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PERM-A-BARRIER® VPS 30 WALL MEMBRANE Data Sheet

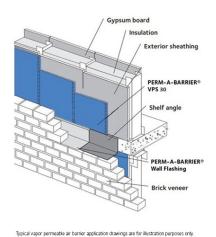
Primerless, self-adhering, vapor permeable air and water barrier membrane



Product Description

The PERM-A-BARRIER® VPS 30 (vapor permeable sheet) is a primerless, vapor permeable air and water barrier membrane consisting of a proprietary breathable carrier film with a specially designed adhesive. This unique membrane provides superior protection against the damaging effects of air and water ingress on building structures. It creates an effective barrier against air infiltration and exfiltration, which reduces associated energy loss and condensation problems through the building envelope.

The PERM-A-BARRIER® VPS 30 membrane is ideal for wall assemblies that require a breathable air barrier. It permits the diffusion of water vapor that might otherwise condense in the wall structure. The membrane is impermeable to water, enabling it to also act as a water drainage plane.



Advantages

- Wide application window Surface and ambient temperatures at 0° F (-17.78° C) and above
- Primerless, self-adhered sheet Reduces installation time
- NFPA 285 Meets NFPA 285 as part of various wall assemblies
- Airtight Protects against air passage and associated energy loss
- Vapor permeable Minimizes moisture from being trapped in the wall cavity



- Water resistant Resists wind-driven rain
- Controlled thickness Factory-made sheet ensures constant, non-variable site application
- Lightweight Allows for easy handling and installation
- Flexible Conforms and bonds tightly to inside and outside corners following exterior building profiles
- Strong adhesion Forms a tenacious bond to prepared construction substrates
- Compatible with GCP PERM-A-BARRIER® flashing systems
- Higher Inservice temperature stability up to 200 °F (93 °C)

System Components

PERM-A-BARRIER® VPS 30 wall membrane - Use at installation temperatures above 0° F (-17.78° C).

Ancillary Products

- PERM-A-BARRIER® S100 Sealant For Detailing/Liquid Flashing purposes
- PERM-A-BARRIER® NPS detail membrane Fully adhered primerless flashing
- PERM-A-BARRIER® aluminum flashing Aluminum faced flashing
- PERM-A-BARRIER® detail membrane Fully adhered flashing for protecting and sealing critical detail areas
- PERM-A-BARRIER® wall flashing Fully adhered throughwall flashing system
- BITUTHENE[®] mastic Rubberized asphalt mastic for sealing penetrations, terminations, brick ties, etc.
- BITUTHENE® liquid membrane Two-component, elastomeric liquid and sealant applied detailing compound used for details and terminations

Limitations of Use

- Approved uses only include those specifically detailed in this product data sheet and other current product data sheets found at gcpat.com
- The PERM-A-BARRIER® VPS 30 membrane is not intended for any other use than what is found in this data sheet. Contact GCP Technical Services where any other use is anticipated or intended.
- The PERM-A-BARRIER® VPS 30 membrane must not be applied in areas where it will be permanently exposed to direct sunlight. The PERM-A-BARRIER® VPS 30 membrane must be covered within 270 (9 months) days of installation. Refer to Technical Letter 19, Exposure Guidelines for PERM-A-BARRIER® Self-Adhered Membranes, as exposure guidelines for some system components may vary.

Safety and Handling Information

Read and understand the product label and safety data sheet (SDS) for each system component. All users should acquaint themselves with this information prior to working with the products and follow the precautionary statements. SDSs can be obtained by contacting your local GCP representative or office, by calling GCP toll free at 1-866-333-3SBM (3726) and in some cases from our website at gcpat.com.



Storage

- All materials must be protected from rain and physical damage. Pallets of PERM-A-BARRIER® VPS 30 membranes must not be double stacked on the job site. Store off the ground and provide cover on top and all sides, allowing for adequate ventilation.
- Store the membranes 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.

Installation

Temperature Limitation

The PERM-A-BARRIER® VPS 30 wall membrane may be applied only when air and surface temperatures are above 0° F (-17.78° C). Maximum in-service temperature is 200 °F (93 °C).

Surface Preparation

The surface must be smooth, clean, dry to the touch and free of voids, spalled areas, loose aggregate, loose nails, sharp protrusions or other matter that might hinder the adhesion or regularity of the wall membrane installation. Clean loose dust or dirt from the surface that the wall membrane is to be applied to by wiping it with a clean, dry cloth or brush. It is best practice to apply a PERM-A-BARRIER® primer or adhesive onto any gypsum cut edge to reduce dust prior to membrane application. For OSB, it is recommended to use PERM-A-BARRIER® Adhesive Primer with a coverage rate of >450sft/gal before applying the membrane.

Membrane Application

Cut membrane into easily handled lengths. For surfaces without pre-existing, in-place penetrations (masonry anchors, ties etc.), apply the membrane horizontally or vertically to the properly prepared substrate, beginning at the base. All subsequent side and end laps must maintain a minimum overlap of 2 in. (51 mm). All horizontal laps must be applied in a shingle/water shedding configuration.

For conditions with existing masonry anchors (ties), apply the membrane horizontally to the prepared wall, beginning at the base. Each length of the membrane must be installed so that the upper edge runs continuously along the underside of the line of masonry anchors (ties). Subsequent membranes applied above must overlap the sheet below by 2 in. (51 mm) immediately below the line of anchors (ties). The membrane may be cut to an appropriate width such that it fits between the rows of anchors and allows for a min. 2 in. (51 mm) overlap onto the membrane below. It will be necessary to cut the membrane at the location of the anchors projecting from the wall to enable the sheet to be laid in place.

All slits and relief cuts made around the anchors (ties) are required to be sealed with BITUTHENE® mastic, BITUTHENE® liquid membrane, PERM-A-BARRIER® \$100 Sealant or GCP approved, compatible sealant. End laps and side laps that occur in subsequent lengths that follow should maintain a minimum overlap of 2 in. (51 mm).

To prevent water from migrating under the membrane, the membrane must be rolled firmly into place with a hand roller as soon as possible, ensuring continuous and intimate contact with the substrate.



In certain applications such as on soffits or ceilings, back nail the membrane along the side lap prior to installing/overlapping the next sheet of membrane.

In these applications, additional fastening may be required through the field of the membrane, and must be sealed with BITUTHENE® mastic, BITUTHENE® liquid membrane, PERM-A-BARRIER® \$100 Sealant or GCP approved sealant. Alternately, install a termination bar that spans the soffit to ensure positive contact to the substrate.

Apply BITUTHENE® mastic, BITUTHENE® liquid membrane, PERM-A-BARRIER® S100 Sealant or GCP approved, compatible sealant to seal around the anchors. Fit the PERM-A-BARRIER® VPS 30 product tightly around all penetrations through the membrane and seal using BITUTHENE® liquid membrane or GCP approved compatible sealant.

Continue applying the membrane into all openings in the wall area, such as windows, doors, etc., and terminate at points that will prevent interior visibility. The installation must be made continuous at all framed openings, such as windows, doors, etc. Flash framed openings with PERM-A-BARRIER® NPS detail membrane, PERM-A-BARRIER® aluminum flashing, or PERM-A-BARRIER® detail membrane, and overlap onto PERM-A-BARRIER® VPS 30 in a shingled water shedding manner. Coordinate installation of PERM-A-BARRIER® VPS 30 with the roofing trade to ensure continuity with the roofing system at this critical transition area.

At the end of each working day, if the wall has been only partially covered, apply a bead of BITUTHENE® mastic, BITUTHENE® liquid membrane or GCP approved, compatible sealant along the top edge of the membrane at its termination to prevent vertical drainage of precipitation from penetrating the end and undermining the membrane adhesion. Tool to ensure the sealant is worked into the surface.

Inspect the membrane before covering, and repair any punctures, damaged areas or inadequately lapped seams.

Membrane Protection

PERM-A-BARRIER® VPS 30 wall membranes must be protected from damage by other trades or construction materials. All damaged areas must be repaired.

Membrane Repairs

Repairs must be made using PERM-A-BARRIER® VPS 30 Wall Membrane sized to extend 3 in. (75mm) in all directions from the perimeter of the affected area. 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. When sealing the patch if placed in a diamond pattern both water sheading edges will need sealant. If the patches are placed straight, then the top edge and minimum of 3" down each side will need sealant termination. If the sealing patch is horizontal, then all edges will need sealant termination. To seal apply a bead of BITUTHENE® mastic, BITUTHENE® liquid membrane, PERM-A-BARRIER® \$100 Sealant. To repair gaps which are less than 1/8 inch in diameter (fish mouth gaps) cover with 'PERM-A-BARRIER® \$100 Sealant' extending 2 inches in diameter from the gap.

Supply

Product	Unit of Sale	Size/Coverage	Weight (nominal)	Palletization
PERM-A-BARRIER® VPS 30 wall	1 roll	38.5 in X 141 ft 450 ft ² per roll	32 lbs./roll	25 cartons (25 rolls) per pallet
membrane				



Physical Properties

Property	PERM-A-BARRIER® VPS 30 Wall Membrane	Test Method
Color	White	
Water resistance of in-place membrane	Pass at >20 psf	ASTM E331
Air permeance at test pressure of 1.57 psf (75 Pa)	< 0.02 L/s/m² (0.004cfm/ft²)	ASTM E2178
Assembly air permeance at test pressure of 1.57 psf (75 Pa)	< 0.2 L/s/m² (0.04cfm/ft²)	ASTM E2357
Water vapor permeance	13.9 perms	ASTM E96, Method B, wet cup
Water resistance	Pass	ICC – AC38
Water Penetration Resistance Around Nails / Fastener Sealability	Pass	AAMA 711 Section 5.2, ASTM D1970 Modified
Peel strength @ minimum temperature (25[])	>1.5 lbf/in to VPS 30	ASTM D903 modified
Pull adhesion	>15 psi. Gypsum board >12 psi CMU	ASTM D4541
Breaking force	>40lb Machine Direction >35lb Cross Direction	ASTM D5034
Low temperature flexibility	Pass	ICC – AC38
Surface burning characteristics	Flame Spread Index, Class A Smoke Developed Index, Class A	ASTM E84
Drainage Efficiency	90%*	ASTM E2273
Wall assembly fire test	Pass as part of various wall assemblies with foam plastic insulation	NFPA 285

^{*}Please request external test report, if needed, for more details.

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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 consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and 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 that would infringe any patent, copyright, or other third party right.

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GCP Applied Technologies Inc., 2325 Lakeview Parkway, Suite 400, Alpharetta, GA 30009, USA

GCP Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6

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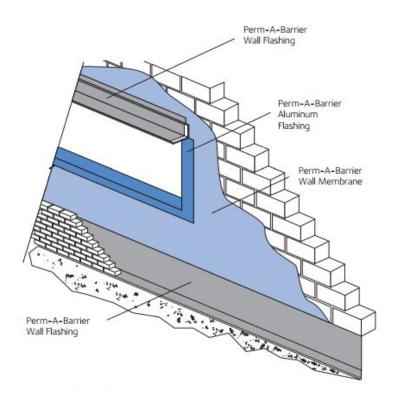
PERM-A-BARRIER® Aluminum Flashing Data Sheet

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

Product 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



Product 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

System Components

- PERM-A-BARRIER® Aluminum Flashing Aluminum faced fully adhered flashing for protecting and sealing critical detail areas
- PERM-A-BARRIER® WB Primer high tack, water-based primer for use with PERM-A-BARRIER® Aluminum Flashing on cementitious and exterior gypsum wallboards
- BITUTHENE® Primer B2 LVC low VOC solvent-based primer for green concrete or damp surfaces
- PERM-A-BARRIER® Universal Flashing & Sealant one part moisture curing, STPE sealant for sealing penetrations, terminations, brick ties, final terminations & flashing application.
- 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 SDS (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 SDS before use. SDSs can be obtained from our web site at gcpat.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 wall membrane installation. Clean loose dust or dirt from the surface to which the detail membrane 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 $25 \,^{\circ}$ F ($-4 \,^{\circ}$ C).



Application

Priming – PERM–A–BARRIER® WB Primer is a water–based primer which imparts 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 Universal Flashing & Sealant, BITUTHENE®Mastic or BITUTHENE®Liquid Membrane along all top edges, cuts, penetrations and as shown in GCP 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 Universal Flashing & Sealant or BITUTHENE®Liquid Membrane along all top edges, cuts, penetrations and as shown in 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 Universal Flashing & 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 Universal Flashing & 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 GCP field sales representatives and technical service personnel, backed by a central research and development technical services staff.

Physical Properties

Available in 4", 6", 9", 12" & 18" width

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, 1/8in. (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

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GCP Applied Technologies Inc., 2325 Lakeview Parkway, Suite 450, Alpharetta, GA 30009, USA

GCP Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6

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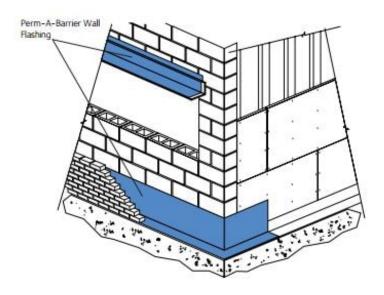
PERM-A-BARRIER® Wall Flashing Data Sheet

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

Product 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 occupant



Product Advantages

- Fully bonded—continuous adhesion to the substrate resists wind loads and prevents water tracking behind the tape
- Waterproof and impermeable to moisture— impermeable to the passage of liquid water and water 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
- 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® Wall Flashing on cementitious and exterior gypsum wallboards
- BITUTHENE® Primer B2 LVC— low VOC solvent-based primer for green concrete or damp surfaces
- PERM-A-BARRIER® Universal Flashing & Sealant one part moisture curing, STPE sealant for sealing penetrations, terminations, brick ties, final terminations & flashing application.
- 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 SDS (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 SDS before use. SDS can be obtained from our web site at gcpat.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

Apply PERM-A-BARRIER® Primer Plus by air spray, brush or roller or apply PERM-A-BARRIER® WB Primer by brush or roller. Allow the primer to dry completely before application of the flashing. Drying times may vary depending upon temperature and humidity conditions. Refer to PERM-A-BARRIER® Primer Plus and PERM-A-BARRIER® WB Primer product data sheet for installation recommendations and 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.

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 Universal Flashing & Sealant along all laps, seams, top edges, cuts, penetrations and trowel into place.

When applying PERM-A-BARRIER® Wall Flashing to PERM-A-BARRIER® Liquid, VP, VP LT or VPO, apply a bead of Universal Flashing & Sealant or BITUTHENE® Liquid Membrane along all laps, seams, top edges, cuts, penetrations and as shown in GCP 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. Lay or trim edges of PERM-A-BARRIER® Wall Flashing 1/2 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.

All non water shedding edges must be sealed with Universal Flashing & Sealant, BITUTHENE® Liquid Membrane or BITUTHENE® Mastic.

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® 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.



Supply

	UNIT OF SALE	APPROXIMATE COVERAGE	WEIGHT	PALLETIZATION
PERM-A-BARRIER® Wall				
Flashing				
12 in. (305 mm)	3 rolls	75 linear ft per roll	22.5 lbs/roll	25 cartons (75 rolls) per pallet
18 in. (457 mm)	2 rolls	75 linear ft per roll	33.7 lbs/roll	25 cartons (50 rolls) per pallet
24 in. (610 mm)	1 roll	75 linear ft per roll	49.7 lbs/roll	35 cartons (35 rolls) per pallet
36 in. (914 mm)	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/pail	36 pails per pallet
BITUTHENE® Mastic—30 oz	12 tubes	approx. 30 linear ft x 1/4 in.	32 lbs/carton	72 cartons (864 tubes) per
tube		bead		pallet
PERM-A-BARRIER® Universal	1 cartridge	approx. 30 linear ft x 1/4 in.	29 oz. cartridge	10 cartridges/ carton
Flashing & Sealant Sealant—29		bead		42 cartons/ pallet
oz. Cartridge				
BITUTHENE® Liquid Membrane	1 pail	approx. 200 Linear ft/gal @ 1"	16 lbs/pail	100 pails per pallet
—1.5 gal pail		wide x 90 mils.		
BITUTHENE® Liquid Membrane	1 pail	approx. 200 Linear ft/gal @ 1"	44 lbs/pai	24 pails per pallet
—4 gal pail		wide x 90 mils.		
PERM-A-BARRIER® Primer Plus	1 pail	450-500 ft²/gal (11-12	43 lbs/pail	36 pails per pallet
—5 gal pail		m^2/L)		
PERM-A-BARRIER® WB Primer	1 pail	250-350 ft²/gal (6-8 m²/L)	45 lbs/pail	32 pails per pallet
—5 gal pail				

Physical Properties

	TYPICAL VALUE	TEST METHOD
Color	Green with repeated logo imprint	
Thickness	40 mil (1 mm)	ASTM D3767, method A
Low temperature flexibility	Unaffected at -45 °F (-43 °C)	ASTM D1970
Tensile strength, membrane	1200 psi (8300 kPa) minimum)	ASTM D412, Die C modified
Elongation, ultimate failure of rubberized asphalt	200% minimum	ASTM D412
Lap adhesion at minimum application temperature	60 lbs/ft (875 N/m) width	ASTM D1876 modified
Adhesion to concrete at minimum application	60 lbs/ft (875 N/m) width	ASTM D903
temperature		
Puncture resistance, membrane	40 lbs (178 N) minimum MD	ASTM D781
	80 lbs (356 N) minimum MD	ASTM E154



Tear resistance, initiation	13 lbs (58 N) minimum MD	ASTM D1004
Tear resistance, propagation	9 lbs (40 N) minimum MD	ASTM D1938
Permeance	0.05 perms (2.9 ng/m²sPa) 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 60 days. Refer to Technical Letter 19, *Exposure Guidelines for PERM-A-BARRIER*[®] *Self-Adhered Membranes*.

PERM-A-BARRIER® Wall Flashing and all other PERM-A-BARRIER® self-adhered membranes should not be applied over Universal Flashing & 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 GCP field sales representatives and technical service personnel, backed by a central research and development technical services staff.

gcpat.com | North America Customer Service: 1-866-333-3726

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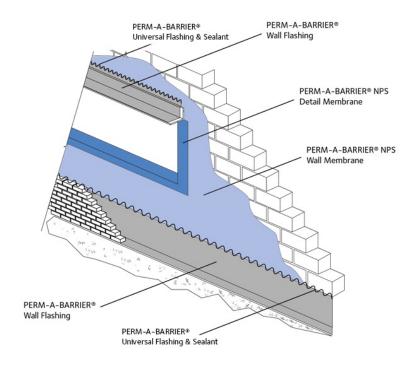


PERM-A-BARRIER® NPS Detail Membrane Data Sheet

Primerless self-adhered detail membrane for air and vapor barrier applications

Product Description

GCP Applied Technologies ("GCP") PERM-A-BARRIER® NPS Detail Membrane is specifically designed for protecting and sealing critical areas of the building superstructure from the damaging effects of the elements by minimizing air, water and water vapor flow through the building exterior at transition areas.



