

Perm-A-Barrier® Wall Flashing

Self-adhesive, rubberized asphalt/polyethylene flashing tapes for cavity wall applications

Advantages

- **Fully bonded** – continuous adhesion to the substrate resists wind loads and prevents water tracking behind the tape
- **Waterproof and virtually impermeable to moisture** – virtually impermeable to the passage of liquid water and vapor
- **Cross laminated film** – provides 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** – creates 100% watertight laps and allows self-sealing around mechanical fasteners
- **Unique green color and logo** – highly differentiated on the job site from other flashing types and enables easy identification of damage
- **RIPCORD™ “split release on demand”** – faster application in the straight-aways, ease of membrane positioning in detailed areas

- **Foldless release paper** – fewer edge catches, 180° pull-back, ease of membrane cutting (single cuts) and membrane positioning, quicker one-man installs

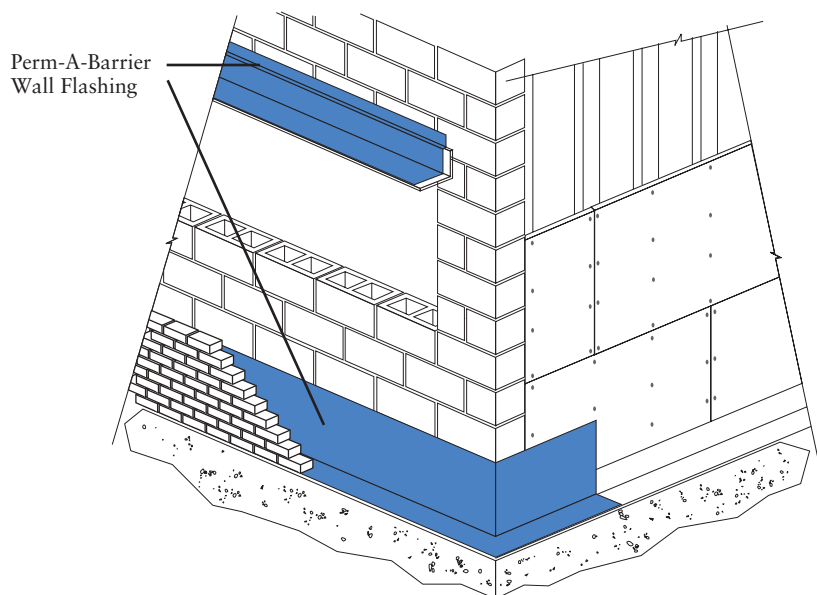
Description

Perm-A-Barrier® wall membranes are ideal for protecting the building superstructure from the damaging effects of the elements. By minimizing air and water vapor flow through the building exterior, Perm-A-Barrier wall membranes:

- Prevent premature deterioration of the building envelope
- Enhance thermal performance of the structure and save energy costs
- Improve comfort for the building occupants

System Components

- **Perm-A-Barrier Wall Flashing** – 1 mm (40 mil) total thickness self-adhesive, cold applied tape consisting of 0.8 mm (32 mils) of rubberized asphalt integrally bonded to a 0.2 mm (8 mil) high density, cross laminated polyethylene film. The rolls are interwound with disposable silicone-coated release sheet
- **Perm-A-Barrier Wall Membranes** – air and vapor barrier membranes for use in cavity wall applications
- **Perm-A-Barrier WB Primer** – high tack, water-based primer for use on exterior wallboards
- **Bituthene® Mastic Trowel Grade** – rubberized asphalt mastic for sealing around penetrations, 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 www.graceconstruction.com or by contacting us toll free at 866-333-3SBM (3726).

Preparatory Work

Apply Perm-A-Barrier Wall Flashing and accessories only in fair weather when air and surface temperatures are above -4°C (25°F).

