# SECTION 076526

# Self-adhering sheet flashing

# Perma-A-Barrier® Wall Flashing

## PART 1 — GENERAL

1.00 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. Section 042000 – Unit Masonry.

1.01 SUMMARY

A. Section provides for a flexible rubberized asphalt, self-sealing through-wall flashing and wall flashing accessories.

1.02 REFERENCES

A. American Society for Testing and Materials

1. ASTM E96 – Test Methods for Water Vapor Transmission of Materials

2. ASTM D570 – Test Method for Water Absorption of Plastics

3. ASTM E154 – Test Method for Water Vapor Retarders used in contact with Earth Under Concrete Slabs,
on Walls or as Ground Cover

4. ASTM D1004 – Test Method for Initial Tear Resistance of Plastic Film and Sheeting

5. ASTM D1938 – Test Method for Tear Propagation Resistance of Plastic Film and Thin Sheeting by a
Single-Tear Method

6. ASTM D1876 – Test Method for Peel Resistance of Adhesives

7. ASTM D1970 – Standard Specifications for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection

8. D412 – Test Methods for Vulcanized Rubber & Thermoplastic Rubbers and Thermoplastic Elastomers – Tension

1.03 SUBMITTALS

A. Product Data and Shop Drawings: Submit for each product; Spec-Data®/Data Sheets, details and installation procedures.

B. Test Reports: Indicating compliance with the performance requirements of this section.

C. Samples of flashing.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Comply with manufacturer’s recommendations for storage and handling of each product.

1.06 WARRANTY

A. Standard Product Warranty:

1. Submit manufacturer’s warranty that flashing and accessories are free of defects at time of delivery, and are manufactured to meet manufacturer’s published physical properties and material specifications.
2. Warranty Period: Five years from date of completion of the flashing installation.
3. Installer to warrant that flashing and accessories have been installed in accordance with manufacturer’s recommendations.

### PART 2 — PRODUCTS

2.01 MATERIALS

A. Flashing Description: 0.8 mm (32 mils) of self-adhesive rubberized asphalt integrally bonded to 0.2 mm (8 mils) of cross-laminated, high-density polyethylene film to provide a min. 1.0 mm (40 mil) thick membrane. Membrane shall be interleaved with disposable silicone-coated release paper until installed.

B. Performance Requirements:

1. Water Vapor Transmission: ASTM E96, Method B – 2.9 ng/m2sPa (0.05 perms) maximum

2. Water Absorption: ASTM D570 – Max. 0.1% by weight

3. Puncture Resistance: ASTM E154 – 356 N (80 lbs)

4. Tear Resistance:

a. Initiation – ASTM D1004 – min. 58 N (13.0 lbs) M.D.

b. Propagation – ASTM D1938 – min. 40 N (9.0 lbs) M.D.

5. Lap Adhesion at -4ºC (25ºF): ASTM D1876 – 880 N/M (5.0 lbs/in.) of width

6. Low Temperature Flexibility – ASTM D1970 – Unaffected to -43ºC (-45ºF)

7. Tensile Strength: ASTM D412, Die C Modified – Min. 5.5 MPa (800 psi)

8. Elongation, Ultimate Failure of Rubberized Asphalt: ASTM D412, Die C – Min. 200%

NOTE TO SPECIFIER: Delete the following if a performance specification is required

C. Product: Perm-A-Barrier® Wall Flashing manufactured by GCP Advanced Technologies Construction Products.

D. Wall Flashing Accessories:

1. Primer:

a. Description: Water-based primer which imparts an aggressive, high tack finish on the treated substrate.

(1.) Flash Point: No flash to boiling point

(2.) Solvent Type: Water

(3.) VOC Content: Not to exceed 10 g/L

(4.) Application Temperature: -4ºC (25ºF) and above

(5.) Freezing point (as packaged): -7ºC (21ºF)

 NOTE TO SPECIFIER: Delete the following if a performance specification is required

b. Product: Perm-A-Barrier WB Primer manufactured by GCP Advanced Technologies Construction Products.

2. Termination Mastic:

a. Description: Rubberized asphalt-based mastic with 200 g/L max. VOC Content.

NOTE TO SPECIFIER: Delete the following if a performance specification is required]

b. Product: Bituthene® Mastic manufactured by GCP Advanced Technologies Construction Products.