Typical Air and Vapor Barrier Application

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

Advantages

- Primerless self-adhered membrane—allows for reduction of installation time by up to 40%
- Fully bonded—helps transmit wind loads directly to the substrate
- Waterproof and impermeable to moisture—impermeable to the passage of liquid water and water vapor
- Air tight—specifically designed to protect against air passage and associated energy losses.
- Cross laminated film provides dimensional stability, high tear strength, puncture and impact resistance
- Flexible—elongation test value of 200% accommodates minor settlement and shrinkage movement
- Controlled thickness—factory made sheet allows for consistent, non-variable site application
- Aggressive, conformable adhesive—can be used to help seal around mechanical fasteners
- Wide application window— primerless application at surface and ambient temperatures of 25°F (-4°C) and above.



System Components

PERM-A-BARRIER® NPS Detail Membrane is fully adhered and is designed for use with other GCP sheet and fluid applied membranes. For specific product use with other GCP membranes and fluids please refer to the individual Sheet and Fluid Applied Membrane product data sheet instructions found at "gcpat.com"

Other Ancillary Products Specific product information and product packaging details for all GCP products (including ancillary products) can be found at gcpat.com

- PERM-A-BARRIER® Adhesive Adhesive for difficult to bond areas
- PERM-A-BARRIER® Primer Plus- water-based vapor permeable primer which imparts an aggressive, high tack finish on the treated substrate.
- PERM-A-BARRIER® Universal Flashing & Sealant one part moisture curing, STPE sealant for sealing penetrations, terminations, brick ties, final terminations & flashing application.
- BITUTHENE® Mastic—rubberized asphalt mastic for sealing penetrations, terminations, brick ties, etc. as detailed in GCP Product Data Sheets
- BITUTHENE® Liquid Membrane—two component, trowel grade, asphalt modified urethane for sealing patches, terminations, brick ties, etc.

Limitations of use

- Approved uses only include those uses specifically detailed in this Product Data Sheet and other current Product Data Sheets that can be found at gcpat.com
- PERM-A-BARRIER® NPS Detail Membrane is not intended for any other use. Contact GCP Technical Services where any other use is anticipated or intended.
- Perm-A-Barrier NPS Detail Membrane must not be applied in areas where it will be exposed to direct sunlight
 permanently, and must be covered within 1 year of installation. Refer to Technical Letter 19, Exposure Guidelines for
 Perm-A-Barrier Self-Adhered Membranes.
- Maximum In Service Temperature (as installed) is 160°F (71°C)

Safety and Handling

- The most current Safety Data Sheet (SDS) can be obtained from our web site at gcpat.com or by contacting us toll free at 866-333-3SBM (3726).
- PERM-A-BARRIER® NPS Detail membrane must be handled properly. The best available information on safe
 handling, storage, personal protection, health and environmental considerations has been gathered. Refer to product
 label and 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 SDS before use.

Storage Information

- Pallets of PERM-A-BARRIER® NPS Detail Membrane must not be double stacked on the job site.
- All materials must be protected from rain and physical damage.
- Store off ground under tarps with adequate ventilation or otherwise protected from rain and ground moisture
- Store membrane where temperatures will not exceed 90°F (32°C) for extended periods.
- Store in dry conditions at 40°F (4.5°C)-90°F(32°C)



- Observe 1 year shelf life and use on a first in- first out basis
- Review technical letter #30 Shelf Life/Storage and Handling of GCP Waterproofing and Air Barrier Products
- Store only as much material at point of use as is required for each day's work.

Installation

Details and Technical Letters

The most up to date detail drawings and technical letters are available at gcpat.com. For complete application instructions, please refer to the current GCP Applied Technologies Contractor Handbook and Literature on (www.gcpat.com). Documents in hardcopy as well as information found on websites other than www.gcpat.com may be out of date or in error. Before using this product it is important that information be confirmed by accessing www.gcpat.com and reviewing the most recent product information, including without limitation Product Data Sheets and Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations. Please review all materials prior to installation of PERM-A-BARRIER® NPS Detail Membrane. For technical assistance with detailing and problem solving please call toll-free at (866) 333–3SBM (3726)

Temperature

- PERM-A-BARRIER® NPS Detail Membrane may be applied to most surfaces without primer only in dry weather and when air and surface temperatures are above 25°F (-4°C).
- Maximum in service temperature is 160°F (71°C)

Substrate 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 membrane installation. Clean loose dust or dirt from the surface to which the membrane is to be applied by wiping with a clean, dry cloth or brush. It is best practice to first apply primer onto any gypsum sheathing cut edges that will receive PERM-A-BARRIER® NPS Detail Membrane to help reduce dust that may impact adhesion. In cold temperature installations do not apply over ice or frost.

Application



- Pre-cut PERM-A-BARRIER® NPS Detail Membrane to easily handled lengths. Peel release paper from roll to expose adhesive and carefully position the membrane against substrate. The entirety of the membrane must be pressed firmly into place with sufficient pressure using a rubber or vinyl hand roller during application to ensure continuous and intimate contact with the substrate and to prevent water from migrating under the membrane. Overlap adjacent pieces 2 in. (51 mm) and roll overlap with a steel hand roller.
- When applying PERM-A-BARRIER® NPS Detail Membrane to PERM-A-BARRIER® Wall Membranes and PERM-A-BARRIER® Wall Flashing Apply a bead of Universal Flashing & Sealant, BITUTHENE® Mastic or BITUTHENE® Liquid Membrane along top edges of cuts, penetrations, all laps and seams on horizontal surfaces (e.g. sill plates), critical areas and as shown in GCP detail drawings, and tool into place.
- When applying PERM-A-BARRIER® NPS Detail Membrane to PERM-A-BARRIER® Liquid, PERM-A-BARRIER® NPL 10/NPL 10 LT, PERM-A-BARRIER® VPL, PERM-A-BARRIER® VPL Low Temp or PERM-A-BARRIER® VPO Apply a bead of Universal Flashing & Sealant or BITUTHENE® Liquid Membrane along top edges, cuts, penetrations, all laps and seams on horizontal surfaces (e.g. sill plates), critical areas and as shown in GCP detail drawings, and trowel into place.
- If PERM-A-BARRIER® fluid applied membranes are more than 7 days old, contact GCP technical service for quidance. Refer to Technical Letter #11 for more information specific to PERM-A-BARRIER® Liquid.
- No reglet is necessary when installing PERM-A-BARRIER® NPS Detail Membrane to vertical surfaces
- All non-water shedding edges must be sealed with Universal Flashing & Sealant, Bituthene Liquid Membrane or Bituthene Mastic.

Membrane Repairs

- Repairs must be made using PERM-A-BARRIER® NPS Detail Membrane sized to extend 6 in. (150 mm) in all directions from the perimeter of the affected area.
- If wrinkles develop, carefully cut out affected area and replace
- The entirety of the membrane patch must be pressed firmly into place with sufficient pressure using a rubber or vinyl hand roller during application to ensure continuous and intimate contact with the substrate and to prevent water from migrating under the membrane.

Membrane Protection

 PERM-A-BARRIER[®] NPS Detail Membrane must be protected from damage by other trades or construction materials.

Supply

PRODUCT	UNIT OF SALE	APPROXIMATE COVERAGE	WEIGHT	PALLETIZATION
PERM-A-BARRIER® NPS Detail Membrane				
- 6 in. (152 mm)	12 rolls	109 linear ft per roll	7 lbs/roll	30 cartons (360 rolls) per
- 9 in. (225 mm)	6 rolls	109 linear ft per roll	10 lbs/roll	30 cartons (180 rolls) per pallet



- 12 in. (305 mm)	6 rolls	109 linear ft per roll	13 lbs/roll	30 cartons (180 rolls) per
				pallet
- 18 in. (455 mm)	2 rolls	109 linear ft per roll	21 lbs/roll	25 carton (50 rolls) per pallet

The most current supply information for ancillary products can be found at gcpat.com

Physical Properties

PROPERTY	PERM-A-BARRIER NPS DETAIL MEMBRANE	TEST METHOD
Thickness includes HDPE Film	0.018 in. (0.46 mm)	ASTM D3767 method A
Minimum tensile strength, membrane	400 psi (2.8 MPa)	ASTM D412
Minimum tensile strength, film	5000PSI (34.5 MPa)	ASTM D412
Minimum elongation, to failure	200%	ASTM D412
Pliability, at 180° bend over 1 in. (25 mm) mandrel	Pass at -20°F (-29°C)	ASTM D1970
Crack cycling, 1/8 in. (3.2 mm) at -25°F (-32°C)	Pass	ASTM C1305
Nail Sealability	Pass	ASTM D1970
Minimum puncture resistance, membrane	40 lbs. (178 N)	ASTM E154
Lap peel adhesion at minimum application	3.5 lbs./in.	ASTM D1876
temperature		
Maximum permeance to water vapor transmission	<0.01 perms / 0.02 perms	ASTM E96 Method A/ Method B
Water absorption (weight gain at 48 hours)	0.1%	ASTM D570
Peel Adhesion to Gypsum board	>5 pli.	ASTM D903
Peel adhesion: to concrete	>5 pli	ASTM D903
Maximum In Service Temperature	160°F(71°C)	NA

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PERM-A-BARRIER® Adhesive Primer Data Sheet

Contact an Air Barrier Specialist today

Product Description

PERM-A-BARRIER[®] Adhesive Primer imparts an aggressive, high tack finish on the treated substrate. It is specifically designed to facilitate tenacious adhesion of PERM-A-BARRIER[®] self-adhered membranes to various substrates including plywood, oriented strand board (OSB), concrete masonry units (CMU) and glass faced wall boards.

Product Advantages

- Excellent adhesion—bonds to substrate and remains permanently pressure sensitive
- Aggressive tack—provides a tenacious bond to substrates such as plywood, OSB, CMU and glass faced wall boards
- Fast drying—increased flexibility for application schedule
- Fast and easy application—by brush or roller
- Low temperature—can be applied at 20°F (-6°C)
- VOC compliant—meets SCAQMD regulations

Use

PERM-A-BARRIER® Adhesive Primer can be used at 20°F (-6°C) or above.

Availability

PERM-A-BARRIER® Adhesive Primer is available in 5 gallon pails.

Installation

Safety, Storage and Handling Information

PERM-A-BARRIER® Adhesive Primer is flammable in the wet state. Material Safety Data Sheets (MSDS) are available and users should acquaint themselves with this information. Carefully read detailed precaution statements on product labels and the MSDS before use.

- The VOC (Volatile Organic Compound) content is 135 q/L EPA method 24.
- Best storage temperature is 40-80 °F (4-27 °C). Lower temperatures can cause increased viscosity of a temporary nature. Rotate stock on a "first in, first out" basis.
- When stored at recommended temperature in the original, unopened container, this product has a shelf life of 12 months from date of shipment.
- Do not apply on EPS/XPS insulation board.
- Use solvent resistant brushes and rollers.



- Keep work area well ventilated.
- Low flash point product. To minimize risk of fire, implement best practices to use only one open container per area.
- Keep away from open flame, sparks, and ignition sources.

Surface Preparation

All surfaces must be free from frost, dirt, grease, oil or other contaminants. Failure to remove excessive dust may result in compromised adhesion of the membrane to the building envelope.

Application

Apply PERM-A-BARRIER[®] Adhesive Primer in dry weather with ambient and substrate temperatures above 20°F (-6°C). Surface must be dry and clean. PERM-A-BARRIER[®] Adhesive Primer can be applied by brush or roller. Typical brushes and rollers designed for use with latex paints may be used. Only prime areas in which the membrane can be applied the same day.

Coverage

Approximately $250-300 \, \mathrm{ft^2/gal} \, (23-28 \, \mathrm{m^2/L})$ on glass-mat faced gypsum sheathing such as DensGlass[®]Gold. Coverage rates may vary depending on substrate type, brand and roughness. Lower coverage per gallon will result in lower permeability. Do not apply more than one coat. For technical assistance, please contact your local GCP Representative.

Drying

Allow PERM-A-BARRIER® Adhesive Primer to dry until surface becomes tacky. Drying times may vary depending on temperature and humidity conditions. The product is packaged "ready to use." Do not use any substance to thin this product. Apply membrane after primer is dried but surface is still tacky. Do not over prime or do not apply multiple coats.

Cleanup

Wet PERM-A-BARRIER[®] Adhesive Primer may be removed using mineral spirits. For dry adhesive, citrus based cleaners may be used.

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PERM-A-BARRIER® WB Primer Data Sheet

Water-based primer for use with Perm-A-Barrier Flashings, Detail Membrane and Wall Membrane

Product Description

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® Flashings, PERM-A-BARRIER® Detail Membrane and PERM-A-BARRIER® Wall Membrane to various substrate 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.

Product Advantages

- Excellent adhesion—bonds to substrate and binds dust
- Aggressive tack—provides a tenacious bond to difficult substrates such as DensGlass Gold and other glass faced wall boards
- Fast drying—increased flexibility for application schedule
- Fast and easy application—by brush or roller
- VOC compliant—water-based, contains no hazardous or flammable solvents
- Low odor—no noxious fumes

Use

PERM-A-BARRIER® WB Primer can be used at 25 °F (-4 °C) or above. It will freeze at 21 °F (-7 °C) and can no longer be used after it freezes.

Availability

PERM-A-BARRIER® WB Primer is available in 1 gallon jugs and 5 gallon plastic pails.

Installation

Safety, Storage and Handling Information

PERM-A-BARRIER® WB Primer is nonflammable. SDS (Safety Data Sheet) are available at gcpat.com and users should acquaint themselves with this information. Carefully read detailed precaution statements on product labels and the SDS before use

Store above freezing 32 °F (0 °C).

The VOC (Volatile Organic Compound) content is 10 g/L and it meets the U.S. EPA Volatile Organic Compound Emission Standard for Architectural Coatings.



Architectural and industrial maintenance regulations limit the VOC content in products classified as architectural coatings. Refer to Technical Letters at gcpat.com for the most current list of allowable limits.

Application

Apply primer in dry weather with ambient and substrate temperatures above 25 °F (-4 °C). Surface must be dry and clean

Surface Preparation

All surfaces must be free from frost, dirt, grease, oil or other contaminants. Failure to remove excessive dust may result in compromised adhesion of the membrane.

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.

Roller Technique

Synthetic, 1/2 in. (13 mm), nap rollers have been found to be very successful for the application of PERM-A-BARRIER® WB Primer. A moderately thick coating should be applied and rolled out evenly (see coverage below). A properly applied coating will have uniform coverage and leave a tacky finish to the surface when dry.

Coverage

 $250-350 \text{ ft}^2/\text{gal} (6.0-8.0 \text{ m}^2/\text{L})$

Drying Time

To be effective, the PERM-A-BARRIER® WB Primer needs to fully dry. Drying time of the material is dependent upon many factors including temperature, humidity, wind, sunlight and coverage rate. The drying time could vary from as little as 15 min. (warm and windy) to 3 hours (cold and no wind), depending upon the weather condition. The following are guidelines for dry time at various temperatures:

- 90 °F (32 °C) or greater: 45 min.-1 hr
- 50 °F (10 °C) to 90 °F (32 °C): 1–3 hrs
- Less than 50 °F (10 °C): 3 hrs +

The product is packaged "ready to use." Do not use any substance to thin this product.



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Last Updated: 2022-12-08

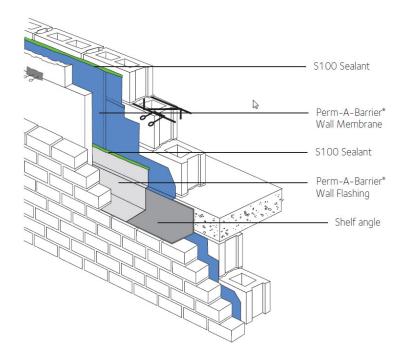


PERM-A-BARRIER® S100 Sealant Data Sheet

PERM-A-BARRIER® S100 sealant is designed for a variety of uses with GCP Applied Technologies' air and weather barrier systems.

Product Description

PERM-A-BARRIER® S100 sealant is designed for a variety of uses with GCP Applied Technologies' air and weather barrier systems.



Uses

S100 Sealant is ideally suited for the following uses:

- Sealing of finished terminations, edges of patches and overlaps in detail areas
- Sealing penetrations through GCP air and weather barrier systems, such as plumbing or ductwork
- As a sheathing joint treatment for GCP fluid-applied air and weather barrier membranes
- For sealing between window flanges and the air and weather barrier system.



Product Advantages

- No primer—fast and easy application with minimum surface preparation
- No staining or residue rundown
- High movement capability
- Adhesion—Strong adhesion to common construction substrates, such as wood, block, concrete, OSB, glass mat sheathing, metal, vinyl and PVC
- Compatibility—Compatible with most GCP air and weather barrier systems

Application Procedures

Safety, Storage and Handling Information

Read and understand the product label and Safety Data Sheet (SDS) for each system component. All users should acquaint themselves with this information prior to working with the products and follow the precautionary statements. SDSs can be obtained by contacting your local GCP representative or office, by calling GCP toll free at 1-866-333-3SBM (3726) and in some cases from our web site at gcpat.com.

S100 Sealant is available in two different sizes 20 fl oz (0.591 L) sausages and 29 fl oz (0.858L) cartridges. S100 Sealant has a shelf life of 12 months from the date of manufacture when stored in the original unopened sausages between $40^{\circ}F$ ($4^{\circ}C$) and $80^{\circ}F$ ($27^{\circ}C$).

The Volatile Organic Compound (VOC) content is <30 g/L.

Surface Preparation

All surfaces must be clean, dry and free from dirt, grease oil, dust or other contaminants. S100 Sealant may be applied at temperatures above $20^{\circ}F$ (-6.67°C) and above.

Product Application

Apply S100 Sealant with a caulking or sausage gun. When used as a seal for finished terminations, edges of patches and overlaps in detail areas, level the bead with a trowel to a minimum 0.125 in. (3 mm) thickness and 0.5 in. (13 mm) to 1 in. (25 mm) width.

When sealing penetrations, apply a 1 in. (25 mm) fillet to the base of the penetration and overlap onto the GCP air and weather barrier material and penetrant a minimum of 2.5 in. (64 mm).

When used to treat sheathing joints for GCP fluid-applied air and weather barrier membranes, completely fill the sheathing joint with sealant and then install a scratch coat of sealant with a margin trowel or similar onto the face of the sheathing approximately 1 in. (25 mm) on each side of the sheathing joint. Once the sealant is tack free, the fluid applied membrane may be applied, refer to the applicable product data sheets for detailed application instructions.



Cleaning

Clean tools and equipment with mineral spirits. Mineral spirits is a combustible liquid and should be used only in accordance with the mineral spirits manufacturer's safety recommendations. Do not use solvents to clean hands or skin.