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

Conditioning and Priming

Use Perm-A-Barrier WB Primer to enhance adhesion on dusty cementitious substrates. Perm-A-Barrier WB Primer is a water-based primer which imparts an aggressive, high tack finish on the treated substrate. It is specifically designed to facilitate tenacious adhesion of Perm-A-Barrier Wall Flashing, Perm-A-Barrier Wall Membrane, Grace underlayments and Grace Vycor® Self-Adhered Flashings to various substrates including Dens-Glass Gold® (refer to relevant product data sheets).

It will cover approximately 6-8 m²/L (250-350 ft²/gal) when applied with a roller. A synthetic, 13 mm (1/2 in.) nap roller has been found to be very successful. A moderately thick coating should be applied and rolled out evenly. A properly applied coating will have uniform coverage and leave a tacky finish to the surface when dry.

Apply primer in dry weather with ambient and substrate temperatures above -4°C (25°F). Surface must be dry and clean, free from frost, dirt, grease, oil or other contaminants. Failure to remove excessive dust may result in compromised adhesion of the membrane. Allow primer to dry completely before application of the flashing.

In cooler or humid conditions, priming may be done in advance. If primed surface is exposed for more than 7 days, or if significant dust or dirt accumulates on the surface, re-prime with a thin coat of Perm-A-Barrier WB Primer.

The drying time could vary from 15 minutes (> 32°C (<90°F), windy, under the sun) to 3 hours (cold and no wind), depending on the weather condition. For 32°C (90°F) or greater, 45 minutes to one hour; 10°C (50°F) to 32°C (90°F), 1-3 hours; less than 10°C (50°F) 3 hours or more.

Bituthene Primer B2 is used to prime “green” concrete or damp substrates. Apply to clean surface at a coverage rate of 6-8 m²/L (250-350 ft²/gal). Allow primer to dry completely (approximately 1 hour dependent on weather condition) before application of wall flashing.

Flashing Application

Pre-cut Perm-A-Barrier Wall Flashing to easily handled lengths. Peel release paper from roll to expose rubberized asphalt and carefully position flashing against substrate. RIPCORDER, a “split release on demand” feature embedded in

the membrane, also makes Perm-A-Barrier Wall Flashing easy to position in detailed areas. Press firmly into place with a steel hand roller or the back of a utility knife as soon as possible, fully adhering the flashing to the substrate to prevent water from migrating under the Perm-A-Barrier Wall Flashing. Form end dams at horizontal flashing terminations to prevent water entry. Overlap adjacent pieces 51 mm (2 in.) and roll overlap with a steel hand roller.

Apply a bead of Bituthene Mastic along all laps, seams, top edges, cuts and penetrations and trowel into place. Lay or trim edges of Perm-A-Barrier Wall Flashing 13 mm (1/2 in.) back from the face of the masonry. No reglet is necessary when installing Perm-A-Barrier Wall Flashing to vertical surfaces. 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.

Protection

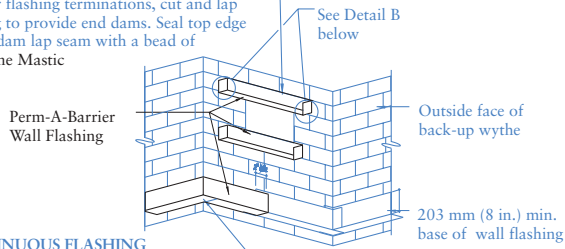
Perm-A-Barrier Wall Flashing must be protected from damage from other trades or construction materials.

