SPEC WRITERS NOTE: This specification includes materials and installation procedures for **CanShield™ VP** vapour permeable air barrier self-adhered water resistive sheet membrane meeting ASTM E2357 for air barrier assemblies. **CanShield™ VP** vapour permeable self-adhered sheet membrane is used behind rain screen wall cladding assemblies such as cladding systems incorporating composite and metal materials, masonry and stone veneers, stucco, and mechanically attached EIFS. With a vapour permeance rating of greater than 24 perms, 1373 ng/Pa•s•m^2 **CanShield™ VP** vapour permeable self-adhered air barrier water resistive sheet membrane prevents air leakage and allows the wall assembly to breathe or 'dry-out' via vapour diffusion, to meet the conditions of seasonal changes for each climate zone. This guide specification should be adapted to suit the requirements of individual projects. It is prepared in CSI Master Format and should be included as a separate section under Division 7 - Thermal and Moisture Protection.

SECTION 072727.02

SELF-ADHERING WATER RESISTIVE AIR BARRIER MEMBRANE

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

A. This specification applies to all trades involved with substrates, preparation, application of vapor permeable air barrier membrane, and subsequent connections to surrounding construction materials. It is the [Contractors] [Construction Managers] responsibility to inform all trades of the extent of their work associated with the membrane system and overlapping Work.

B. Examine all Drawings and all Sections of the Specifications for requirements and provisions affecting the work of this Section.

1.2 SUMMARY

A. Supply labor, materials, and equipment for a fully adhered water-resistive vapour-permeable air barrier membrane system.

B. Complete Work as shown on the Drawings and specified herein to bridge gaps and seal the water-resistive vapour permeable air barrier membrane against air leakage and water intrusion, including:
   1. Connections of the walls to the roof air barrier component(s).
   2. Connections of the walls to the below-grade air barrier component(s).
   3. Seismic and movement joints.
   4. Openings/penetrations of window and door frames, storefront, curtain wall.
   5. Piping penetrations, conduit, duct, and MEP penetrations.
   6. Masonry ties, fasteners, and cladding attachments.
   7. All other water and air leakage pathways in the building envelope.
   8. Install primary water-resistive vapour-permeable air barrier, flashing, and appropriate accessories.

1.3 RELATED SECTIONS

A. Carefully examine all of the Contract Documents for requirements that affect the work of this section.

B. Other specifications sections which directly relate to the work of this section include, but are not limited to, the following:

1. Section 011000 - Summary; for work restrictions and limitations on material applications.
2. Section 015000 - Temporary Facilities and Controls; for temporary facilities during construction.
3. Section 015010 -Temporary Permeable Air-Water Barrier for Mass Timber Construction.
4. Section 018316 - Exterior Enclosure Performance Requirements; Coordinate installation of water-resistive vapor permeable, air barrier floor and roof underlayment membrane specified in this Section concurrently with installation of permanent building enclosure components specified for the Project.
5. Section 042000 - Unit Masonry: Masonry units used as non-load bearing walls or partitions, veneer, and cavity unit masonry construction, including related accessories
6. Section 061113 - Engineered Wood Products.
7. Section 061300 - Heavy Timber Construction.
8. Section 061600 - Sheathing.
9. Section 061700 - Shop Fabricated Structural Wood.
10. Section 061713 - Laminated Veneer Lumber.
11. Section 072200 - Roof and Deck Insulation.
12. Section 072100 - Building Insulation and Vapor Barriers.
13. Section 072513 - Non-Permeable Waterproofing Roofing Underlayment.
14. Section 072719 - Plastic Sheet Air Barrier.
15. Section 072727.01 - Self-Adhering Water-Resistive Air Barrier Membrane System - WrapShield.
16. Section 072743 - Highly Permeable Self-Adhering Air Barrier Membrane/Roofing Underlayment.
17. Section 073100 - Shingles and Shakes.
18. Section 073116 - Metal Shingles.
19. Section 073129 - Wood Shakes and Shingles.
20. Section 073213 - Clay Roof Tiles.
21 Section 074263 - Composite Metal Panels.
22. Section 075300 - Thermoplastic Membrane Roofing System.
23. Section 076200 - Sheet Metal.
24. Section 079200 - Joint Sealants.
25. Section 081113 - Hollow Metal Doors and Frames.
26. Section 081216 - Aluminum Frames.
27. Section 099000.02 – Primers