Limitations

\$100 Sealant should not be used in the following applications:

- Below grade
- End of day terminations
- Under GCP air and weather barrier membranes and flashing, except when used as a joint treatment for GCP fluidapplied membranes.
- Not for use with building materials that bleed oils, plasticizers or solvents
- Firestopping applications

Supply

S100 SEALANT	
Unit size	20 fl oz (0.591 L) sausage
Packaging	12 cartridges/carton; 48 cartons/pallet
SAP#	114175

Physical Properties

PROPERTY	
Color	Green
Tack Free Time	1-2 hours
Cure Time	7-14 days*
Full Adhesion	7-14 days*

Typical cured properties after 7 days cure at 77°F (25°C), 50% R.H.

	TYPICAL VALUE	TEST METHOD
Hardness (Shore A)	>15	ASTM C661
Elongation	>500%	ASTM D412
Ultimate Tensile Strength	120 psi	ASTM D412
Modulus @ 100% Elongation	30 psi	ASTM D412
Elastomeric Joint Sealants	Class 25	ASTM C920

^{*}Curing and full adhesion time will vary depending on temperature and humidity



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GCP Applied Technologies Inc., 2325 Lakeview Parkway, Suite 450, Alpharetta, GA 30009, USA

GCP Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6

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Last Updated: 2022-12-09





Printing date 05/28/2019 Version Number 1.0 Reviewed on 05/28/2019

1 Identification

Product identifier

Trade name: Perm-A-Barrier VPS 30

SDS ID Number: 912

Relevant identified uses of the substance or mixture, and uses advised against:

Waterproofing.

Specialty construction product. Not intended for other uses.

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA

GCP Canada, Inc. 294 Clements Road W. Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours) Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

Additional information:

SDS's are not required for finished articles. nevertheless, the following information is provided to assist with safe use.

Label elements:

Hazard pictograms Not applicable.

Not applicable.

Hazard statements Not applicable.

NFPA ratings (scale 0 - 4)



Health = 1 Fire = 1 Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 1 Flammability = 1 Reactivity = 0

Other hazards Contact with residue from adhesive may cause eye and skin irritation.

(Cont. on page 2)

- USGHS

Printing date 05/28/2019 Version Number 1.0 Reviewed on 05/28/2019

Trade name: Perm-A-Barrier VPS 30

(Cont. from page 1)

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixture Hazardous components: Not applicable.

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation: No special measures required.

After skin contact: If skin irritation occurs, consult a doctor.

After eye contact:

Rinse cautiously with water for several minutes.

If symptoms persist, consult a physician.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: Wear personal protective equipment.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up: Pick up mechanically.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Cont. on page 3)

Printing date 05/28/2019 Version Number 1.0 Reviewed on 05/28/2019

Trade name: Perm-A-Barrier VPS 30

(Cont. from page 2)

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Wash thoroughly after handling.

Avoid eye and skin contact with residue from adhesive.

Release liners are slippery. Remove from work area immediately after membrane application.

Membrane is slippery when wet or covered with frost.

Release liners may cause slip and trip hazards.

Do not eat, drink or smoke when using this product.

Wash skin after handling.

For professional use only. Keep out of children's reach.

Information about protection against explosions and fires:

Removal of release liner may generate a static electrical discharge (spark).

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Rubber or other impervious gloves should be worn to prevent skin contact.

(Cont. on page 4)

Printing date 05/28/2019 Version Number 1.0 Reviewed on 05/28/2019

Trade name: Perm-A-Barrier VPS 30

(Cont. from page 3)

Eye protection:



Safety glasses with side shield protection.

Body protection: Use personal protective equipment as required.

9 Physical and chemical properties				
Information on basic physical and chemical properties				
General Information Appearance: Form: Color: Odor: Odor threshold:	Solid According to product specification Characteristic Not determined.			
pH-value (~):	Not applicable.			
Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point:	Undetermined. Undetermined. Not applicable.			
Flammability (solid, gaseous):	Not determined. Not applicable.			
Ignition temperature:	Undetermined.			
Decomposition temperature: Auto igniting: Danger of explosion:	Not determined. Not determined. Product does not present an explosion hazard.			
Explosion limits: Lower: Upper: VOC Content (max):	Not determined. Not determined. Not determined.			
Vapor pressure: Density: (~) at 20 °C (68 °F) Relative density Vapor density	Not applicable. 1 g/cm³ (8.3 lbs/gal) Not determined. Not determined.			
Solubility in / Miscibility with Water:	Insoluble.			
Partition coefficient (n-octanol/water	er): Not determined.			
Viscosity: Dynamic: Kinematic: Molecular weight	Not applicable. Not applicable. Not applicable.			
Other information	No further relevant information available.			

10 Stability and reactivity

Reactivity

Stable under normal conditions.

No further relevant information available.

(Cont. on page 5)

Printing date 05/28/2019 Version Number 1.0 Reviewed on 05/28/2019

Trade name: Perm-A-Barrier VPS 30

(Cont. from page 4)

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions

No dangerous reactions known.

No further relevant information available.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritating effect expected on the eye: No irritating effect expected inhalation: No irritating effect expected Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity:

Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

None of the ingredients are listed.

NTP (National Toxicology Program)

K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects No further relevant information available.

USGHS

(Cont. on page 6)

Printing date 05/28/2019 Version Number 1.0 Reviewed on 05/28/2019

Trade name: Perm-A-Barrier VPS 30

(Cont. from page 5)

13 Disposal considerations

Disposal methods:

Recommendation:



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Dispose of contents/container in accordance with local/regional/national/international regulations.

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UN-Number DOT, IMDG, IATA	Not applicable.	
UN proper shipping name DOT, IMDG, IATA	Not applicable.	
Transport hazard class(es)		
DOT, IMDG, IATA Class	Not applicable.	
Packing group DOT, IMDG, IATA	Not applicable.	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport/Additional information: Not classified as a dangerous good for transport by road, rail or air.		
DOT Remarks:	Not Regulated.	

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories: None

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

Right to Know Ingredient Disclosure:

Non Hazardous / Non Regulated Components

Non-hazardous ingredients

nt. on page 7

Printing date 05/28/2019 Version Number 1.0 Reviewed on 05/28/2019

Trade name: Perm-A-Barrier VPS 30

(Cont. from page 6)

California Proposition 65: (Substances <0.1% unless noted in Section 3)

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Carcinogenicity Categories

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)

Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

None of the ingredients are listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards.

If no g/L value is provided this product is not subject to above standard.

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA USA: +1-617-876-1400 (24 hours)

+1-800-354-5414

The first date of preparation 05/28/2019

Number of revision times and the latest revision date 1.0 / 05/28/2019



Printing date 12/21/2016 Version Number 1.0 Reviewed on 12/21/2016

1 Identification

Product identifier

Trade name: Perm-A-Barrier Aluminum Flashing

SDS ID Number: 2763

Relevant identified uses of the substance or mixture, and uses advised against

Waterproofing

Specialty construction product. Not intended for other uses

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA

GCP Canada, Inc. 294 Clements Road W. Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours) Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

Additional information:

SDS's are not required for finished articles. nevertheless, the following information is provided to assist with safe use.

Label elements:

Hazard pictograms Not applicable.

Not applicable.

Hazard statements Not applicable.

NFPA ratings (scale 0 - 4)



 $\begin{aligned} & Health = 1 \\ & Fire = 0 \\ & Reactivity = 0 \end{aligned}$

HMIS-ratings (scale 0 - 4)



 $\begin{aligned} & Health = 1 \\ & Flammability = 0 \\ & Reactivity = 0 \end{aligned}$

Other hazards Contact with residue from adhesive may cause eye and skin irritation.

Results of PBT and vPvB assessment

PBT: Not applicable.

(Cont. on page 2)

■ USGHS ■

Printing date 12/21/2016 Version Number 1.0 Reviewed on 12/21/2016

Trade name: Perm-A-Barrier Aluminum Flashing

vPvB: Not applicable.

(Cont. from page 1)

3 Composition/information on ingredients

Chemical characterization: Mixture Hazardous components: Not applicable.

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation: No special measures required.

After skin contact: If skin irritation occurs, consult a doctor.

After eye contact:

Rinse cautiously with water for several minutes. If symptoms persist, consult a physician.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up: Pick up mechanically.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Avoid eye and skin contact with residue from adhesive.

(Cont. on page 3)

(Cont. from page 2)

Safety Data Sheet

Printing date 12/21/2016 Version Number 1.0 Reviewed on 12/21/2016

Trade name: Perm-A-Barrier Aluminum Flashing

Wash thoroughly after handling.

Wash skin after handling.

Release liners are slippery. Remove from work area immediately after membrane application.

Membrane is slippery when wet or covered with frost.

Release liners may cause slip and trip hazards.

Do not eat, drink or smoke when using this product.

For professional use only. Keep out of children's reach.

Information about protection against explosions and fires:

Removal of release liner may generate a static electrical discharge (spark).

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:



Safety glasses with side shield protection.

Body protection: Use personal protective equipment as required.

- USGHS

(Cont. on page 4)

Printing date 12/21/2016 Version Number 1.0 Reviewed on 12/21/2016

Trade name: Perm-A-Barrier Aluminum Flashing

(Cont. from page 3)

9 Physical and chemical properties		
Information on basic physical and chemical properties		
General Information Appearance: Form: Color: Odor: Odor threshold:	Solid According to product specification Characteristic Not determined.	
pH-value (~):	Not applicable.	
Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point:	Undetermined. Undetermined. Not applicable.	
Flammability (solid, gaseous):	Product is not flammable.	
Decomposition temperature: Auto igniting: Danger of explosion:	Not determined. Not determined. Product does not present an explosion hazard.	
Explosion limits: Lower: Upper: VOC Content (max):	Not determined. Not determined. Not determined.	
Vapor pressure: Density: (~) Relative density Vapor density Evaporation rate	Not applicable. 1.1 LBS/CF Not determined. Not applicable. Not applicable.	
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/water): Not determined.	
Viscosity: Dynamic: Kinematic: Molecular weight	Not applicable. Not applicable. Not applicable.	
Other information	No further relevant information available.	

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

USGHS

(Cont. on page 5)

Printing date 12/21/2016 Version Number 1.0 Reviewed on 12/21/2016

Trade name: Perm-A-Barrier Aluminum Flashing

(Cont. from page 4)

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritating effect expected on the eye: No irritating effect expected inhalation: No irritating effect expected Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity:

Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

None of the ingredients is listed.

NTP (National Toxicology Program)

K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods Comply with Federal, State and local regulations.

Recommendation:



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Cont. on page 6)

- USGHS

Printing date 12/21/2016 Version Number 1.0 Reviewed on 12/21/2016

Trade name: Perm-A-Barrier Aluminum Flashing

(Cont. from page 5)

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information		
UN-Number DOT, IMDG, IATA	Not applicable.	
UN proper shipping name DOT, IMDG, IATA	Not applicable.	
Transport hazard class(es)		
DOT, IMDG, IATA Class	Not applicable.	
Packing group DOT, IMDG, IATA	Not applicable.	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport/Additional information: Not classified as a dangerous good for transport by road, rail or air.		
DOT Remarks:	Not Regulated.	
UN "Model Regulation":	Not applicable.	

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories: None

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

California Proposition 65

Chemicals known to cause cancer:

Extracts (petroleum), heavy paraffinic distillate solvent

Polycyclic Aromatic Hydrocarbons

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

(Cont. on page 7)

Printing date 12/21/2016 Version Number 1.0 Reviewed on 12/21/2016

Trade name: Perm-A-Barrier Aluminum Flashing

(Cont. from page 6)

Carcinogenicity Categories

EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)

Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

None of the ingredients is listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards.

If no g/L value is provided this product is not subject to above standard.

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA USA: +1-617-876-1400 (24 hours)

+1-800-354-5414

Date of preparation / last revision 12/21/2016 / -

The first date of preparation 12/21/2016

Number of revision times and the latest revision date 1.0 / 12/21/2016



Printing date 12/06/2016 Version Number 1.0 Reviewed on 12/06/2016

1 Identification

Product identifier

Trade name: Perm-A-Barrier Wall Flashing

SDS ID Number: 2757

Relevant identified uses of the substance or mixture, and uses advised against

Waterproofing

Specialty construction product. Not intended for other uses

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA

GCP Canada, Inc. 294 Clements Road W. Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours) Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

Additional information:

SDS's are not required for finished articles. nevertheless, the following information is provided to assist with safe use.

Label elements:

Hazard pictograms Not applicable.

Not applicable.

Hazard statements Not applicable.

NFPA ratings (scale 0 - 4)



 $\begin{aligned} & \text{Health} = 1 \\ & \text{Fire} = 0 \\ & \text{Reactivity} = 0 \end{aligned}$

HMIS-ratings (scale 0 - 4)



 $\begin{aligned} & Health = 1 \\ & Flammability = 0 \\ & Reactivity = 0 \end{aligned}$

Other hazards Contact with residue from adhesive may cause eye and skin irritation.

Results of PBT and vPvB assessment

PBT: Not applicable.

(Cont. on page 2)

■ USGHS ■

Printing date 12/06/2016 Version Number 1.0 Reviewed on 12/06/2016

Trade name: Perm-A-Barrier Wall Flashing

vPvB: Not applicable.

(Cont. from page 1)

3 Composition/information on ingredients

Chemical characterization: Mixture Hazardous components: Not applicable.

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation: No special measures required.

After skin contact: If skin irritation occurs, consult a doctor.

After eye contact:

Rinse cautiously with water for several minutes. If symptoms persist, consult a physician.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up: Pick up mechanically.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Avoid eye and skin contact with residue from adhesive.

(Cont. on page 3)

(Cont. from page 2)

Safety Data Sheet

Printing date 12/06/2016 Version Number 1.0 Reviewed on 12/06/2016

Trade name: Perm-A-Barrier Wall Flashing

Wash thoroughly after handling.

Wash skin after handling.

Release liners are slippery. Remove from work area immediately after membrane application.

Membrane is slippery when wet or covered with frost.

Release liners may cause slip and trip hazards.

Do not eat, drink or smoke when using this product.

For professional use only. Keep out of children's reach.

Information about protection against explosions and fires:

Removal of release liner may generate a static electrical discharge (spark).

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:



Safety glasses with side shield protection.

Body protection: Use personal protective equipment as required.

- USGHS

(Cont. on page 4)

Printing date 12/06/2016 Version Number 1.0 Reviewed on 12/06/2016

Trade name: Perm-A-Barrier Wall Flashing

(Cont. from page 3)

9 Physical and chemical properties			
Information on basic physical and chemical properties			
General Information Appearance: Form: Color: Odor: Odor threshold:	Solid According to product specification Characteristic Not determined.		
pH-value (~):	Not applicable.		
Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point:	Undetermined. Undetermined. Not applicable.		
Flammability (solid, gaseous):	Product is not flammable.		
Decomposition temperature: Auto igniting: Danger of explosion:	Not determined. Not determined. Product does not present an explosion hazard.		
Explosion limits: Lower: Upper: VOC Content (max):	Not determined. Not determined. Not determined.		
Vapor pressure: Density: (~) Relative density Vapor density Evaporation rate	Not applicable. 1.1 LBS/CF Not determined. Not applicable. Not applicable.		
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.		
Partition coefficient (n-octanol/water	Partition coefficient (n-octanol/water): Not determined.		
Viscosity: Dynamic: Kinematic: Molecular weight	Not applicable. Not applicable. Not applicable.		
Other information	No further relevant information available.		

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

USGHS

(Cont. on page 5)

Printing date 12/06/2016 Version Number 1.0 Reviewed on 12/06/2016

Trade name: Perm-A-Barrier Wall Flashing

(Cont. from page 4)

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritating effect expected on the eye: No irritating effect expected inhalation: No irritating effect expected Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity:

Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

None of the ingredients is listed.

NTP (National Toxicology Program)

K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods Comply with Federal, State and local regulations.

Recommendation:



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Cont. on page 6)

- USGHS

Printing date 12/06/2016 Version Number 1.0 Reviewed on 12/06/2016

Trade name: Perm-A-Barrier Wall Flashing

(Cont. from page 5)

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information		
UN-Number DOT, IMDG, IATA	Not applicable.	
UN proper shipping name DOT, IMDG, IATA	Not applicable.	
Transport hazard class(es)		
DOT, IMDG, IATA Class	Not applicable.	
Packing group DOT, IMDG, IATA	Not applicable.	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport/Additional information: Not classified as a dangerous good for transport by road, rail or air.		
DOT Remarks:	Not Regulated.	
UN "Model Regulation":	Not applicable.	

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories: None

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

California Proposition 65

Chemicals known to cause cancer:

Extracts (petroleum), heavy paraffinic distillate solvent

Polycyclic Aromatic Hydrocarbons

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

(Cont. on page 7)

Printing date 12/06/2016 Version Number 1.0 Reviewed on 12/06/2016

Trade name: Perm-A-Barrier Wall Flashing

(Cont. from page 6)

Carcinogenicity Categories

EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)

Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

None of the ingredients is listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards.

If no g/L value is provided this product is not subject to above standard.

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA USA: +1-617-876-1400 (24 hours)

+1-800-354-5414

Date of preparation / last revision 12/06/2016 / -

The first date of preparation 12/05/2016

Number of revision times and the latest revision date 1.0 / 12/06/2016



Printing date 05/30/2018 Version Number 1.0 Reviewed on 05/30/2018

1 Identification

Product identifier

Trade name: Perm A Barrier NPS Detail Membrane

SDS ID Number: 2916

Relevant identified uses of the substance or mixture, and uses advised against:

Waterproofing

Specialty construction product. Not intended for other uses.

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA

GCP Canada, Inc. 294 Clements Road W. Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours) Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

Additional information:

SDS's are not required for finished articles. nevertheless, the following information is provided to assist with safe use.

Label elements:

Hazard pictograms Not applicable.

Not applicable.

Hazard statements Not applicable.

NFPA ratings (scale 0 - 4)



 $\begin{aligned} & \text{Health} = 1 \\ & \text{Fire} = 0 \\ & \text{Reactivity} = 0 \end{aligned}$

HMIS-ratings (scale 0 - 4)



 $\begin{aligned} & Health = 1 \\ & Flammability = 0 \\ & Reactivity = 0 \end{aligned}$

Other hazards Contact with residue from adhesive may cause eye and skin irritation.

Results of PBT and vPvB assessment

PBT: Not applicable.

(Cont. on page 2)

■ USGHS ■

Printing date 05/30/2018 Version Number 1.0 Reviewed on 05/30/2018

Trade name: Perm A Barrier NPS Detail Membrane

vPvB: Not applicable.

(Cont. from page 1)

3 Composition/information on ingredients

Chemical characterization: Mixture Hazardous components: Not applicable.

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation: No special measures required.

After skin contact: If skin irritation occurs, consult a doctor.

After eye contact:

Rinse cautiously with water for several minutes. If symptoms persist, consult a physician.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up: Pick up mechanically.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Avoid eye and skin contact with residue from adhesive.