3. Optional Primer:

a. Description: Water-based primer which imparts an aggressive, high tack finish on the treated substrate. 1 g/l max. VOC content.

NOTE TO SPECIFIER: Delete the following if a performance specification is required

b. Product: Perm-A-Barrier Primer Plus by GCP Advanced Technologies Construction Products.

4. Optional Primer:

a. Description: Water-based latex primer.110 g/L max. VOC content.

NOTE TO SPECIFIER: Delete the following if a performance specification is required

b. Product: Bituthene Primer WP-3000 by GCP Advanced Technologies Construction Products.

5. Option Primer:

a. Description: High tack low VOC solvent based primer. 200 g/l max. VOC content.

NOTE TO SPECIFIER: Delete the following if a performance specification is required

b. Product: Bituthene Primer B2 LVC manufactured by GCP Advanced Technologies Construction Products.

6. Optional Primer:

a. Description: Rubber-based primer in solvent.440 g/L max. VOC content.

NOTE TO SPECIFIER: Delete the following if a performance specification is required

b. Product: Bituthene Primer B2 by GCP Advanced Technologies Construction Products.

### PART 3 — EXECUTION

3.01 EXAMINATION

A. Examine conditions, with installer present, for compliance with requirements for installation, tolerances and other specific conditions affecting performance of flashing. Remove all deleterious materials from surfaces to be flashed.

3.02 INSTALLATION

A. General: Install flashing to dry surfaces at air and surface temperatures of -4ºC (25ºF) and above in accordance with manufacturer’s recommendations at locations indicated on Construction Documents.

B. Flexible Wall Flashing:

1. Precut pieces of flashing to easily handled lengths for each location.

2. Remove silicone-coated release paper and position flashing carefully before placing it against the surface.

3. When properly positioned, place against surface by pressing firmly into place by hand roller. Fully adhere flashing to substrate to prevent water from migrating under flashing.

4. Overlap adjacent pieces 50 mm (2 in.) and roll all seams with a steel hand roller.

5. Trim bottom edge 13 mm (1⁄2 in.) back from exposed face of the wall. Flashing shall not be permanently exposed to sunlight.

6. At heads, sills and all flashing terminations turn up ends a minimum of 50 mm (2 in.) and make careful folds to form an end dam, with the seams sealed.

7. Do not allow the rubberized asphalt surface of the flashing membrane to come in contact with polysulfide sealants, creosote, uncured coal tar products or EPDM.

8. Do not expose flashing membrane to sunlight for more than thirty days prior to enclosure.

C. Accessories:

1. When required by dirty or dusty site conditions or by surfaces having irregular or rough texture, apply Perm-A-Barrier Primer Plus by air spray, brush or roller or apply Perm-A-Barrier WB Primer by brush or roller at the rate recommended by manufacturer, prior to flashing installation. Allow the primer to dry completely before flashing application.

2. Apply a bead or trowel coat of mastic along flashing top edge, seams, cuts, and penetrations.

NOTE TO SPECIFIER: Include the following if Optional Primer has been specified in Part 2 – Products.

3. Apply primer by brush or heavy nap, natural-material roller at rate recommended by manufacturer prior to flashing installation. Allow primer to dry completely before flashing application.

***Short Form Specification or Performance Specification***

*(For inclusion in Section 042000)*

NOTE TO SPECIFIER: Incorporate the following in PART 1 – GENERAL

A. Throughwall Flashing:

1. Description: Flexible rubberized asphalt, self-sealing throughwall flashing and wall flashing accessories.

NOTE TO SPECIFIER: Incorporate the following in PART 2 – PRODUCTS

A. Through-wall Flashing:

1. Description: 0.8 mm (32 mils) of self adhesive rubberized asphalt integrally bonded to 0.2 mm (8 mils) of cross-laminated, high-density polyethylene film to provide a min. 1 mm (40 mil) thick membrane. Membrane shall be interleaved with silicone-coated release paper until installed.

a. Water Vapor Transmission: ASTM E96, Method B – 2.9 ng/m2sPa (0.05 perms) maximum

b. Water Absorption: ASTM D570 – Max. 0.1% by weight

c. Puncture Resistance: ASTM E154 – 356 N (80 lbs)

d. Tear Resistance:

 (1.) Initiation – ASTM D1004 – min. 58 N (13.0 lbs) M.D.