1.4 REFERENCE STANDARDS

A. ASTM International (ASTM):
1. ASTM D1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
2. ASTM D5034 - Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test).
3. ASTM E96/E 96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials.
4. ASTM E398 - Standard Test Method for Water Vapor Transmission Rate of Sheet Materials Using Dynamic Relative Humidity Measurement.
5. ASTM D7314 - Standard Test Method for Determining the Capability of Roofing and Waterproofing Materials to Seal around Fasteners
6. ASTM E2178 - Standard Test Method for Air Permeance of Building Materials.
7. ASTM E2357 - Standard Test Method for Determining Air Leakage of Air Barrier Assemblies.
8. ASTM E283 - Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.
9. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.

10. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
11. ASTM E1105 - Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors, and Curtain Walls, by Uniform or Cyclic Static Air Pressure Difference.
12. ASTM E2947 - Standard Guide for Building Enclosure Commissioning.
13. ASTM F1240 - Standard Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor.

B. American Association of Textile Chemists and Colorists (AATCC): ATCC 127 - Test Method for Water Resistance: Hydrostatic Pressure Test.

C. Standards Council of Canada CAN S741/742

D. International Code Council Evaluation Service, Inc. (ICC-ES): ICC-ES AC38 - Acceptance Criteria for Water-Resistive Barriers.

E. National Fire Protection Association (NFPA) 285: Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components.

1.5 SUBMITTALS

A. Submit manufacturers' current product data sheets, details, and installation instructions for the water-resistive vapour permeable air barrier membrane components and accessories.

B. Submit samples of the following:
1. Manufacturer's sample warranty
2. Self-adhered water-resistive vapour permeable air barrier sheet sample, minimum 20.3 by 25.4 cm
3. Accessories and flashings
4. Fasteners, clips, strapping, cladding attachment components, and masonry ties
5. Exterior insulation attachments
6. Compatible sealants

1.6 QUALITY ASSURANCE

A. Single Source: Self-adhered water-resistive vapour permeable air barrier membrane components and accessories must be obtained as a single-source membrane system to ensure total system compatibility and integrity.

B. Manufacturer Qualifications
1. Manufacturer of specified products listed in this Section to have a minimum of 10 years of continued experience in the manufacture and supply of highly vapour permeable water-resistive air barrier products successfully installed in similar project applications.
2. The manufacturer of specified products listed in this Section to have experienced in-house technical and field observation personnel qualified to provide expert technical support.

C. Fire Performance Characteristics: Provide a water-resistive barrier meeting the following fire-test characteristics.
1. Surface-Burning Characteristics: ASTM E84.
2. Flame spread index: 10 or less.
3. Smoke developed index: 10 or less

1.7 MOCK-UP

A. Construct mock-up in accordance with Section 014339 - Mock-ups.
B. Provide mock-up of specified water-resistive vapour permeable air barrier materials under provisions of Section 013323 - Shop Drawings, Product Data and Samples.
C. As directed by [engineer] [architect] [consultant], construct typical exterior wall panel, minimum 6 foot long by 6 foot wide incorporating the sheathing board or substrate, window rough opening preparation or flashing method, window frame and attachment method, clips, strapping or masonry ties, or cladding attachment components, attachment of insulation and detailing of water-resistive vapour permeable air barrier membrane application and lap seams.
    1. Perform water spray test of mockup to demonstrate performance, as per ASTM Standard E331 and/or E1105.