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Printing date 05/30/2018 Version Number 1.0 Reviewed on 05/30/2018

Trade name: Perm A Barrier NPS Detail Membrane

(Cont. from page 2)

Wash thoroughly after handling.

Wash skin after handling.

Release liners are slippery. Remove from work area immediately after membrane application.

Membrane is slippery when wet or covered with frost.

Release liners may cause slip and trip hazards.

Do not eat, drink or smoke when using this product.

For professional use only. Keep out of children's reach.

Information about protection against explosions and fires:

Removal of release liner may generate a static electrical discharge (spark).

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:



Safety glasses with side shield protection.

Body protection: Use personal protective equipment as required.

- USGHS

(Cont. on page 4)

Printing date 05/30/2018 Version Number 1.0 Reviewed on 05/30/2018

Trade name: Perm A Barrier NPS Detail Membrane

(Cont. from page 3)

9 Physical and chemical properties		
Information on basic physical and chemical properties		
General Information Appearance: Form: Color: Odor: Odor threshold:	Solid According to product specification Characteristic Not determined.	
pH-value (~):	Not applicable.	
Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point:	Undetermined. Undetermined. Not applicable.	
Flammability (solid, gaseous):	Product is not flammable.	
Ignition temperature:	Undetermined.	
Decomposition temperature: Auto igniting: Danger of explosion:	Not determined. Not determined. Product does not present an explosion hazard.	
Explosion limits: Lower: Upper: VOC Content (max):	Not determined. Not determined. Not determined.	
Vapor pressure: Density: (~) Relative density Vapor density Evaporation rate	Not applicable. 1.1 LBS/CF Not determined. Not applicable. Not applicable.	
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/water	Partition coefficient (n-octanol/water): Not determined.	
Viscosity: Dynamic: Kinematic: Molecular weight	Not applicable. Not applicable. Not applicable.	
Other information	No further relevant information available.	

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

USGHS

(Cont. on page 5)

Printing date 05/30/2018 Version Number 1.0 Reviewed on 05/30/2018

Trade name: Perm A Barrier NPS Detail Membrane

(Cont. from page 4)

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritating effect expected on the eye: No irritating effect expected inhalation: No irritating effect expected Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity:

Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

None of the ingredients is listed.

NTP (National Toxicology Program)

K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Disposal methods:

Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing product for disposal. Dispose of waste in accordance with all applicable regulations.

Recommendation:



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Cont. on page 6)

Printing date 05/30/2018 Version Number 1.0 Reviewed on 05/30/2018

Trade name: Perm A Barrier NPS Detail Membrane

(Cont. from page 5)

Uncleaned packagings:

Recommendation: Dispose of contents/container in accordance with local/regional/national/international regulations.

14 Transport information		
UN-Number DOT, IMDG, IATA	Not applicable.	
UN proper shipping name DOT, IMDG, IATA	Not applicable.	
Transport hazard class(es)		
DOT, IMDG, IATA Class	Not applicable.	
Packing group DOT, IMDG, IATA	Not applicable.	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport/Additional information: Not classified as a dangerous good for transport by road, rail or air.		
DOT Remarks:	Not Regulated.	
UN "Model Regulation":	Not applicable.	

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories: None

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

California Proposition 65: (Substances <0.1% unless noted in Section 3)

Chemicals known to cause cancer:

Extracts (petroleum), heavy paraffinic distillate solvent

Polycyclic Aromatic Hydrocarbons

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

(Cont. on page 7)

Printing date 05/30/2018 Version Number 1.0 Reviewed on 05/30/2018

Trade name: Perm A Barrier NPS Detail Membrane

(Cont. from page 6)

Carcinogenicity Categories

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)

Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

None of the ingredients is listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards.

If no g/L value is provided this product is not subject to above standard.

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA USA: +1-617-876-1400 (24 hours) +1-800-354-5414

Date of preparation / last revision 05/30/2018 / -

The first date of preparation 05/30/2018

Number of revision times and the latest revision date 1.0 / 05/30/2018





Printing date 03/28/2018 Version Number 1.0 Reviewed on 03/28/2018

1 Identification

Product identifier

Trade name: Perm-A-Barrier Adhesive Primer

SDS ID Number: 2567

Relevant identified uses of the substance or mixture, and uses advised against:

Specialty construction product. Not intended for other uses.

Details of the supplier of the safety data sheet

Manufacturer/Supplier: GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA

GCP Canada, Inc. 294 Clements Road W. Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours) Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

Highly flammable liquid and vapor.

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated

exposure.

May be fatal if swallowed and enters airways.

Label elements: The product is classified and labeled according to the Globally Harmonized System (GHS)

Hazard pictograms







GHS02

GHS07

GHS08

Danger

Hazard statements

Highly flammable liquid and vapor.

(Cont. on page 2)

Printing date 03/28/2018 Version Number 1.0 Reviewed on 03/28/2018

Trade name: Perm-A-Barrier Adhesive Primer

(Cont. from page 1)

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse mouth.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

Hazard description: Flammable

NFPA ratings (scale 0 - 4)



Health = 3Fire = 3

Reactivity = 0

HMIS-ratings (scale 0 - 4)



 $\begin{aligned} Health &= *3 \\ Flammability &= 3 \end{aligned}$

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixture

Description: Mixture of the hazardous substance(s) listed below with additional nonhazardous ingredients.

Hazardous components:		
79-20-9	methyl acetate	50-100%
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	10-20%
110-54-3	n-Hexane	10-20%
110-82-7	cyclohexane	5-10%
142-82-5	Heptane	5-10%
64742-89-8	Solvent naphtha (petroleum), light aliph.	5-10%

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

(Cont. on page 3)

Printing date 03/28/2018 Version Number 1.0 Reviewed on 03/28/2018

Trade name: Perm-A-Barrier Adhesive Primer

(Cont. from page 2)

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

After skin contact:

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

After eye contact: Rinse cautiously with water for several minutes.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Immediately call a doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed

Harmful: may cause lung damage if swallowed.

Harmful if swallowed.

Irritating to eyes.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

Combustion products may include toxic gases such as carbon monoxide and smoke.

Advice for firefighters

Protective equipment: Wear personal protective equipment.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions: Prevent seepage into sewage system, workpits and cellars.

Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to section 13 of the SDS.

(Cont. on page 4)

- USGHS

Printing date 03/28/2018 Version Number 1.0 Reviewed on 03/28/2018

Trade name: Perm-A-Barrier Adhesive Primer

(Cont. from page 3)

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Prevent formation of aerosols.

Flammable mixtures with air can be formed in emptied containers. Do not puncture, cut, drill, heat or weld uncleaned drums.

Avoid contact with eyes.

Information about protection against explosions and fires:



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Use explosion-proof apparatus / fittings and spark-proof tools.

Empty containers may retain hazardous residue, both liquid and vapor.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility:

Use only in explosion protected area.

Keep respiratorator available.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters		
Components with limit values that require monitoring at the workplace:		
79-20-9 methyl acetate		
PEL (USA) Long-term value: 610 mg/m³, 200 ppm		
REL (USA) Short-term value: 760 mg/m³, 250 ppm Long-term value: 610 mg/m³, 200 ppm		
TLV (USA) Short-term value: 757 mg/m³, 250 ppm Long-term value: 606 mg/m³, 200 ppm		
110-54-3 n-Hexane		
PEL (USA) Long-term value: 1800 mg/m³, 500 ppm		
REL (USA) Long-term value: 180 mg/m³, 50 ppm		
	(Cont. on page 5)	

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Trade name: Perm-A-Barrier Adhesive Primer

		(Cont. from page 4)		
TLV (USA)	Long-term value: 176 mg/m³, 50 ppm Skin; BEI			
110-82-7 cyc	clohexane			
PEL (USA)	Long-term value: 1050 mg/m³, 300 ppm			
REL (USA)	Long-term value: 1050 mg/m³, 300 ppm			
TLV (USA)	Long-term value: 344 mg/m³, 100 ppm			
142-82-5 He	ptane			
PEL (USA)	Long-term value: 2000 mg/m³, 500 ppm			
	Long-term value: 350 mg/m³, 85 ppm Ceiling limit value: 1800* mg/m³, 440* ppm *15-min			
	Short-term value: 2050 mg/m³, 500 ppm Long-term value: 1640 mg/m³, 400 ppm			
	Ingredients with biological limit values:			
110-54-3 n-I	Hexane			
BEI (USA)				
	Medium: urine			
	Time: end of shift at end of workweek			
	Parameter: 2.5-Hexanedione without hydrolysis			

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves Rubber or other impervious gloves should be worn to prevent skin contact.

Eye protection:



Safety glasses with side shield protection.

Body protection:

Use personal protective equipment as required.

Take off contaminated clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:
Color:
Green
Odor:
Characteristic
Odor threshold:
Not determined.

(Cont. on page 6)

Printing date 03/28/2018 Version Number 1.0 Reviewed on 03/28/2018

Trade name: Perm-A-Barrier Adhesive Primer

		(Cont. from page 5)
pH-value (~):	Not determined.	
Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point:	Undetermined. 56 °C (132.8 °F) -23 °C (-9.4 °F)	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:	215 °C (419 °F)	
Decomposition temperature: Auto igniting: Danger of explosion:	Not determined. Product is not self-igniting. In use, may form flammable/explosive vapor-air mixture.	
Explosion limits: Lower: Upper:	1.2 Vol % Not applicable. 16 Vol %	
VOC Content (max):	Not applicable. Not applicable.	
Vapor pressure: Density: (~) at 20 °C (68 °F) Relative density Vapor density Evaporation rate	Not determined. 0.9 g/cm³ (7.5 lbs/gal) Not determined. Not determined. Not determined.	
Solubility in / Miscibility with Water:	Fully miscible.	
Partition coefficient (n-octanol/water	r): Not determined.	
Viscosity: Dynamic: Kinematic: Molecular weight	Not determined. Not applicable.	
Other information	No further relevant information available.	

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: Strong oxidizers.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Delayed and immediate effects and chronic effects from short or long term exposure

May cause damage to organs through prolonged or repeated exposure.

(Cont. on page 7)

Printing date 03/28/2018 Version Number 1.0 Reviewed on 03/28/2018

Trade name: Perm-A-Barrier Adhesive Primer

(Cont. from page 6)

Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

79-20-9 methyl acetate

Dermal LD50 6,970 mg/kg (rat)

110-82-7 cyclohexane

Dermal LD50 12,705 mg/kg (rat)

Primary irritant effect:

on the skin: Causes skin irritation.on the eye: Causes serious eye irritation.inhalation: No irritating effect expected

Ingestion:

Harmful: may cause lung damage if swallowed.

May cause damage to organs through prolonged or repeated exposure.

Harmful if swallowed.

Additional toxicological information:

The product can cause inheritable damage.

Suspected of damaging fertility or the unborn child.

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity:

Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

None of the ingredients is listed.

NTP (National Toxicology Program)

K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects No further relevant information available.

USGHS

(Cont. on page 8)

Printing date 03/28/2018 Version Number 1.0 Reviewed on 03/28/2018

Trade name: Perm-A-Barrier Adhesive Primer

(Cont. from page 7)

13 Disposal considerations

Disposal methods:

Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing product for disposal. Dispose of waste in accordance with all applicable regulations.

Recommendation:



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Dispose of contents/container in accordance with local/regional/national/international regulations.

14 Transport information

UN-Number DOT, IMDG, IATA UN1133

UN proper shipping name

DOT Adhesives

IMDG ADHESIVES (HEPTANES, CYCLOHEXANE), MARINE POLLUTANT

IATA ADHESIVES

Transport hazard class(es)

DOT



Class 3 Flammable liquids

Label

IMDG



12

Class 3 Flammable liquids Label 3

IATA



Class 3 Flammable liquids

II

Label 3

Packing group DOT, IMDG, IATA

Environmental hazards: Product contains environmentally hazardous substances: cyclohexane, Heptane

Marine pollutant: Yes (DOT)

Symbol (fish and tree)

Special marking (ADR): Symbol (fish and tree)

(Cont. on page 9)

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Printing date 03/28/2018 Version Number 1.0 Reviewed on 03/28/2018

Trade name: Perm-A-Barrier Adhesive Primer

(Cont. from page 8)

Special precautions for user Warning: Flammable liquids

Danger code (Kemler): 30 EMS Number: F-E,S-D Stowage Category A

Transport/Additional information:

DOT

Remarks: Special marking with the symbol (fish and tree).

IMDG

Limited quantities (LQ) 5L Excepted quantities (EQ) 5Code: E2

> Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation": UN 1133 ADHESIVES, 3, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

110-54-3 n-Hexane	10.5%
110-82-7 cyclohexane	5.3%

SARA Section 312/Tier I & II Hazard Categories:

Physical Hazard - Flammable (gases, aerosols, liquids, or solids)

Health Hazard - Carcinogenicity

Health Hazard - Acute toxicity (any route of exposure)

Health Hazard - Reproductive toxicity

Health Hazard - Skin Corrosion or Irritation

Health Hazard - Serious eye damage or eye irritation

Health Hazard - Specific target organ toxicity (single or repeated exposure)

Health Hazard - Aspiration Hazard

Health Hazard - Germ cell mutagenicity

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

California Proposition 65: (Substances <0.1% unless noted in Section 3)

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenicity Categories

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)

Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

None of the ingredients is listed.

(Cont. on page 10)

Printing date 03/28/2018 Version Number 1.0 Reviewed on 03/28/2018

Trade name: Perm-A-Barrier Adhesive Primer

(Cont. from page 9)

NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards.

If no g/L value is provided this product is not subject to above standard.

135 g/L

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA USA: +1-617-876-1400 (24 hours)

+1-800-354-5414

Date of preparation / last revision 03/28/2018 / -

The first date of preparation 10/09/2015

Number of revision times and the latest revision date 1.0 / 03/28/2018



Printing date 08/15/2017 Version Number 1.1 Reviewed on 08/15/2017

1 Identification

Product identifier

Trade name: PERM-A-BARRIER WB Primer

SDS ID Number: 60142

Relevant identified uses of the substance or mixture, and uses advised against:

Specialty construction product. Not intended for other uses.

Details of the supplier of the safety data sheet

Manufacturer/Supplier: GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA

GCP Canada, Inc. 294 Clements Road W. Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours) Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

Suspected of causing cancer.

Label elements:

Hazard pictograms



GHS08

Warning

Hazard statements

Suspected of causing cancer.

Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

IF exposed or concerned: Get medical advice/attention.

Dispose of contents/container in accordance with local/regional/national/international regulations.

NFPA ratings (scale 0 - 4)



 $\begin{aligned} & \text{Health} = 2 \\ & \text{Fire} = 1 \\ & \text{Reactivity} = 0 \end{aligned}$

(Cont. on page 2)

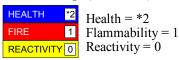
USGHS •

(Cont. from page 1)

Printing date 08/15/2017 Version Number 1.1 Reviewed on 08/15/2017

Trade name: PERM-A-BARRIER WB Primer

HMIS-ratings (scale 0 - 4)



Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixture

Description: Mixture of the hazardous substance(s) listed below with additional nonhazardous ingredients.

Hazardous components:

108-05-4 vinyl acetate 0.1-1.0%

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact:

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

After eye contact:

Rinse cautiously with water for several minutes.

Seek immediate medical advice.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Immediately call a doctor.

Never give anything by mouth to an unconscious person.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

(Cont. on page 3)

Printing date 08/15/2017 Version Number 1.1 Reviewed on 08/15/2017

Trade name: PERM-A-BARRIER WB Primer

(Cont. from page 2)

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up:

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Open and handle receptacle with care.

Prevent formation of aerosols.

Avoid contact with eyes, skin and clothing.

Do not take internally.

Practice good personal hygiene to avoid ingestion.

Use only with adequate ventilation.

Wash clothing before reuse.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

Information about protection against explosions and fires: Keep respiratorator available.

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: Keep respiratorator available.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

108-05-4 vinyl acetate

REL (USA) Ceiling limit value: 15* mg/m³, 4* ppm

*15-min

TLV (USA) | Short-term value: 53 mg/m³, 15 ppm

Long-term value: 35 mg/m³, 10 ppm

(Cont. on page 4)

Printing date 08/15/2017 Version Number 1.1 Reviewed on 08/15/2017

Trade name: PERM-A-BARRIER WB Primer

(Cont. from page 3)

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Store protective clothing separately.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands:

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Rubber or other impervious gloves should be worn to prevent skin contact.

Material of gloves Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:



Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.



A face shield should also be worn if there is potential exposure to splash or spray.

Body protection:

Protective work clothing

Use personal protective equipment as required.

Take off contaminated clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties General Information Appearance:

Form: Liquid

Color: According to product specification

Odor: Characteristic
Odor threshold: Not determined.

pH-value (~) at 20°C (68 °F): 4.8

Change in condition

Melting point/Melting range:
Boiling point/Boiling range:
Undetermined.
Undetermined.
Not applicable.

(Cont. on page 5)

- USGHS

Printing date 08/15/2017 Version Number 1.1 Reviewed on 08/15/2017

Trade name: PERM-A-BARRIER WB Primer

		(Cont. from page 4)	
Flammability (solid, gaseous):	Not applicable.		
Decomposition temperature: Auto igniting: Danger of explosion:	Not determined. Product is not self-igniting. Product does not present an explosion hazard.		
Explosion limits: Lower: Upper: VOC Content (max):	Not determined. Not determined. Not determined.		
Vapor pressure: Density: (~) Relative density Vapor density Evaporation rate	Not determined. Not determined. Not determined. Not determined. Not determined. Not determined.		
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.		
Partition coefficient (n-octanol/water	Partition coefficient (n-octanol/water): Not determined.		
Viscosity: Dynamic: Kinematic: Molecular weight	Not determined. Not applicable.		
Other information	No further relevant information available.		

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions No further relevant information available.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:		
108-05-4 vinyl acetate		
Dermal	LD50	2920 mg/kg (rat)
	LD50	2335 mg/kg (rabbit)

Primary irritant effect:

on the skin: No irritating effect expected on the eye: No irritating effect expected inhalation: No irritating effect expected

(Cont. on page 6)

Printing date 08/15/2017 Version Number 1.1 Reviewed on 08/15/2017

Trade name: PERM-A-BARRIER WB Primer

(Cont. from page 5)

Additional toxicological information: Suspected of causing cancer.

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity:

Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

108-05-4 vinyl acetate

2B

NTP (National Toxicology Program)

K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Disposal methods:

Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing product for disposal. Dispose of waste in accordance with all applicable regulations.

Recommendation:



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Dispose of contents/container in accordance with local/regional/national/international regulations.

14 Transport information

UN-Number DOT, IMDG, IATA

Not applicable.