 (2.) Propagation – ASTM D1938 – min. 40 N (9.0 lbs) M.D.

e. Lap Adhesion at -4ºC (25ºF): ASTM D1876 – 880 N/M (5.0 lbs/in.) of width

 f. Low Temperature Flexibility – ASTM D1970 – Unaffected to -43ºC (-45º F)

g. Tensile Strength: ASTM D412, Die C Modified – Min. 5.5 MPa (800 psi)

h. Elongation, Ultimate Failure of Rubberized Asphalt: ASTM D412, Die C – Min. 200%

NOTE TO SPECIFIER: Delete the following as well as B;1;b; B;2;b; B;3;b; B;4;b and B;5;b if a performance specification is required

2. Product: Perm-A-Barrier Wall Flashing manufactured by GCP Advanced Technologies Construction Products.

B. Wall Flashing Accessories:

1. Primer:

a. Description: Water-based primer which imparts an aggressive, high tack finish on the treated substrate.

(1.) Flash Point: No flash to boiling point

(2.) Solvent Type: Water

(3.) VOC Content: Not to exceed 10 g/L

(4.) Application Temperature: -4ºC (25ºF) and above

(5.) Freezing point (as packaged): -7ºC (21ºF)

b. Product: Perm-A-Barrier WB Primer manufactured by GCP Advanced Technologies Construction Products.

2. Termination Mastic:

a. Description: Rubberized asphalt-based mastic with 200 grams/Liter max VOC content.

b. Product: Bituthene Mastic manufactured by GCP Advanced Technologies Construction Products.

3. Optional Primer:

a. Description: Water-based primer which imparts an aggressive, high tack finish on the treated substrate. 1
 g/l max. VOC content.

b. Product: Perm-A-Barrier Primer Plus by GCP Advanced Technologies Construction Products.

4. Optional Primer:

a. Description: Water-based latex primer. 110 g/L max. VOC content.

b. Product: Bituthene Primer WP-3000 by GCP Advanced Technologies Construction Products.

5. Option Primer:

a. Description: High tack low VOC solvent based primer. 200 g/l max. VOC content.

b. Product: Bituthene Primer B2 LVC manufactured by GCP Advanced Technologies Construction Products.

6. Optional Primer:

a. Description: High tack solvent based primer.440 g/L max. VOC content.

b. Product: Bituthene Primer B2 by GCP Advanced Technologies Construction Products.

NOTE TO SPECIFIER: Incorporate the following in PART 3 – EXECUTION

A. Through-wall Flashing: Install flashing to dry surfaces at air and surface temperatures of -4ºC (25ºF) and above in accordance with manufacturer’s recommendations at locations indicated on Construction Documents.

B. Flexible Wall Flashing:

1. Precut pieces of flashing to easily handled lengths for each location.

2. Remove silicone-coated release paper and position flashing carefully before placing it against the surface.

3. When properly positioned, place against surface by pressing firmly into place by hand roller. Fully adhere flashing to substrate to prevent water from migrating under flashing.

4. Overlap adjacent pieces 50 mm (2 in.) and roll all seams with a steel hand roller.

5. Trim bottom edge 13 mm (1⁄2 in.) back from exposed face of the wall. Flashing shall not be permanently exposed to sunlight.

6. At heads, sills and all flashing terminations turn up ends a minimum of 50 mm (2 in.) and make careful folds to form an end dam with the seams sealed.

7. Do not allow the rubberized asphalt surface of the flashing membrane to come in contact with polysulfide sealants, creosote, uncured coal tar products or EPDM.

8. Do not expose flashing membrane to sunlight for more than thirty days prior to enclosure.

C. Accessories:

1. When required by dirty or dusty site conditions or by surfaces having irregular or rough texture, apply Perm-A-Barrier Primer Plus by air spray, brush or roller or apply Perm-A-Barrier WB Primer by brush or roller at the rate recommended by manufacturer, prior to flashing installation. Allow the primer to dry completely before flashing application.

2. Apply a bead or trowel coat of mastic along flashing top edge, seams, cuts, and penetrations.

NOTE TO SPECIFIER: Include the following if Optional Primer has been specified in Part 2 – Products.

3. Apply primer by brush or heavy nap, natural-material roller at rate recommended by manufacturer prior to flashing installation. Allow primer to dry completely before flashing application.