

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

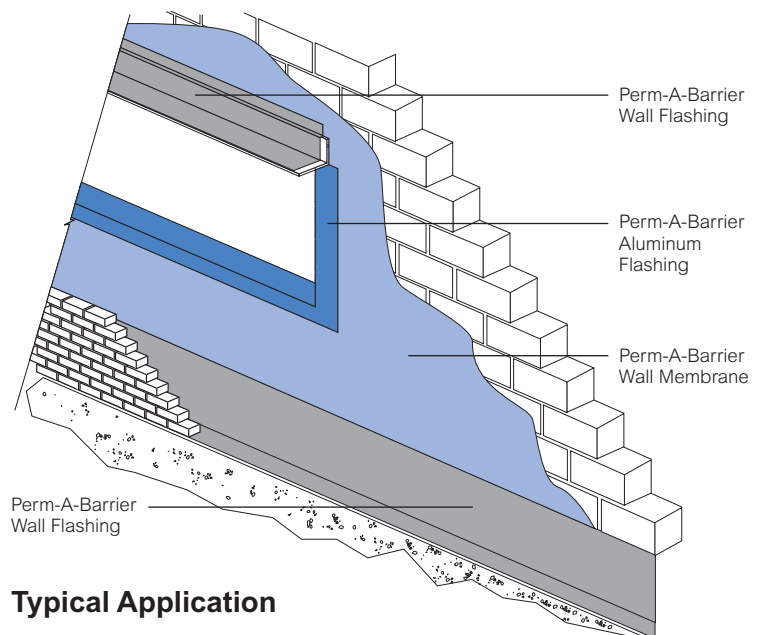
Advantages

- **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



Typical Application

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

System Components

- **Perm-A-Barrier WB Primer**—high tack, water-based primer for use with Perm-A-Barrier membranes and flashings on cementitious substrates and exterior gypsum wallboards
- **Bituthene® Primer B2**—solvent-based primer for green concrete or damp substrates
- **Bituthene Primer B2 LVC**—low VOC solvent-based primer for green concrete or damp surfaces
- **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 solvent-based 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 or 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 WB Primer is a water-based primer which imparts an aggressive, high tack finish on the treated substrate. It is packaged ready to use and is specifically designed to facilitate tenacious adhesion of Perm-A-Barrier Wall Flashing, Wall Membrane, Detail Membrane and Aluminum Flashing to exterior sheathing. Apply Perm-A-Barrier WB Primer by roller at a coverage rate of 250–350 ft²/gal (6–8 m²/L). Allow to dry for a minimum of 1 hour (longer at low temperatures).

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 Bituthene Mastic 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 or Perm-A-Barrier VP—Apply a bead of 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.

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 can be used in cavity or vertical wall construction where extended UV exposure is required (up to 1 year). However, Perm-A-Barrier Aluminum Flashing should not be used in applications such as roofing applications and open joint wall panels where it will be left permanently exposed to UV.

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, 1/8 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)

Perm-A-Barrier and Bituthene are trademarks of W. R. Grace & Co.–Conn. registered in the United States and other countries.

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate and is offered for the users' consideration, investigation and verification, but we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would infringe any patent or copyright. W. R. Grace & Co.–Conn., 62 Whittemore Avenue, Cambridge, MA 02140. In Canada, Grace Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6.

This product may be covered by patents or patents pending.
PAB-098A Printed in U.S.A. 1/10

Copyright 2009. W. R. Grace & Co.–Conn.
FA/pdf

GRACE