(Cont. on page 7)

Printing date 08/15/2017 Version Number 1.1 Reviewed on 08/15/2017

Trade name: PERM-A-BARRIER WB Primer

		(Cont. from page 6)
UN proper shipping name DOT, IMDG, IATA	Not applicable.	
Transport hazard class(es)		
DOT, IMDG, IATA Class	Not applicable.	
Packing group DOT, IMDG, IATA	Not applicable.	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport/Additional information	on: Not classified as a dangerous good for transport by road, rail or air.	
DOT Remarks:	Not Regulated.	
UN "Model Regulation":	Not applicable.	

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

108-05-4 vinyl acetate

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories: Health Hazard - Carcinogenicity

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

Right to Know Ingredient Disclosure:

25280-35-7 Acetic acid ethenyl ester

7732-18-5 | Water

California Proposition 65: (Substances <0.1% unless noted in Section 3)

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenicity Categories

EPA (Environmental Protection Agency)

None of the ingredients is listed.

(Cont. on page 8)

USGHS

Printing date 08/15/2017 Version Number 1.1 Reviewed on 08/15/2017

Trade name: PERM-A-BARRIER WB Primer

(Cont. from page 7)

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)

Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

None of the ingredients is listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards.

If no g/L value is provided this product is not subject to above standard.

10g/l (as applied)

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA USA: +1-617-876-1400 (24 hours)

+1-800-354-5414

Date of preparation / last revision 08/15/2017 / 1.0

The first date of preparation 11/08/2012

Number of revision times and the latest revision date 1.1 / 08/15/2017

USGHS !

Printing date 08/11/2016 Version Number 1.0 Reviewed on 08/11/2016

1 Identification

Product identifier

Trade name: Perm-A-Barrier S-100

SDS ID Number: 2659

Relevant identified uses of the substance or mixture, and uses advised against

Specialty construction product. Not intended for other uses

Details of the supplier of the safety data sheet

Manufacturer/Supplier: GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA

GCP Canada, Inc. 294 Clements Road W. Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours)

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

May cause an allergic skin reaction.

Label elements: The product is classified and labeled according to the Globally Harmonized System (GHS)

Hazard pictograms



Warning

Hazard statements

May cause an allergic skin reaction.

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves.

Contaminated work clothing should not be allowed out of the workplace.

IF ON SKIN: Wash with plenty of water.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Cont. on page 2)

USGHS -

Page 1/7

Printing date 08/11/2016 Version Number 1.0 Reviewed on 08/11/2016

Trade name: Perm-A-Barrier S-100

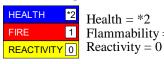
NFPA ratings (scale 0 - 4)

(Cont. from page 1)



Health = 2Fire = 1Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = *2Flammability = 1

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with additional nonhazardous ingredients.

Hazardous components:

96-29-7 2-butanone oxime

0.1-1.0%

Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse cautiously with water for several minutes.

After swallowing: If symptoms persist consult doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

USGHS

(Cont. on page 3)

Printing date 08/11/2016 Version Number 1.0 Reviewed on 08/11/2016

Trade name: Perm-A-Barrier S-100

(Cont. from page 2)

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to section 13 of the SDS.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling No special precautions are necessary if used correctly.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

96-29-7 2-butanone oxime

WEEL (USA) Long-term value: 10 ppm DSEN

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

(Cont. on page 4)

- USGHS

Printing date 08/11/2016 Version Number 1.0 Reviewed on 08/11/2016

Trade name: Perm-A-Barrier S-100

(Cont. from page 3)

Protection of hands: Not required.

Eye protection: Goggles recommended during refilling.

Body protection:

Use personal protective equipment as required.

Take off contaminated clothing.

Physical and chemical proper	
Information on basic physical	l and chemical properties
General Information Appearance: Form: Color: Odor:	Liquid According to product specification Characteristic
Odor threshold:	Not determined. Not determined.
pH-value (~): Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point:	Undetermined. 175 °C (347 °F) >200 °C (>392 °F)
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature: Auto igniting: Danger of explosion:	Not determined. Product is not selfigniting. Product does not present an explosion hazard.
Explosion limits: Lower: Upper: VOC Content (max):	Not determined. Not determined. Not determined.
Vapor pressure: Density: (~) Relative density Vapor density Evaporation rate	Not determined. Not determined. Not determined. Not determined. Not determined. Not determined.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wat	er): Not determined.
Viscosity: Dynamic: Kinematic: Molecular weight	Not determined. Not applicable.

10 Stability and reactivity

Reactivity Stable under normal conditions.

(Cont. on page 5)

USGHS •

Printing date 08/11/2016 Version Number 1.0 Reviewed on 08/11/2016

Trade name: Perm-A-Barrier S-100

(Cont. from page 4)

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritating effect expected on the eye: No irritating effect expected inhalation: No irritating effect expected

Sensitization: May cause an allergic skin reaction.

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity:

Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

None of the ingredients is listed.

NTP (National Toxicology Program)

K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

(Cont. on page 6)

USGHS •

Printing date 08/11/2016 Version Number 1.0 Reviewed on 08/11/2016

Trade name: Perm-A-Barrier S-100

(Cont. from page 5)

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

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		т т апть	DOIL		ULILLA	

UN-Number DOT, IMDG, IATA	Not applicable.
UN proper shipping name DOT, IMDG, IATA	Not applicable.

Transport hazard class(es)

DOT, IMDG, IATA

Class Not applicable.

Packing group

DOT, IMDG, IATA Not applicable.

Environmental hazards: Not applicable.

Special precautions for user Not applicable.

Transport/Additional information:

DOT

Remarks:

Not Regulated.

UN "Model Regulation": Not applicable.

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories:

Health Immediate (acute) Yes
Health Delayed (chronic) Yes
Flammable No
Reactive No

(Cont. on page 7)

USGHS

Printing date 08/11/2016 Version Number 1.0 Reviewed on 08/11/2016

Trade name: Perm-A-Barrier S-100

D. N.	(Cont. from page 6)
Pressure No	
North America Chemical Inventory Status	
TSCA (Toxic Substances Control Act - United States):	
All ingredients are listed or exempt from listing unless otherwise noted below.	
CEPA (Canadian DSL):	
All ingredients are listed or exempt from listing unless otherwise noted below.	
Right to Know Ingredient Disclosure:	
Propietary Ingredient NJTSN801416108	
Proprietary Polydimethylsiloxane - NJTSN801416111	
112945-52-5 Amorphous Silica Dioxide	
California Proposition 65	
Chemicals known to cause cancer:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
Carcinogenicity Categories	
EPA (Environmental Protection Agency)	
13463-41-7 Pyrithione zinc	D, I, II
TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists) Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable	
None of the ingredients is listed.	

NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards. 25.44 g/L

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies 62 Whittemore Avenue Cambridge, MA 02140 USA USA: +1-617-876-1400 (24 hours)

+1-800-354-5414

Date of preparation / last revision 08/11/2016 / -

The first date of preparation 07/05/2016

Number of revision times and the latest revision date 1.0 / 08/11/2016

USGHS



PERM-A-BARRIER VPS 30

Five Year Materi	al Warranty
WARRANTY NO	
NAME OF BUILDING	
LOCATION OF BUILDIN	NG
NAME OF OWNER	
CONTRACTOR	
PRODUCT(S) USED	PERM-A-BARRIER® VPS 30
TOTAL AREA (SF)	
DATE OF COMPLETED	INSTALLATION
installation identified abo installed and used in stri- according to ASTM E 217	is Inc. ("GCP") hereby warrants that for a period of Five (5) years from the date of completion of ove, the air permeance of a continuous coating of PERM-A-BARRIER® VPS 30 Membrane when ct conformance with the written instructions of GCP will not exceed 0.02 l/s/m² when tested 28 at a pressure differential of 75 Pa, and the vapor permeance of PERM-A-BARRIER® VPS 30 d and used in strict conformance with the written instructions of GCP will be no less than 10 perms of ASTM E96 Method B.
this warranty, then GCP	th Five (5) year period the PERM-A-BARRIER® VPS 30 Membrane is found by GCP not to comply with will supply to the owner replacement PERM-A-BARRIER® VPS 30 Membrane in a quantity equal to the conforming, with a value not to exceed the purchase price for the material paid to GCP for the
BARRIER® VPS 30 Memb materials, acts of God, m the subject structure or t does not cover any costs sheathing or facade in co	pply to any failure caused by or due to workmanship or improper installation of the PERM-A-rane, abuse of the PERM-A-BARRIER® VPS 30 Membrane, or chemical incompatibility with other novement or cracks in excess of 1/16 inch of the immediate substrate, inadequate or faulty design of to repairs or installations made by other persons not authorized by GCP. In addition, this warranty or expenses associated with 1) the removal or replacement of any material including the exterior onnection with the testing, repair, removal or replacement of the PERM-A-BARRIER® VPS 30 ges or repairs of any kind or nature to the subject building or its' contents from air, vapor, water or
EXPRESS OR IMPLIED, IN FOR A PARTICULAR PURI THOSE HEREIN PROVIDE FOR ANY DAMAGE TO TH INCIDENTAL, CONSEQUE	ANTY IS EXCLUSIVE AND IS IN LIEU OF ANY AND ALL OTHER GUARANTEES OR WARRANTIES, NCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS POSE. THE REMEDIES OF THE OWNER FOR ANY BREACH OF THIS WARRANTY SHALL BE LIMITED TO ED TO THE EXCLUSION OF ANY AND ALL OTHER REMEDIES. GCP SHALL NOT BE LIABLE IN ANY CASE HE BUILDING OR THE CONTENTS THEREOF, NOR WILL IT BE RESPONSIBLE FOR SPECIAL, ENTIAL, OR PENAL DAMAGES. NO AGREEMENT VARYING OR EXTENDING THE FOREGOING VILL BE BINDING UPON GCP UNLESS IN WRITING, SIGNED BY A DULY AUTHORIZED OFFICER OF
GCP Applied Technologie	s Inc.

gcpat.com

All information provided by and on behalf of GCP Applied Technologies Inc. ("GCP"), regardless whether provided in hard or soft copy, or by allowing access on a website or shared site, is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but GCP does not warrant the results to be obtained. Please read all statements, recommendations, and 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 that would infringe any patent, copyright, or other third party right. ADCOR®, PREPRUFE®, PROCOR®, and BITUTHENE® are trademarks, which may be registered in the United States and/or other countries, of GCP Applied Technologies Inc. This trademark has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status. © Copyright 2018 GCP Applied Technologies Inc. All rights reserved. GPC Inc. 2325 Lakeview Pkwy Suite 450 Alpharetta, GA 30009 USA.In Canada, 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6. Last Updated: 2021



LIST OF DRAWINGS

WINDOW DETAILS AT MASONRY CLADDING

VPS30-001 VPS30-002 VPS30-003 VPS30-003 (3D-1) VPS30-003 (3D-2) WINDOW HEAD DETAIL WINDOW JAMB DETAIL WINDOW SILL DETAIL WINDOW FLASHING SEQUENCE SHEET-APPLIED FLASHING PRESTRIP MASONRY CLADDING MASONRY CLADDING MASONRY CLADDING SHEET-APPLIED FLASHING

BASE OF WALL DETAILS AT MASONRY CLADDING

 VPS30-004
 BASE-OF-WALL DETAIL

 VPS30-004 (3D-1)
 BASE-OF-WALL FLASHING SEQ. (OPT. 1)

 VPS30-004 (3D-2)
 BASE-OF-WALL FLASHING SEQ. (OPT. 2)

 VPS30-004 (ALT 1)
 BASE-OF-WALL DETAIL (ALTERNATE 1)

 VPS30-004 (ALT 2)
 BASE-OF-WALL DETAIL (ALTERNATE 2)

MASONRY CLADDING MASONRY CLADDING MASONRY CLADDING MASONRY CLADDING MASONRY CLADDING

LEDGER DETAILS AT MASONRY CLADDING

VPS30-005 VPS30-005 (3D-1) VPS30-005 (3D-2) VPS30-006A VPS30-006B FLOOR LINE DETAIL FLOOR LINE FLASHING SEQ. (OPT. 1) FLOOR LINE FLASHING SEQ. (OPT. 2) MASONRY ANCHOR DETAIL MASONRY ANCHOR DETAIL MASONRY CLADDING MASONRY CLADDING MASONRY CLADDING CMU SUBSTRATE FRAMED SUBSTRATE

MASONRY CLADDING

PARAPET DETAILS AT MASONRY CLADDING

VPS30-007 PARAPET DETAIL

EXPANSION AND CONTROL JOINT DETAILS

VPS30-008 VPS30-009 EXPANSION JOINT DETAIL CONTROL JOINT DETAIL

WINDOW DETAILS AT NON-MASONRY CLADDING

VPS30-010 VPS30-011 VPS30-012 WINDOW HEAD DETAIL WINDOW JAMB DETAIL WINDOW SILL DETAIL NON-MASONRY CLADDING NON-MASONRY CLADDING NON-MASONRY CLADDING

NON-MASONRY CLADDING DETAILS

VPS30-013 VPS30-014 VPS30-015 VPS30-016 VPS30-017

VPS30-018

VPS30-019 VPS30-020

VPS30-017 (ALT)

VPS30-018 (ALT)

FLOOR LINE DETAIL
CONCRETE STEM WALL DETAIL
BASE-OF-WALL DETAIL AT GRADE
BASE-OF-WALL DETAIL
INSIDE CORNER DETAIL
INSIDE CORNER DETAIL (ALTERNATE)
OUTSIDE CORNER DETAIL (ALTERNAT

OUTSIDE CORNER DETAIL
OUTSIDE CORNER DETAIL (ALTERNATE)
KNIFEPLATE PENETRATION DETAIL
PENETRATION DETAILS

NON-MASONRY CLADDING NON-MASONRY CLADDING

CURTAINWALL DETAILS AT NON-MASONRY CLADDING

VPS30-021 VPS30-022 VPS30-023 CURTAINWALL HEAD DETAIL CURTAINWALL JAMB DETAIL CURTAINWALL SILL DETAIL NON-MASONRY CLADDING NON-MASONRY CLADDING NON-MASONRY CLADDING

DEFLECTION JOINT

VPS30-024 DEFLECTION JOINT

NON-MASONRY CLADDING

GENERAL NOTES

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.

Refer to air barrier system product data sheet for acceptable SELF-ADHERED FLASHING products.



LIST OF DRAWINGS

DRAWING: VP\$30-000

SCALE: 3" = 1'

LEGEND

NOTE

30 30 DETAILS

DETAILS APPLY TO PERM-A-BARRIER®

VPS 30 AND PERM-A-BARRIER® VPS

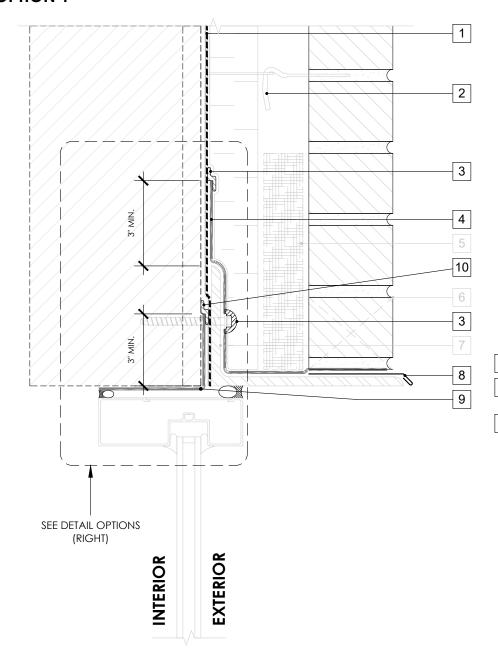
EFFECTIVE DATE: 2020.05.21

SUPERCEDES: NEW

PERM-A-BARRIER® VPS 30

84

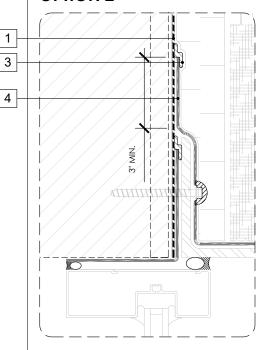
OPTION 1



LEGEND

- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- MASONRY ANCHOR DETAILING (SEE DRAWING VPS30-006)
- 3. PERM-A-BARRIER® \$100, BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT
- 4. PERM-A-BARRIER® WALL FLASHING (STAR CUT AT BOLT), PRIME SUBSTRATE WHERE REQUIRED
- 5 MORTAR COLLECTION MESH
- MASONRY WEEP/VENT
- 7. CONTINUOUS SHELF ANGLE
- 8 SHEET METAL ELASHING PER ARCH
- 9. PERM-A-BARRIER® SELF-ADHERED FLASHING*
- 10. BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT

OPTION 2



DRAWING:

VPS30-001

GENERAL NOTES

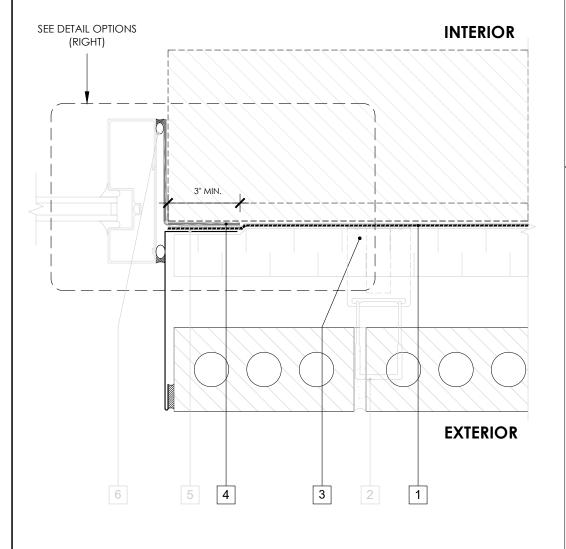
- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.

WINDOW HEAD DETAIL -



MACCAIRY OLARBING		
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
85	SUPERCEDES:	NEW

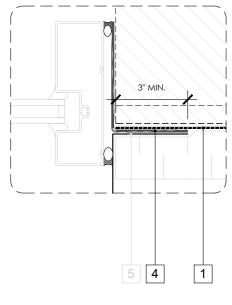
OPTION 1



LEGEND

- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- 2. MASONRY ANCHOR DETAILING (SEE DRAWING VPS30-006)
- 3. PERM-A-BARRIER® \$100, BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT
- 4. PERM-A-BARRIER® SELF-ADHERED FLASHING*
- 5. SHEET METAL FLASHING PER ARCH
- INTERIOR AIR SEALANT OVER BACKER ROD

OPTION 2



GENERAL NOTES

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



WINDOW JAMB DETAIL -	DRAWING:	VPS30-002
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
86	SUPERCEDES:	NEW

LEGEND OPTION 1 4. PERM-A-BARRIER® SELF-ADHERED **FLASHING*** 5. PERM-A-BARRIER® VPS 30 **MEMBRANE** 6. PERM-A-BARRIER® \$100, BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED **SEALANT** SEE DETAIL OPTIONS (RIGHT) **OPTION 2** 6 4 5 NTERIOR

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- GCP products are indicated in the detail legend in BOLDFACE font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.