D. Allow 48 hours for inspection of mock-up by [engineer] [architect] [consultant] before proceeding with water-resistive vapour permeable air barrier work. Mock-up may remain as part of the work.

1.8 PRE-INSTALLATION CONFERENCE

A. Contractor shall convene [one] week before commencing work of this section, under the provisions of Section 013119 - Project Meetings.

B. Ensure all contractors responsible for creating a continuous plane of water and air tightness are present.

1.9 DELIVERY, STORAGE AND HANDLING

A. Refer to the current Product Installation Instructions and SDS at www.VaproShield.com for proper storage and handling.

B. Deliver materials to the job site in undamaged and original packaging, indicating the name of the manufacturer and product.

C. Store roll materials on end in original packaging. Protect rolls from direct sunlight and inclement weather until ready for use.

D. Waste Management and Disposal
    1. Separate and recycle waste materials in accordance with Section [01355 - Waste Management and Disposal], and with the Waste Reduction Work Plan.

1.10 COORDINATION

A. Ensure continuity of the fully self-adhered water-resistive vapour-permeable air barrier system throughout the scope of this section.
    1. Air barrier vapour-permeable membrane to include self-adhered air barrier, transition membranes, flashings, and sealants at penetrations.
    2. Drainage plane to include drainage cavity, water resistive barrier, and flashings to the exterior.

1.11 ALTERNATIVES

A. Submit request for alternates in accordance with Section 012500 - Substitution Procedures.

B. Submit requests for alternates a minimum of ten (10) working days prior to the bid date.

C. Alternate submission to include:
   1. Evidence that alternate materials meet or exceed performance characteristics of specified Product requirements, as well as documentation from an approved independent testing laboratory certifying the minimum physical dimensions, tensile strength, fire burning characteristics, vapour permeance, and air leakage rates of the fully self-adhered water-resistive vapour permeable air barrier membrane. All testing to be performed without the aid of primers or surface conditioners.
   2. Manufacturer's complete set of details for a fully self-adhered water-resistive vapour permeable air barrier membrane system showing a continuous plane of water and air tightness throughout the building enclosure.
   3. The manufacturer of alternate materials has experienced in-house technical and field observation personnel qualified to provide expert technical support.

D. Acceptable alternates will be confirmed by addendum. Substitute materials not approved in writing before the bid date shall not be permitted for use on this project.

1.12 WARRANTY

A. Provide manufacturer's standard material warranty in which the manufacturer agrees to provide replacement material for the fully self-adhered water-resistive vapour permeable air barrier sheets installed in accordance with the manufacturer's instructions that fail due to material defects within 20 years of the date of Purchase.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Provide fully self-adhered water-resistive vapour permeable air barrier membrane components and accessories obtained from a single-source manufacturer to ensure total system compatibility and integrity.
   1. Self-Adhered water-resistive vapour permeable air barrier membrane by VaproShield LLC., Gig Harbor, WA, Phone: (866) 731-7663, Website: www.VaproShield.com.

B. Water-Resistive Vapour Permeable Self-Adhered Air Barrier Materials.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide fully self-adhered air barrier sheet membrane **CanShield™ VP** vapour permeable self-adhered air barrier water resistive sheet membrane by VaproShield, a zero VOC fully self-adhered vapour permeable air barrier sheet membrane consisting of multiple layers of spun-bonded polypropylene, tested in accordance with ICC-ES AC 38 criteria to meet IBC and IRC requirements for weather-resistive barriers having the following properties:
      a. Color: Red with allowable UV exposure for 6 months (180 days), before coverage.
         1) Physical Dimensions: 0.75 mm thick, 1.5 m wide, and 247 g/m^2.
      b. Breaking strength and Elongation to ASTM D5034: 391 N, machine direction; 369 N, cross-machine direction.
      c. Cold Mandrel Bent Test to AC38 Section 3.3.4: PASS, No Cracking.
      d. Nail Sealability Test to ASTM D1970 section 7.9 referring to ASTM D7349: PASS.
      e. Weathering Tests to AC38 Section 4.1.2 & 4.1.3: No deterioration.
      f. Peel Adhesion to AAMA 711 Section 5.3 Section 5.3 method F PASS ≥ 0.26 N/mm: PASS.
      g. Water Vapour Permeance tested to ASTM E96 Method A: minimum of 486 ng/Pa.s.m^2.
      h. Water Vapour Permeance tested to ASTM E96 Method B: minimum of 1471 ng/Pa.s.m^2.
      i. Water Vapour Permeance tested to ASTM E398: minimum of 1223 ng/Pa.s.m^2.
      j. Water Vapour Permeance tested to ASTM F1249: minimum of 431 ng/Pa.s.m^2.

