PERM-A-BARRIER® WALL FLASHING
Self-adhesive, rubberized asphalt/polyethylene flashing tapes for cavity wall applications

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

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

System Components
• Perm-A-Barrier Wall Flashing—40 mil (1 mm) total thickness self-adhesive, cold applied tape consisting of 32 mils (0.8 mm) of rubberized asphalt integrally bonded to a 8 mil (0.2 mm) high density, cross laminated polyethylene film. The rolls are interwound with disposable silicone-coated release sheet.

Product Advantages
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• Aggressive, conformable adhesive
• Unique green color and logo
• Ripcord Split Release on Demand
• Foldless release paper

Drawings are for illustration purposes only. Please refer to www.graceconstruction.com for specific application details.
• **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 25°F (-4°C).

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 DensGlass Gold® (refer to relevant product data sheets). It will cover approximately 250–350 ft²/gal (6–8 m²/L) when applied with a roller. A synthetic, ½ in. (13 mm) 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 25°F (-4°C). 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 (<90°F (>32°C), windy, under the sun) to 3 hours (cold and no wind), depending on the weather condition. For 90°F (32°C) or greater, 45 minutes to one hour; 50°F (10°C) to 90°F (32°C), 1–3 hours; less than 50°F (10°C) 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 250–350 ft²/gal (6–8 m²/L). 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. Ripcord, 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 2 in. (51 mm) 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 ½ in. (13 mm) 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.
Through-wall Flashing Details

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

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.

Perm-A-Barrier Wall Flashing
8 in. (203 mm) min. base of wall flashing

Bituthene Mastic

Outside face of back-up wythe

8 in. (203 mm) min. base of wall flashing

Note: Veneer not shown for clarity

Bead of Bituthene Mastic

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CONTINUOUS FLASHING
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B. Isometric of end dam

Base of Wall Detail

Sill Detail

Masonry Opening Head Flashing

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

Perma-A-Barrier Wall Flashing
with end dams

Sloped sill set in mortar

2 in. (51 mm) clear airspace

Cavity insulation

Joint reinforcement

Dry-Block in CMU & mortar

Insulation

Weeps at 16 in. (406 mm) O.C.

Weeps at 16 in. (406 mm) O.C.

Shelf angle

Compressible filler

Optional clay brick outer wythe

Sealant

Perma-A-Barrier Wall Flashing

8 in. (203 mm) nominal

[10 in. & 12 in. (254 mm & 305 mm) similar]

Joint reinforcement

Optional Zonolite Masonry Insulation

Perm-A-Barrier Wall Flashing

Dry-Block in CMU & mortar

Precast lintel

Percy-A-Barrier Wall Flashing

Dry-Block in CMU & mortar

Precast lintel

See Detail "C" below

Steel lintel

Stainless steel drip with hemmed edge

2 in. (51 mm) min.

Sealant

Steel lintel

30°

Perma-A-Barrier Wall Flashing

Stainless steel drip with hemmed edge

2 in. (51 mm) min.

Sealant

Steel lintel

30°

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Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical Value</th>
<th>Test Method</th>
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<tbody>
<tr>
<td>Color</td>
<td>Green with repeated logo imprint</td>
<td>ASTM D3767, method A</td>
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<tr>
<td>Thickness</td>
<td>40 mil (1 mm)</td>
<td>ASTM D1970</td>
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<tr>
<td>Low temperature flexibility</td>
<td>Unaffected at -45°F (-43°C)</td>
<td>ASTM D412, Die C modified</td>
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<td>Tensile strength, membrane</td>
<td>1200 psi (8300 kPa) minimum</td>
<td>ASTM D412</td>
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<td>Elongation, ultimate failure of</td>
<td>200% minimum</td>
<td>ASTM D412</td>
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<tr>
<td>rubberized asphalt</td>
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<td>Lap adhesion at minimum application temperature</td>
<td>60 lbs/ft (875 N/m) width</td>
<td>ASTM D1876 modified</td>
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<tr>
<td>Adhesion to concrete at minimum application temperature</td>
<td>60 lbs/ft (875 N/m) width</td>
<td>ASTM D903</td>
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<td>Puncture resistance, membrane</td>
<td>40 lbs (178 N) minimum MD</td>
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<td>80 lbs (356 N) minimum MD</td>
<td>ASTM E154</td>
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<td>Tear resistance, initiation</td>
<td>13 lbs (58 N) minimum MD</td>
<td>ASTM D1004</td>
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<td>Tear resistance, propagation</td>
<td>9 lbs (40 N) minimum MD</td>
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<td>Permeance</td>
<td>0.05 perms (2.9 ng/m²sPa) maximum</td>
<td>ASTM E96, method B</td>
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<tr>
<td>Water absorption</td>
<td>0.1% maximum</td>
<td>ASTM D570</td>
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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 90°F (32°C) 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.

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.

www.graceconstruction.com

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