Storage and Handling Information

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

DISCONTINUOUS FLASHING

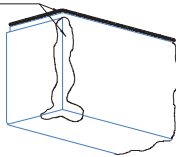
At masonry opening head & sill flashing and at other flashing terminations, cut and lap flashing to provide end dams. Seal top edge & end dam lap seam with a bead of Bituthene Mastic



CONTINUOUS FLASHING

At inside and outside corners, fold and lap seams. Seal top edge & corner lap seams with a bead of Bituthene Mastic

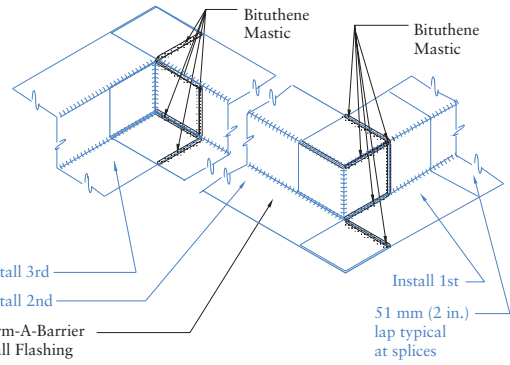
Bead of Bituthene Mastic



A. Isometric

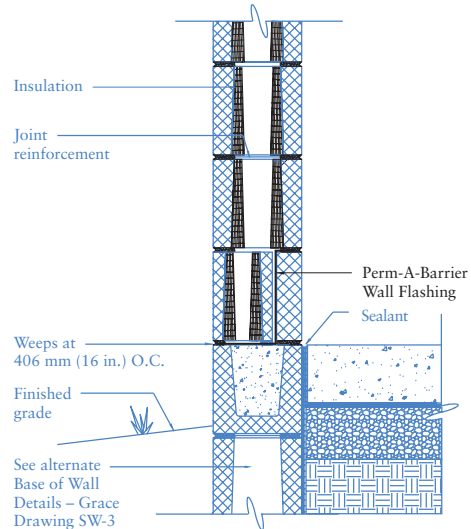
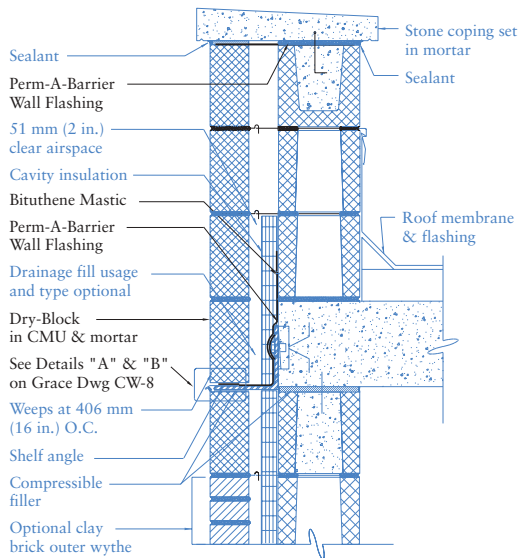
Note: Veneer not shown for clarity