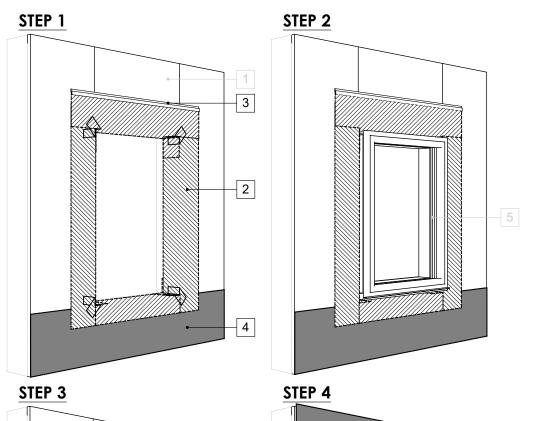
WINDOW CITE DETAIL

Refer to air barrier system product data sheet for acceptable SELF-ADHERED FLASHING products.



WINDOW SILL DETAIL -	DRAWING:	VP\$30-003
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
87	SUPERCEDES:	NEW

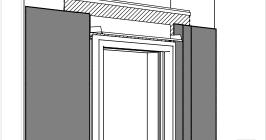
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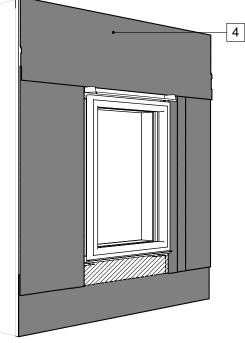


- SHEATHING SUBSTRATE
- PERM-A-BARRIER® DETAIL MEMBRANE, NPS DETAIL MEMBRANE, ALUMINUM FLASHING, OR WALL FLASHING - PRIME SUBSTRATE WHERE REQUIRED; SEE VPS30-003 (3D-2)
- **BITUTHENE MASTIC, BITUTHENE LIQUID** MEMBRANE, OR GCP APPROVED **SEALANT - 1-INCH TROWELED BEAD**
- PERM-A-BARRIER® VPS 30 **MEMBRANE**
- WINDOW PER ARCH



- CONTINUOUS AIR AND WATER SEAL AT PERIMETER OF FENESTRATION, FENESTRATION ATTACHMENT, AND DRAINAGE OF ROUGH OPENING TO BE PER PROJECT SPECIFIC REQUIREMENTS
- SEAL ALL NON-WATER SHEDDING **EDGES WITH ACCEPTABLE SEALANT**
- OPTIONAL WINDOW FLASHING SEQUENCE CAN BE COMPLETED AFTER FIELD APPLICATION OF PERM-A-BARRIER® VPS





GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.

4

GCP products are indicated in the detail legend in BOLDFACE font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.

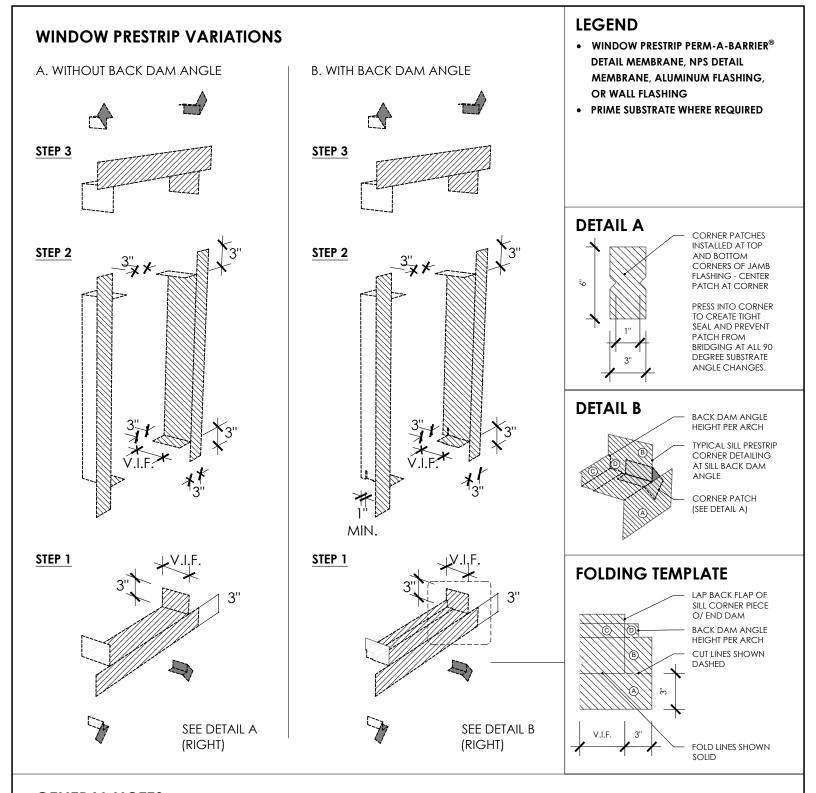
*Refer to air barrier system product data sheet for acceptable self-adhered flashing products.



WINDOW FLASHING SEQUENCE -SHEET APPLIED FLASHING

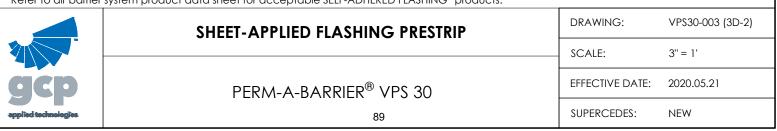
PERM-A-BARRIER® VPS 30

DRAWING: VPS30-003 (3D-1) SCALE: 3" = 1' **EFFECTIVE DATE:** 2020.05.21 SUPERCEDES: NEW

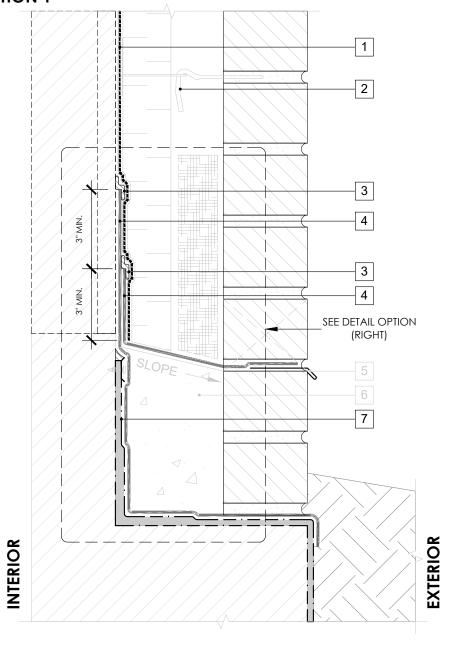


GENERAL NOTES

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



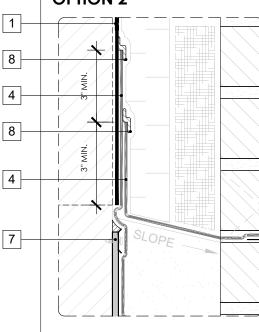
OPTION 1



LEGEND

- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- MASONRY ANCHOR DETAILING (SEE DRAWING VPS30-006)
- 3. BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT, 1-INCH TROWELED BEAD
- 4. PERM-A-BARRIER® WALL FLASHING
- SHEET METAL FLASHING PER ARCH
- 6. GROUT SOLID TO HEIGHT OF CURB
- 7. BELOW GRADE WATERPROOFING SYSTEM - SEE GCPAT.COM
- 8. PERM-A-BARRIER® \$100, BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT

OPTION 2



SEE VPS30-004 (3D-2) FOR 3D DETAIL

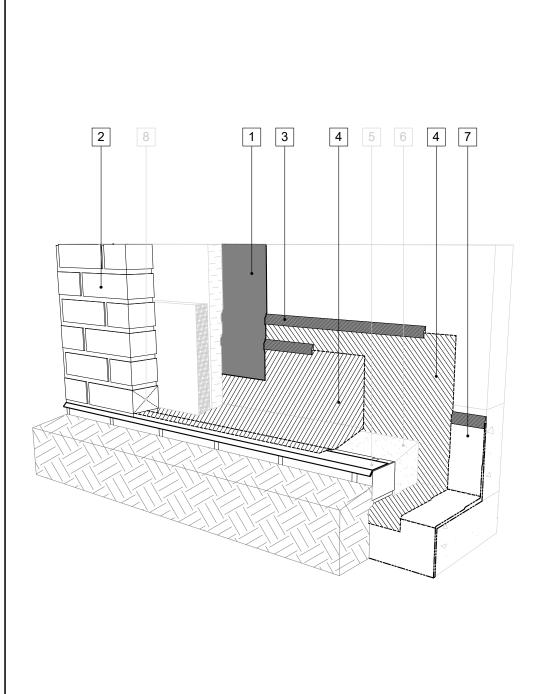
GENERAL NOTES

SEE VPS30-004 (3D-1) FOR 3D DETAIL

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- GCP products are indicated in the detail legend in BOLDFACE font. Detail components by others are indicated in GRAY FONT. Install
 components per manufacturer and project specific requirements.



BASE OF WALL DETAIL -	DRAWING:	VPS30-004
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
90	SUPERCEDES:	NEW



- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- 2. MASONRY ANCHOR DETAILING (SEE DRAWING VPS30-006)
- 3. BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT, 1-INCH TROWELED BEAD
- 4. PERM-A-BARRIER® WALL FLASHING
- 5. SHEET METAL FLASHING PER ARCH
- 6. GROUT SOLID TO HEIGHT OF CURB
- 7. BELOW GRADE WATERPROOFING SYSTEM - SEE GCPAT.COM
- 8. MASONRY WEEP/VENT

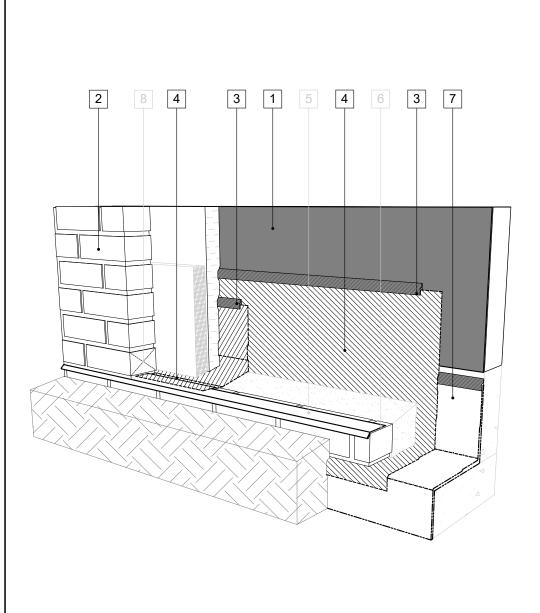
SEE VPS30-004 (OPTION 1) FOR 2D DETAIL

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



BASE OF WALL FLASHING SEQUENCE (OPTION 1) -	DRAWING:	VPS30-004 (3D-1)
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
91	SUPERCEDES:	NEW



- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- 2. MASONRY ANCHOR DETAILING (SEE DRAWING VPS30-006)
- 3. PERM-A-BARRIER® \$100, BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT, 1-INCH TROWELED BEAD
- 4. PERM-A-BARRIER® WALL FLASHING
- 5. SHEET METAL FLASHING PER ARCH
- 6. GROUT SOLID TO HEIGHT OF CURB
- 7. BELOW GRADE WATERPROOFING SYSTEM - SEE GCPAT.COM
- 8. MASONRY WEEP/VENT

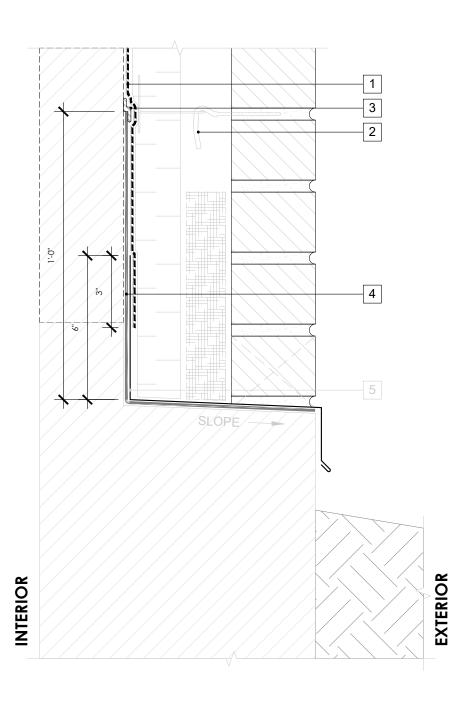
SEE VPS30-004 (OPTION 2) FOR 2D DETAIL

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
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in product data shoot for decoprable seel 7 briefied by 127 string products.		
BASE OF WALL FLASHING SEQUENCE (OPTION 2) -	DRAWING:	VPS30-004 (3D-2)
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
	SUPERCEDES:	NEW



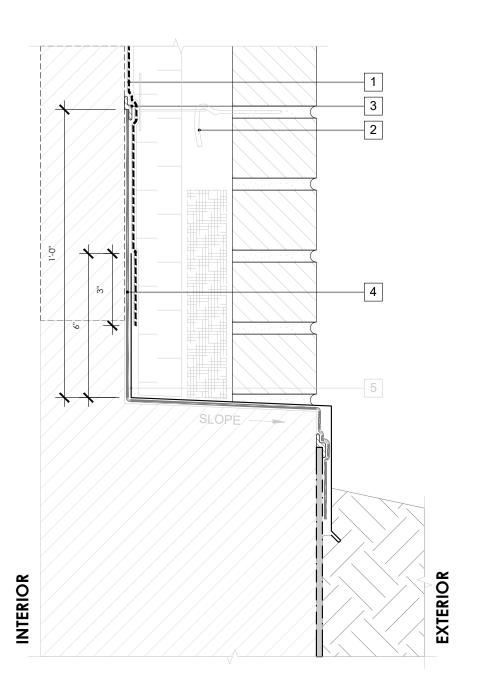
- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- MASONRY ANCHOR DETAILING (SEE DRAWING VPS30-006)
- 3. BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT, 1-INCH TROWELED BEAD
- 4. PERM-A-BARRIER® WALL FLASHING
- SHEET METAL FLASHING PER ARCH

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
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BASE OF WALL DETAIL (ALTERNATE 1) -	DRAWING:	VPS30-004 (ALT 1)
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
93	SUPERCEDES:	NEW



- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- MASONRY ANCHOR DETAILING (SEE DRAWING VPS30-006)
- 3. BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT, 1-INCH TROWELED BEAD
- 4. PERM-A-BARRIER® WALL FLASHING
- SHEET METAL FLASHING PER ARCH

NOTE

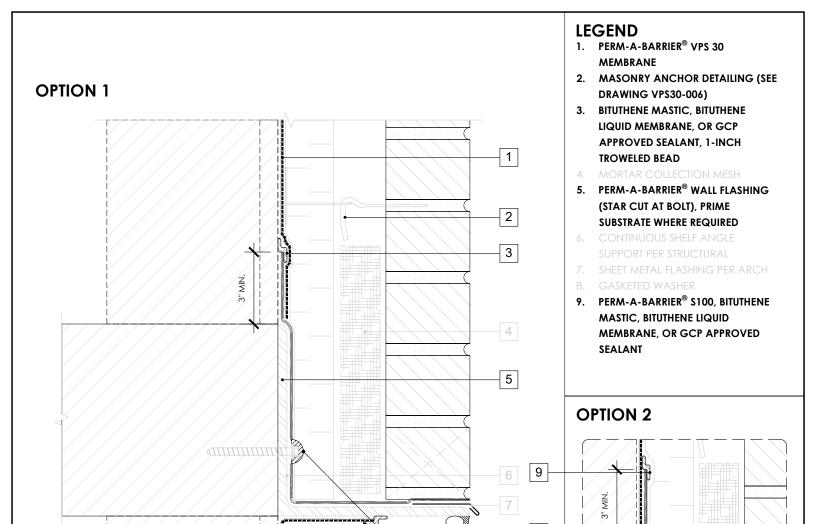
 CONSULT GCP FOR BELOW GRADE WATERPROOFING COMPATIBILITY AND CONNECTION

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
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- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



BASE OF WALL DETAIL (ALTERNATE 2) -	DRAWING:	VPS30-004 (ALT 2)
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
94	SUPERCEDES:	NEW



5

1

9

EXTERIOR

SEE VPS30-005 (3D-1) FOR 3D DETAIL

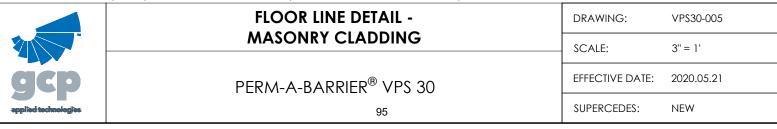
4" MIN.

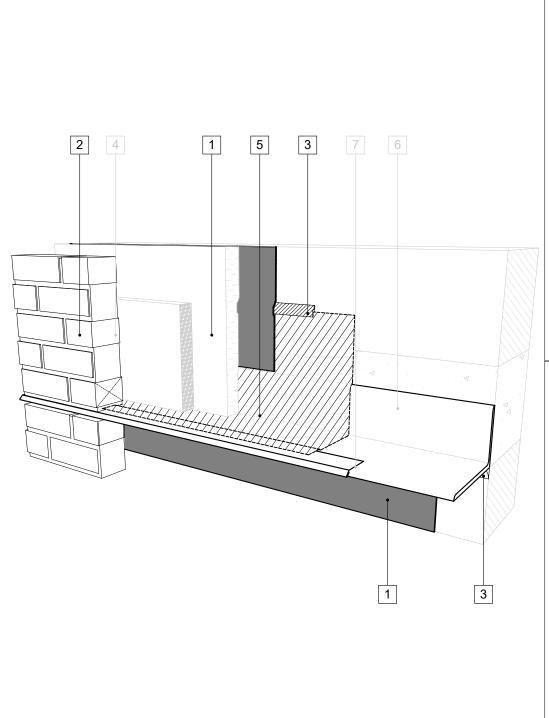
SEE VPS30-005 (3D-2) FOR 3D DETAIL

GENERAL NOTES

NTERIOR

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.





