100 Sealant, Bituthene Mastic or Bituthene Liquid Membrane along all top edges, cuts, penetrations and as shown in Grace detail drawings, and trowel into place.

When applying Aluminum Flashing to Perm-A-Barrier Liquid, Perm-A-Barrier VP, Perm-A-Barrier VP Low Temp or Perm-A-Barrier VPO—Apply a bead of Grace S100 Sealant or Bituthene Liquid Membrane along all top edges, cuts, penetrations and as shown in Grace detail drawings, and trowel into place. If Perm-A-Barrier Liquid is more than 7 days old, priming may be necessary. Refer to Technical Letter 11 for more information.

Complete installation instructions and details are available upon request.

If wrinkles develop, carefully cut out affected area and replace in similar procedure outlined above. The repair piece must be pressed into place with a hand roller as soon as possible to ensure continuous and intimate contact with the substrate.

All non water shedding edges must be sealed with Grace S100 Sealant, Bituthene Liquid Membrane or Bituthene Mastic.

Membrane Protection

Perm-A-Barrier Aluminum Flashing must be protected from damage by other trades or construction materials.

Storage and Handling Information

All materials must be protected from rain and physical damage. Pallets of Perm-A-Barrier Aluminum Flashing must not be double stacked on the job site. Provide cover on top and all sides, allowing for adequate ventilation. Store membrane where temperatures will not exceed 90°F (32°C) for extended periods. All products must be stored in a dry area away from high heat, flames or sparks. Store only as much material at point of use as is required for each day's work.

Limitations

Perm-A-Barrier Aluminum Flashing must not be applied in areas where it will be exposed to direct sunlight permanently, and must be covered within 1 year. Refer to Technical Letter 19, *Exposure Guidelines for Perm-A-Barrier Self-Adhered Membranes*.

Perm-A-Barrier Aluminum Flashing and all other Perm-A-Barrier self-adhered membranes should not be applied over Grace S100 Sealant.

Warranty

Perm-A-Barrier products are warranted to be free of defects in manufacture for a period of 5 years. Material will be provided at no charge to replace any defective product.

Technical Service

Support is provided by full-time technically trained Grace field sales representatives and technical service personnel, backed by a central research and development technical services staff.

Physical Properties

Property	Typical Value	Test Method
Thickness	0.040 in. (1.0 mm)	ASTM D3767 method A
Minimum tensile strength, membranes	600 psi	ASTM D412 die C modified
Minimum tensile strength, film	4000 psi	ASTM D412 die C modified
Minimum elongation, to failure of rubberized asphalt	200%	ASTM D412 die C modified
Pliability, at 180° bend over 1 in. (25 mm) mandrel	Pass at -15°F (-26°C)	ASTM D1970
Crack cycling, 1/2 in. (3.2 mm) at -25°F (-32°C)	Unaffected	ASTM C836
Minimum puncture resistance, membrane	80 lbs (355 N)	ASTM E154
Water absorption	0.1%	ASTM D570

www.graceconstruction.com

For technical assistance call toll free at 866-333-3SBM (3726)

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