B. Isometric of end dam

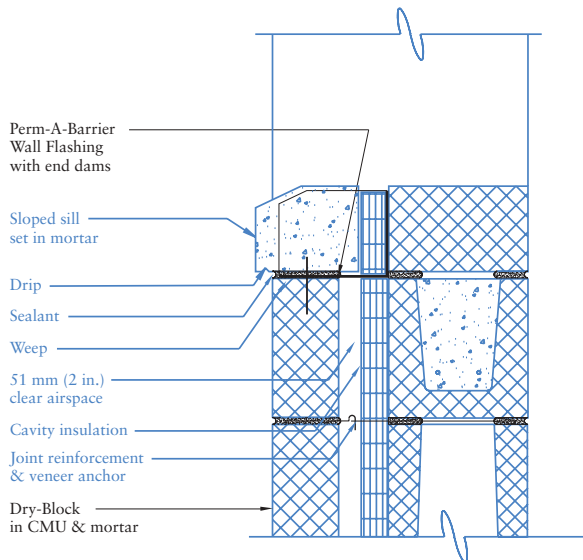


Perm-A-Barrier Flashing Details at Inside and Outside Corners

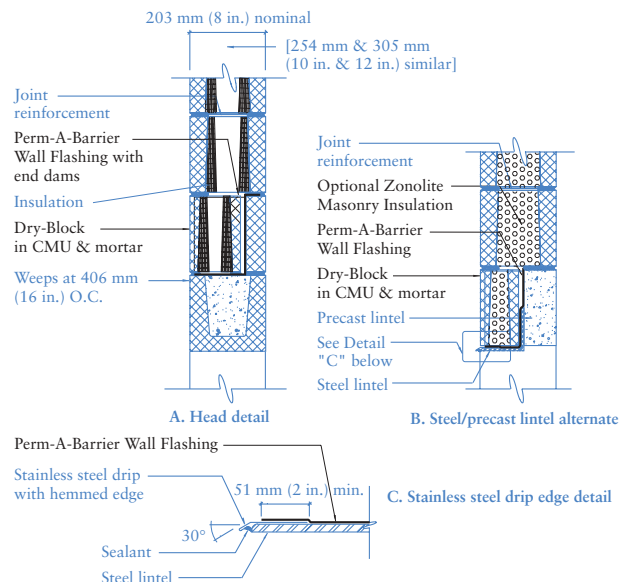
Through-wall Flashing Details



Parapet Detail



Base of Wall Detail



Sill Detail

Masonry Opening Head Flashing

Supply

Product	Unit of Sale	Approximate Coverage	Weight	Palletization
Perm-A-Barrier Wall Flashing				
– 305 mm (12 in.)	3 rolls	75 linear ft per roll	22.5 lbs/roll	25 cartons (75 rolls) per pallet
– 457 mm (18 in.)	2 rolls	75 linear ft per roll	33.7 lbs/roll	25 cartons (50 rolls) per pallet
– 610 mm (24 in.)	1 roll	75 linear ft per roll	49.7 lbs/roll	35 cartons (35 rolls) per pallet
– 914 mm (36 in.)	1 roll	75 linear ft per roll	67.7 lbs/roll	25 cartons (25 rolls) per pallet
Bituthene Mastic – 5 gal pail	1 pail	approx. 120 ft ² at 60 mils	54 lbs/roll	36 pails per pallet
Bituthene Mastic – 30 oz tube	12 tubes	approx. 30 linear ft x ¼ in. bead	32 lbs/carton	72 cartons (864 tubes) per pallet
Perm-A-Barrier WB Primer – 5 gal pail	1 pail	6-8 m ² /L (250-350 ft ² /gal)	45 lbs/pail	24 pails per pallet

Physical Properties

Property	Typical Value	Test Method
Color	Green with repeated logo imprint	
Thickness	1 mm (40 mil)	ASTM D3767, Method A
Low temperature flexibility	Unaffected at -43°C (-45°F)	ASTM D1970
Tensile strength, membrane	8300 kPa (1200 psi) minimum	ASTM D412, Die C Modified
Elongation, ultimate failure of rubberized asphalt	200% minimum	ASTM D412
Lap adhesion at minimum application temperature	875 N/m (60 lbs/ft) width	ASTM D1876 Modified
Adhesion to concrete at minimum application temperature	875 N/m (60 lbs/ft) width	ASTM D903
Puncture resistance, membrane	178 N (40 lbs) minimum MD	ASTM D781
	356 N (80 lbs) minimum MD	ASTM E154
Tear resistance, initiation	58 N (13 lbs) minimum MD	ASTM D1004
Tear resistance, propagation	40 N (9 lbs) minimum MD	ASTM D1938
Permeance	2.9 ng/m ² sPa (0.05 perms) maximum	ASTM E96, Method B
Water absorption	0.1% maximum	ASTM D570

Limitations

Perm-A-Barrier Wall Flashing must not be applied in areas where it will be exposed to sunlight permanently and must be covered within a reasonable amount of time, not to exceed 30 days.

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 Services

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

For Technical Assistance call toll free at 866-333-3SBM (3726).

 Visit our web site at www.graceconstruction.com

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W. R. Grace & Co.-Conn.

62 Whittemore Avenue

Cambridge, MA 02140

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