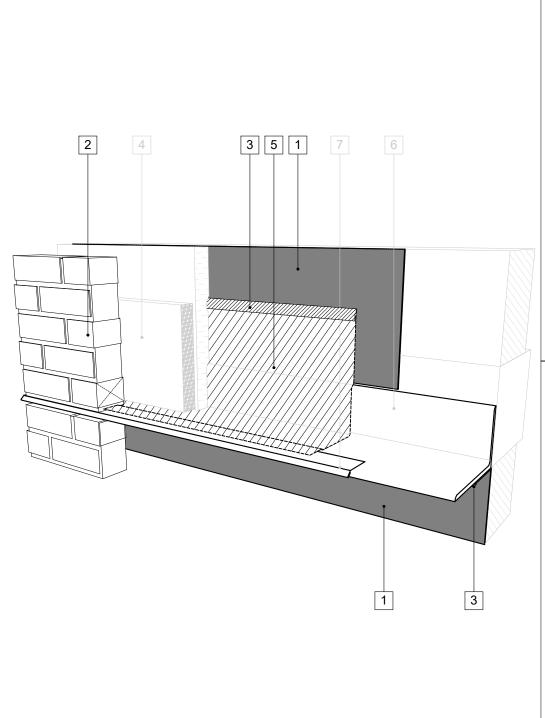
- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- MASONRY ANCHOR DETAILING (SEE DRAWING VPS30-006)
- 3. BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT, 1-INCH TROWELED BEAD
- 4. MORTAR COLLECTION MESH
- 5. PERM-A-BARRIER® WALL FLASHING,
 PRIME SUBSTRATE WHERE REQUIRED
- 6. CONTINUOUS SHELF ANGLE SUPPORT PER STRUCTURAL
- 7. SHEET METAL FLASHING PER ARCH

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



FLOOR LINE FLASHING SEQUENCE (OPT. 1) -	DRAWING:	VPS30-005 (3D-1)
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
96	SUPERCEDES:	NEW



- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- MASONRY ANCHOR DETAILING (SEE DRAWING VPS30-006)
- 3. PERM-A-BARRIER® \$100, BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT, 1-INCH TROWELED BEAD
- 4. MORTAR COLLECTION MESH
- 5. PERM-A-BARRIER® WALL FLASHING,
 PRIME SUBSTRATE WHERE REQUIRED
- 6. CONTINUOUS SHELF ANGLE SUPPORT PER STRUCTURAL
- 7. SHEET METAL FLASHING PER ARCH

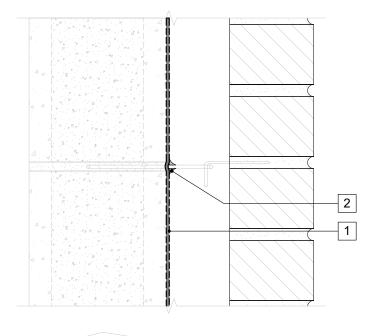
GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



FLOOR LINE FLASHING SEQUENCE (OPT. 2) -	DRAWING:	VP\$30-005 (3D-2)
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
97	SUPERCEDES:	NEW

SECTION VIEW



LEGEND

- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- 2. PERM-A-BARRIER® S100, BITUTHENE
 MASTIC, BITUTHENE LIQUID
 MEMBRANE, OR GCP APPROVED
 SEALANT FILLET SURROUNDING WIRE
 TIE PENETRATION



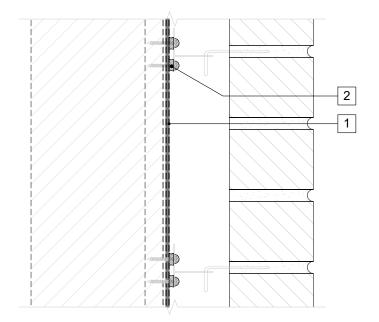
PERSPECTIVE VIEW

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



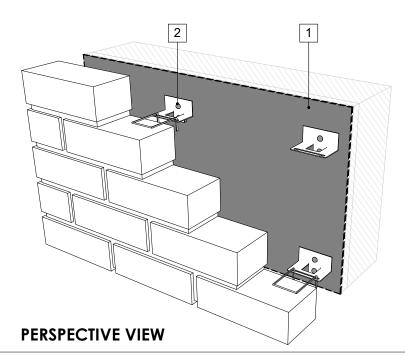
MASONRY ANCHOR DETAIL -	DRAWING:	VPS30-006A
CMU SUBSTRATE	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
98	SUPERCEDES:	NEW

SECTION VIEW



LEGEND

- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- 2. PERM-A-BARRIER® \$100, BITUTHENE
 MASTIC, BITUTHENE LIQUID
 MEMBRANE, OR GCP APPROVED
 SEALANT AROUND FASTENER AT
 FRONT AND BACK FACE OF
 MASONRY ANCHOR

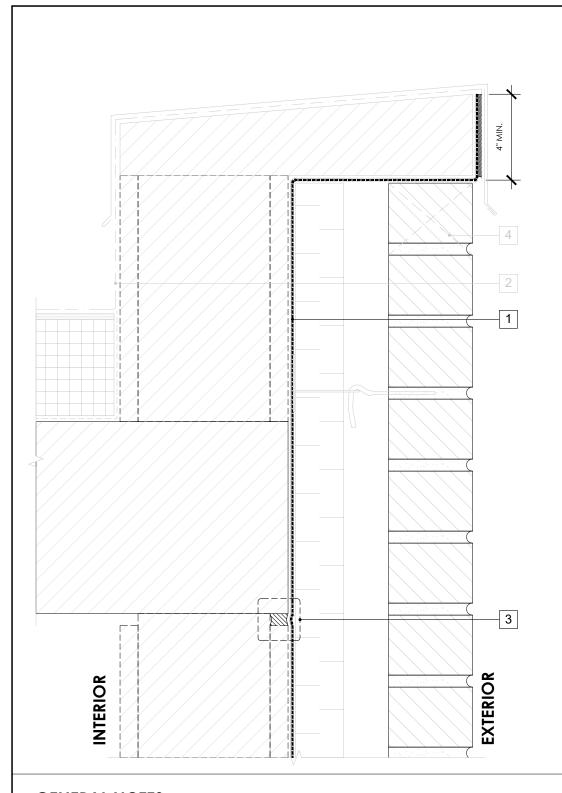


GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



MASONRY ANCHOR DETAIL -	DRAWING:	VPS30-006B
FRAMED SUBSTRATE	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
99	SUPERCEDES:	NEW



- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- ROOF MEMBRANE AND ROOF DETAILS
- 3. SEE CONTROL JOINT DETAI VPS30-009
- 4. MASONRY WEEP/VENT

NOTE

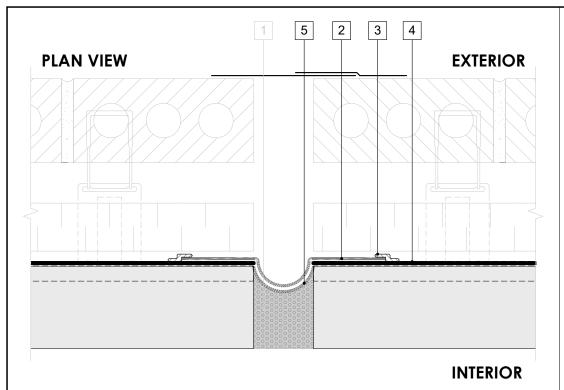
CONSULT GCP & ROOFING
 MANUFACTURER FOR
 COMPATIBILITY AND CONNECTION
 AT ROOF INTERFACE

GENERAL NOTES

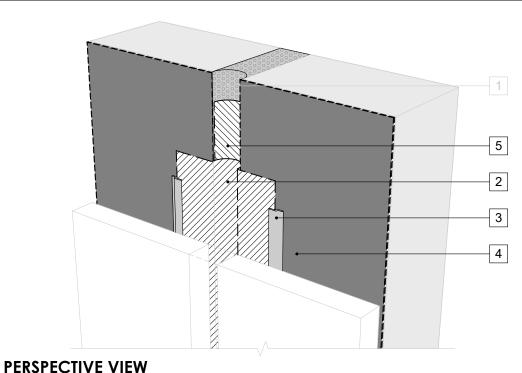
- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- GCP products are indicated in the detail legend in BOLDFACE font. Detail components by others are indicated in GRAY FONT. Install
 components per manufacturer and project specific requirements.



PARAPEI DEIAIL -	DRAWING:	VPS30-007
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
100	SUPERCEDES:	NEW



- COMPRESSIBLE JOINT FILLER MAXIMUM 4-INCH WIDE JOINT
 CAPABLE OF A MAXIMUM 50%
 MOVEMENT IN COMPRESSION AND
 ELONGATION
- 2. PERM-A-BARRIER® SELF-ADHERED FLASHING*
- 3. PERM-A-BARRIER® \$100, BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT 1-INCH WIDE TROWELED READ
- 4. PERM-A-BARRIER® VPS 30 MEMBRANE
- 5. PERM-A-BARRIER® SELF-ADHERED FLASHING* INVERTED STRIP



NOTE

- WIDTH OF THE INVERTED STRIP SHALL
 BE TWICE THE WIDTH OF THE
 EXPANSION JOINT TO
 ACCOMMODATE MOVEMENT ALL
 SEAMS, OVERLAPS, JOINTS, AND
 EDGES SEALED WITH \$100
- MAXIMUM 4 INCH WIDE JOINT CAPABLE OF A MAXIMUM 50% MOVEMENT IN COMPRESSION AND ELONGATION
- CLADDING AND CLOSURE BY OTHERS NOT SHOWN FOR CLARITY

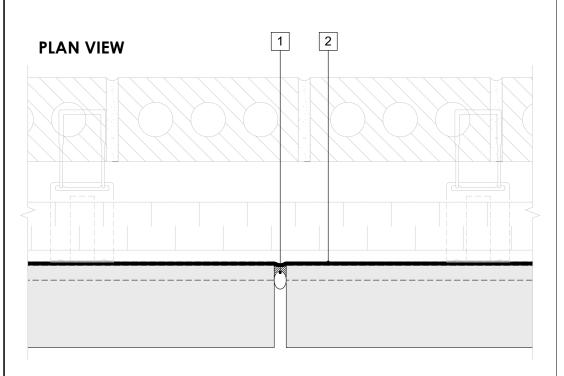
GENERAL NOTES

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.

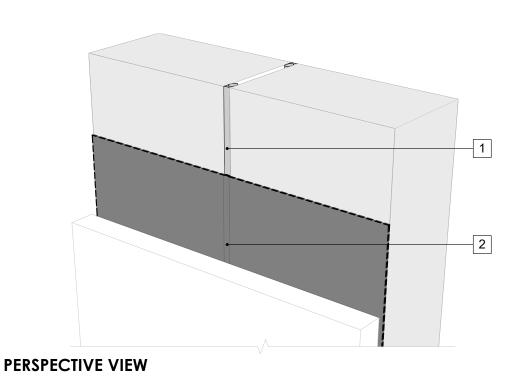
Refer to air barrier system product data sheet for acceptable SELF-ADHERED FLASHING products.



CONTROL JOINT DETAIL - MASONRY CLADDING DRAWING: VPS30-008 SCALE: 3" = 1' EFFECTIVE DATE: 2020.05.21 SUPERCEDES: NEW



- 1. BACKER ROD AND COMPATIBLE SEALANT
- 2. PERM-A-BARRIER® VPS 30 MEMBRANE



NOTE

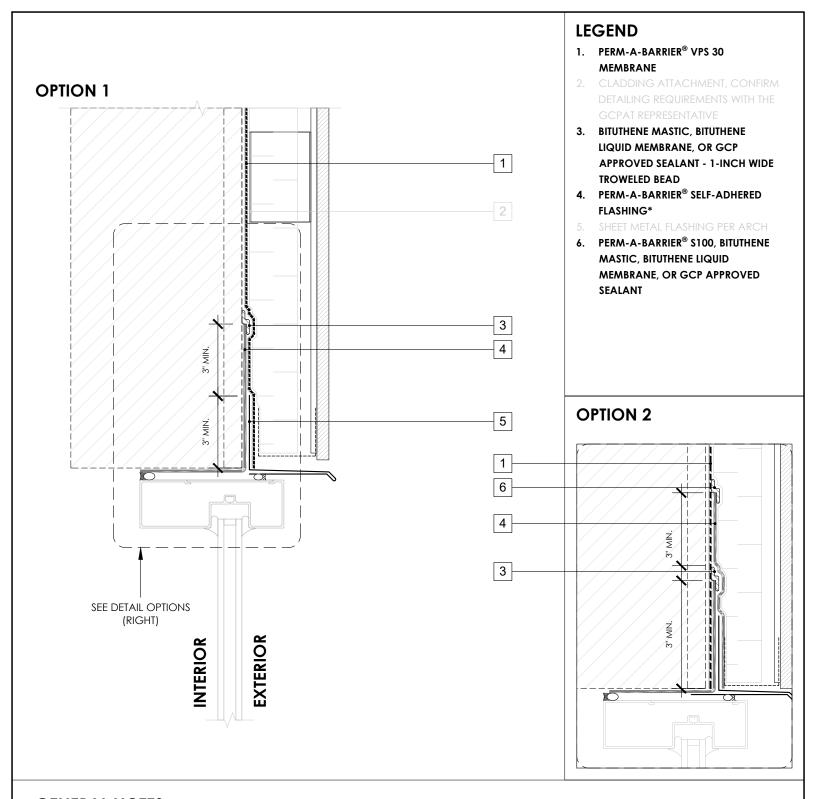
 MAX 1/2-INCH JOINT CAPABLE OF MAXIMUM 10% MOVEMENT IN COMPRESSION AND ELONGATION

GENERAL NOTES

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



CONTROL JOINT DETAIL -	DRAWING:	VPS30-009
MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
102	SUPERCEDES:	NEW



GENERAL NOTES

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.

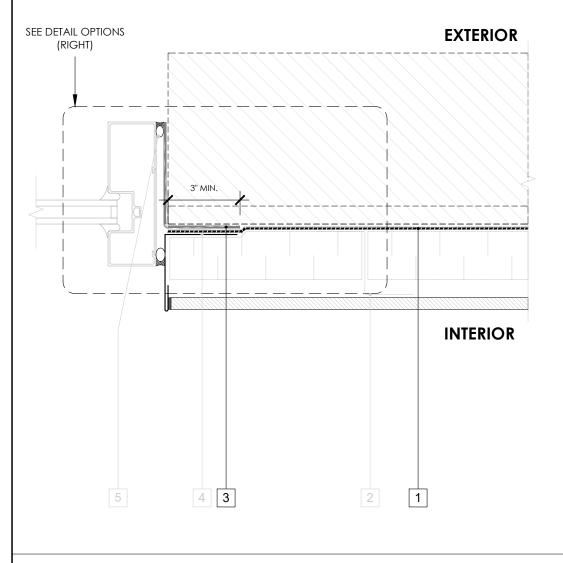


WINDOW HEAD DETAIL -	DRAWING:	VPS30-010
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
103	SUPERCEDES:	NEW

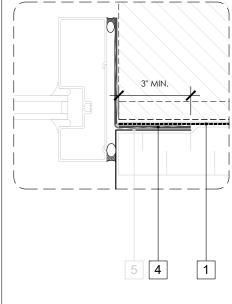
OPTION 1

LEGEND

- 1. PERM-A-BARRIER® VPS
- CLADDING ATTACHMENT, CONFIRM
 DETAILING REQUIREMENTS WITH THE
 GODAL REPRESENTATIVE
- 3. PERM-A-BARRIER® SELF-ADHERED FLASHING*
- 4. SHEET METAL FLASHING PER ARCH
- 5. INTERIOR AIR SEALANT OVER
 BACKER ROD



OPTION 2



GENERAL NOTES

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



WINDOW JAMB DETAIL -	DRAWING:	VPS30-011
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
104	SUPERCEDES:	NEW

OPTION 1 4. PERM-A-BARRIER® \$100, BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED **SEALANT - 1-INCH WIDE TROWELED BEAD** 5. PERM-A-BARRIER® SELF-ADHERED FLASHING* 6. PERM-A-BARRIER® VPS 30 **MEMBRANE** SEE DETAIL OPTIONS (RIGHT) **OPTION 2** Ž 4 5 6 **EXTERIOR** NTERIOR

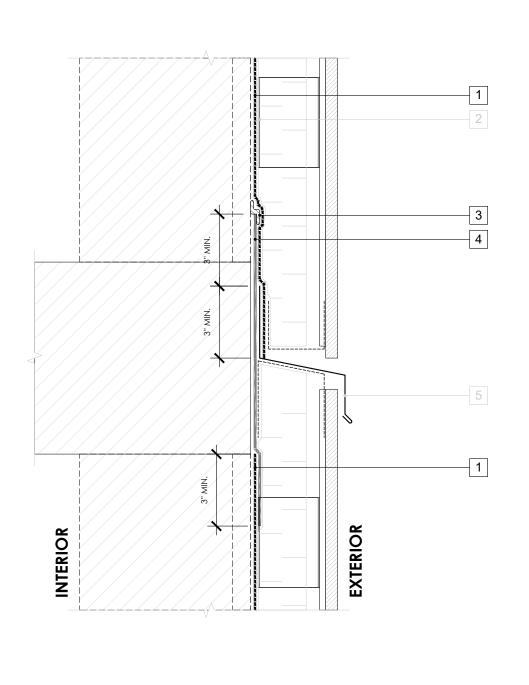
LEGEND

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



WINDOW SILL DETAIL -	DRAWING:	VPS30-012
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
105	SUPERCEDES:	NEW



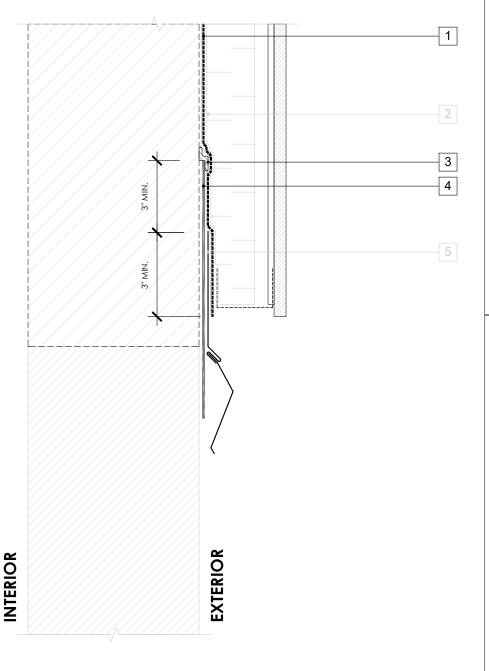
- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- CLADDING ATTACHMENT -CONFIRM DETAILING REQUIREMENTS
 WITH THE GOPAL REPRESENTATIVE
- 3. BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT 1-INCH TROWELED BEAD
- 4. PERM-A-BARRIER® SELF-ADHERED FLASHING*
- 5. SHEET METAL FLASHING PER ARCH

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- GCP products are indicated in the detail legend in BOLDFACE font. Detail components by others are indicated in GRAY FONT. Install
 components per manufacturer and project specific requirements.



FLOOR LINE DETAIL -	DRAWING:	VPS30-013
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
106	SUPERCEDES:	NEW



- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- CLADDING ATTACHMENT -CONFIRM DETAILING REQUIREMENTS WITH THE GODAL REPRESENTATIVE
- 3. BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT 1-INCH TROWELED BEAD
- 4. PERM-A-BARRIER® SELF-ADHERED FLASHING*
- 5. TWO-PIECE SHEET METAL FLASHING PER ARCH

NOTE

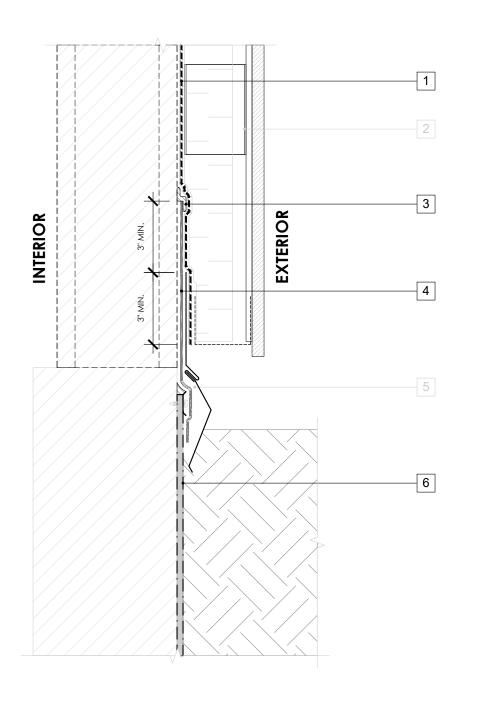
CONFIRM MAXIMUM SERVICE
 TEMPERATURE OF PERM-A-BARRIER
 PRODUCTS DIRECTLY UNDER
 EXPOSED METAL FLASHING

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



CONCRETE STEM WALL DETAIL -	DRAWING:	VPS30-014
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
107	SUPERCEDES:	NEW



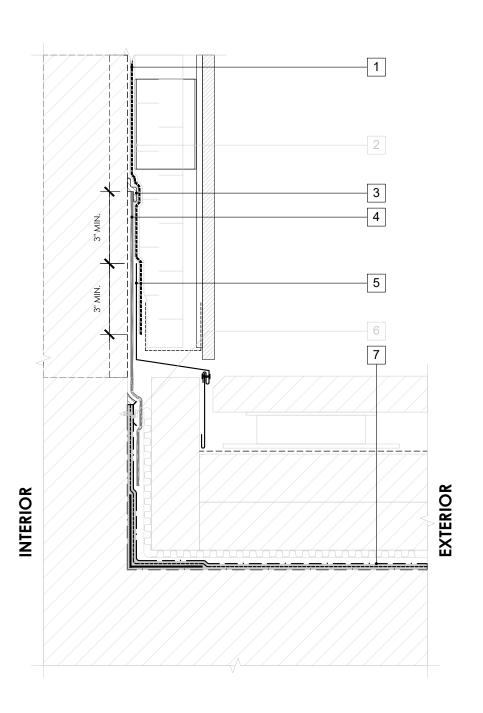
- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- CLADDING ATTACHMENT CONFIRM DETAILING REQUIREMENTS
 WITH THE GOPAT REPRESENTATIVE
- 3. BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT 1-INCH TROWELED BEAD
- 4. PERM-A-BARRIER® SELF-ADHERED FLASHING*
- 5. TWO-PIECE SHEET METAL FLASHING
 PER ARCH
- 6. BELOW GRADE WATERPROOFING SYSTEM - SEE GCPAT.COM

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- GCP products are indicated in the detail legend in BOLDFACE font. Detail components by others are indicated in GRAY FONT. Install
 components per manufacturer and project specific requirements.



BASE-OF-WALL AT GRADE DETAIL -	DRAWING:	VPS30-015
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
108	SUPERCEDES:	NEW



- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- CLADDING ATTACHMENT CONFIRM DETAILING REQUIREMENTS

 WITH THE CODAT DEPRESENTATIVE
- 3. BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT 1-INCH TROWELED BEAD
- 4. PERM-A-BARRIER® SELF-ADHERED FLASHING*
- SHEET METAL FLASHING PER ARCH
- 6. TERMINATION PER HORIZONTAL
 WATERPROOFING SYSTEM
 MANUE ACTUPED
- 7. HORIZONTAL WATERPROOFING SYSTEM - SEE GCPAT.COM

NOTE

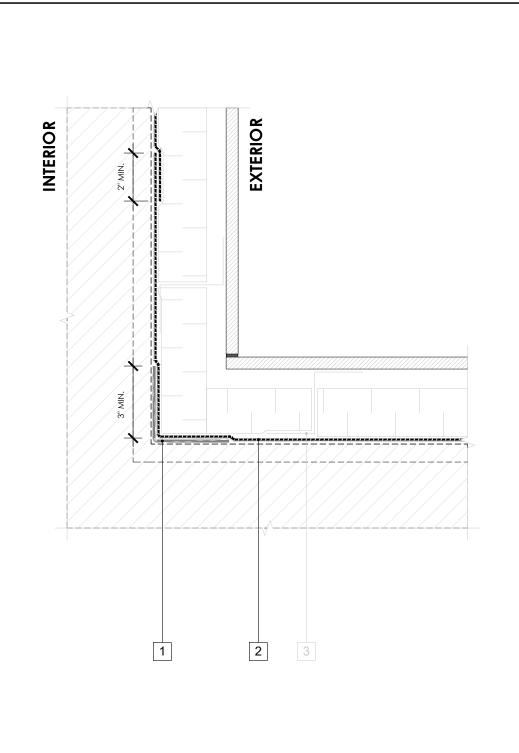
 CONSULT GCP FOR HORIZONTAL WATERPROOFING COMPATIBILITY AND CONNECTION

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- GCP products are indicated in the detail legend in BOLDFACE font. Detail components by others are indicated in GRAY FONT. Install
 components per manufacturer and project specific requirements.



BASE-OF-WALL DETAIL -	DRAWING:	VPS30-016
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
109	SUPERCEDES:	NEW



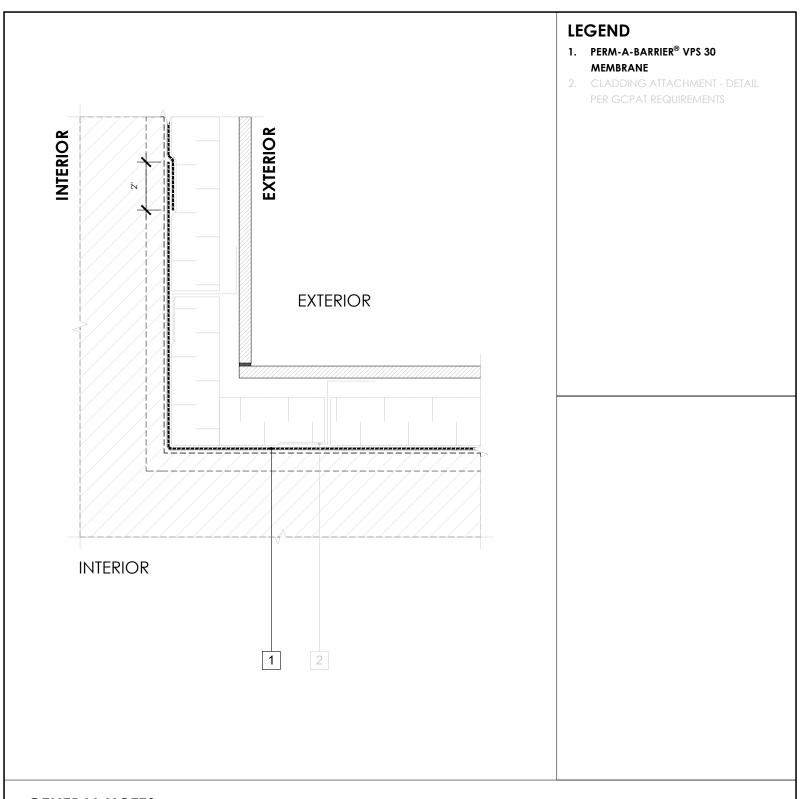
- 1. PERM-A-BARRIER® SELF-ADHERED FLASHING*. PRIME SUBSTRATE WHERE REQUIRED
- 2. PERM-A-BARRIER® VPS 30 MEMBRANE
- CLADDING ATTACHMENT DETAIL
 PER GCPAT REQUIREMENTS

GENERAL NOTES

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



INSIDE CORNER DETAIL -	DRAWING:	VPS30-017
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
110	SUPERCEDES:	NEW



GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



INSIDE CORNER DETAIL (ALTERNATE) -	DRAWING:	VPS30-017 (ALT)
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
111	SUPERCEDES:	NEW

2 1 3" MIN. 2" MIN. **EXTERIOR** NTERIOR

LEGEND

- 1. PERM-A-BARRIER® DETAIL
 MEMBRANE, NPS DETAIL MEMBRANE,
 ALUMINUM FLASHING, OR WALL
 FLASHING. PRIME SUBSTRATE WHERE
 REQUIRED
- 2. PERM-A-BARRIER® VPS 30 MEMBRANE
- CLADDING ATTACHMENT DETAIL
 PER GCPAT REQUIREMENTS

GENERAL NOTES

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



OUTSIDE CORNER DETAIL -	DRAWING:	VPS30-018
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
112	SUPERCEDES:	NEW

2 2" MIN. **EXTERIOR** NTERIOR

LEGEND

- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- 2. CLADDING ATTACHMENT DETAIL

GENERAL NOTES

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.

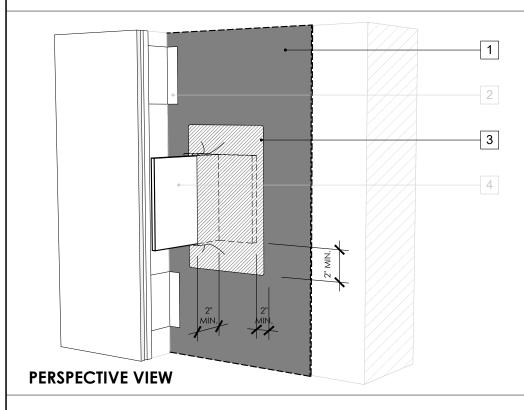


OUTSIDE CORNER DETAIL (ALTERNATE) -	DRAWING:	VPS30-018 (ALT)
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
113	SUPERCEDES:	NEW

SECTION VIEW 1 2 NIM 2 MIN 3 3

LEGEND

- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- 2. CLADDING ATTACHMENT CONFIRM DETAILING REQUIREMENTS WITH THE GCPAT REPRESENTATIVE
- 3. PERM-A-BARRIER® \$100, BITUTHENE
 MASTIC, BITUTHENE LIQUID
 MEMBRANE, OR GCP APPROVED
 SEALANT, FLASHING AND CANT SEAL
- 4. KNIFE PLATE PENETRATION
- 5. POLYURETHANE SEALANT OR NON-SHRINK GROUT PER BACKUP WALL TYPE
- 6. JOINT TREATMENT PER DETAIL VPS30-009



GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- GCP products are indicated in the detail legend in BOLDFACE font. Detail components by others are indicated in GRAY FONT. Install
 components per manufacturer and project specific requirements.



KNIFEPLATE PENETRATION DETAIL -	DRAWING:	VPS30-019
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
114	SUPERCEDES:	NEW

1 1 2 21/2" MIN 2.1/2" MIN 2 2 3 4 **EXTERIOR EXTERIOR** NTERIOR INTERIOR

LEGEND

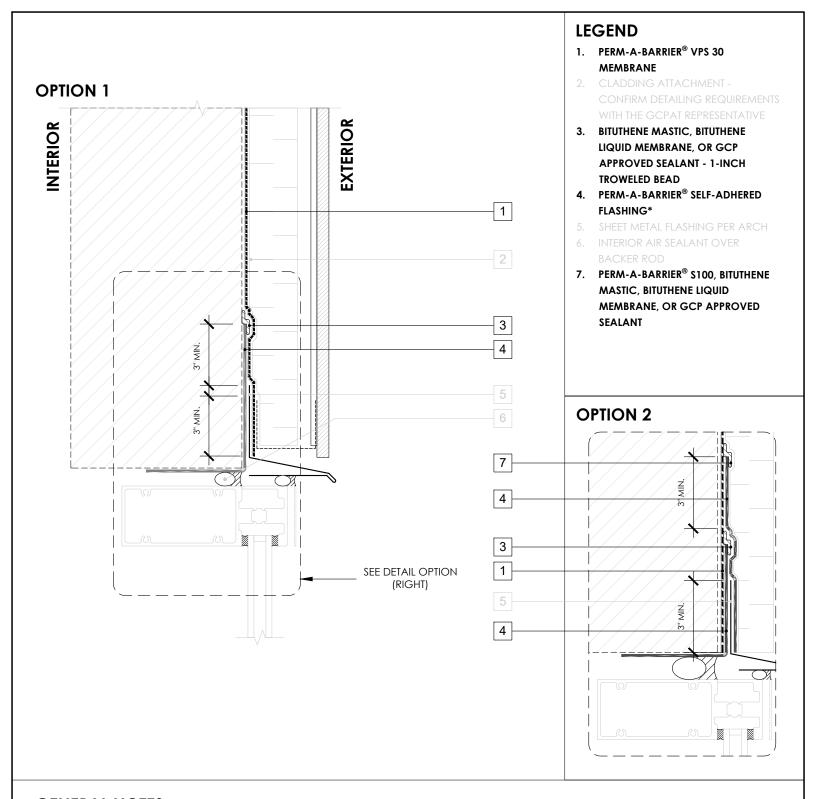
- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- 2. PERM-A-BARRIER® \$100, BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED SEALANT
- AIR AND WATER TIGHT BOX AND PENETRATION
- 4. AIR AND WATER TIGHT PIPE OR

GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- GCP products are indicated in the detail legend in BOLDFACE font. Detail components by others are indicated in GRAY FONT. Install
 components per manufacturer and project specific requirements.



PENETRATION DETAILS -	DRAWING:	VPS30-020
NON-MASONRY CLADDING	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
115	SUPERCEDES:	NEW



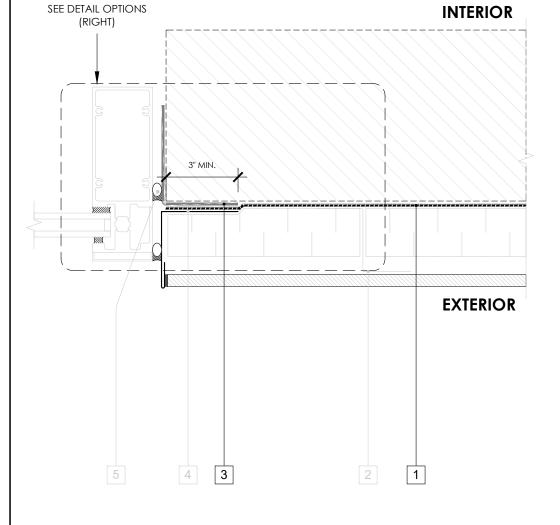
GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



CURTAINWALL HEAD DETAIL	DRAWING:	VPS30-021
	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
116	SUPERCEDES:	NEW

OPTION 1

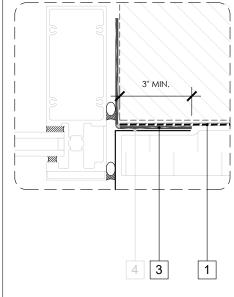


LEGEND

- 1. PERM-A-BARRIER® VPS 30 MEMBRANE
- 3. PERM-A-BARRIER® SELF-ADHERED **FLASHING***

OPTION 2

DD A WINC.



GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- GCP products are indicated in the detail legend in BOLDFACE font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



CURTAINWALL JAMB DETAIL	DRAWING:	VPS30-022
	SCALE:	3" = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
117	SUPERCEDES:	NEW

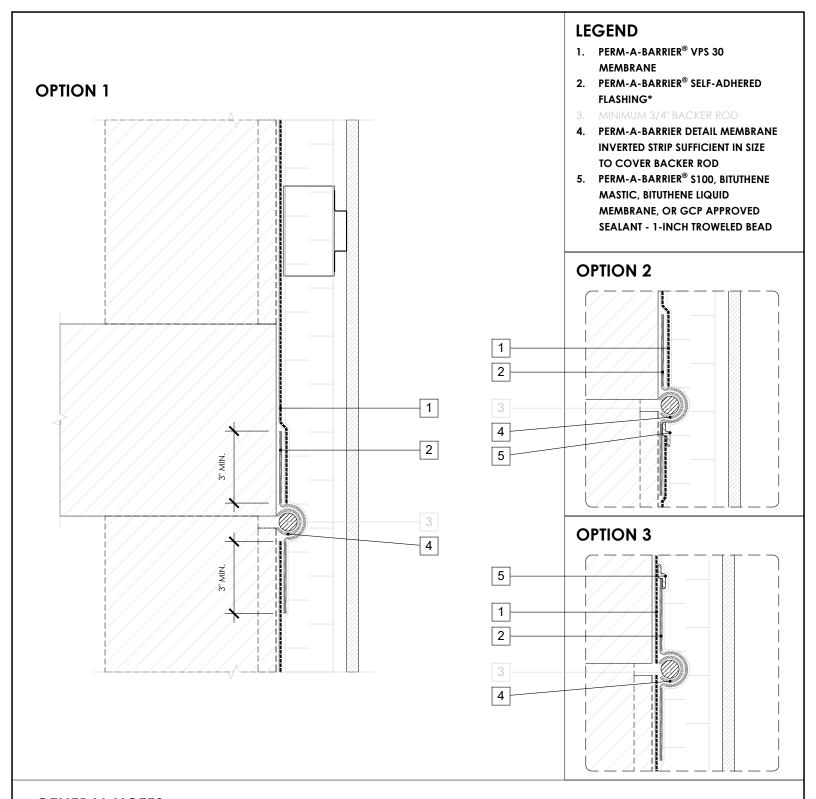
LEGEND OPTION 1 4. PERM-A-BARRIER® \$100, BITUTHENE MASTIC, BITUTHENE LIQUID MEMBRANE, OR GCP APPROVED **SEALANT - 1-INCH TROWELED BEAD** 5. PERM-A-BARRIER® SELF-ADHERED **FLASHING*** 6. PERM-A-BARRIER® VPS 30 **MEMBRANE** SEE DETAIL OPTIONS (RIGHT) **OPTION 2** 4 5 6 Ż **EXTERIOR** NTERIOR

GENERAL NOTES

- 1. Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.



CURTAINWALL SILL DETAIL	DRAWING:	VPS30-023
	SCALE:	3'' = 1'
PERM-A-BARRIER® VPS 30	EFFECTIVE DATE:	2020.05.21
	SUPERCEDES:	NEW



GENERAL NOTES

- Detail not suitable for all climates. Avoiding excessive moisture accumulation in exterior walls is dependent on many factors including proper
 placement of insulation and water, air, and vapor control layers in the wall. Confirm membranes are suitable for project specific service
 temperatures. For assistance with exterior wall design, consult with a building science professional.
- 2. Install all GCP products in accordance with GCP Product Data Sheets and GCP recommendations.
- 3. GCP products are indicated in the detail legend in **BOLDFACE** font. Detail components by others are indicated in GRAY FONT. Install components per manufacturer and project specific requirements.