k. Air leakage ≤0.0194 L/s m^2 @ 75 Pa) when tested in accordance with ASTM E2357.
l. Air leakage ≤0.0014 L/s m^2 @ 75 Pa) when tested in accordance with ASTM E2178.
m. Water Resistance tested to AATCC 127, at 55 cm hydrostatic head for 5 hours: No leakage.
n. CAN/ULC-S741-08(2020): PASS < 0.001 L/s•m^2 difference at 75 Pa between conditioned and nonconditioned specimens.
o. CAN/ULS-S742-11-R2016: A1 – The reference air leakage rate shall not exceed 0.05 L/s•m^2 (0.009 cfm/ft^2) at a pressure difference of 75 Pa (1.57 psf).
p. Application Temperature: Ambient temperature must be above 6.7 °C.
q. Surface Burning Characteristics tested to ASTM E84: Class A, Flame-spread index of less than 10, Smoke-developed index of less than 10.

C. Water-Resistive Vapour Permeable Transition and Flashing Membrane (**Part One** of Two-Part Flashing System).
1. Self-adhered air barrier transition / flashing membrane for rough openings, including window jambs, headers, door openings, inside and outside corners, and other transitions shall be pre-cut CanFlashing™ VP by VaproShield, a zero VOC, fully self-adhered water-resistive vapour permeable sheet membrane having the following properties: CanFlashing™ VP Self-Adhered Red: 0.298 m x 50 m long.
a. ≤0.0014 L/s m^2 @ 75 Pa when tested in accordance with ASTM E 2178.
b. Water Vapour Permeance tested to ASTM E 96 Method A: minimum 486 ng/Pa.s.m^2.
c. Water Vapour Permeance tested to ASTM E 96 Method B: minimum 1373 ng/Pa.s.m^2.
d. Water Vapour Permeance tested to ASTM E398: minimum of 1171 ng/Pa.s.m^2.
e. Water Vapour Permeance tested to ASTM F1249: minimum of 572 ng/Pa.s.m^2.
f. Water Resistance tested to AATCC 127, 55 cm hydrostatic head for 5 hours: No leakage.

SPEC WRITERS NOTE: Acceptable substrates for **CanShield™ VP** vapour permeable self-adhered air barrier water resistive sheet membrane include: exterior grade gypsum board, plywood, precast concrete, cast-in-place concrete, concrete block, steel, aluminum, and galvanized metal. Best practice guidelines for the application of CanShield™ VP Self-Adhered on clean, dry surfaces or sheathing. Apply CanShield™ VP Self-Adhered on sheathing surfaces; clean of oil, dust, bulk water, or other contaminants.

CanShield™ VP is installed on most substrates without primer. Specific jobsite conditions may require additional surface preparation with primer; contact VaproShield Technical. The application will be Vaproliqui-Flash™ Vapour Permeable Water Resistive Flashing for Rough Openings (**Part Two** of Two-Part Flashing System).

1. For fenestration flashing over pre-cut CanFlashing™ Self-Adhered, provide VaproLiqui-Flash™ by VaproShield, a liquid-applied vapour permeable air barrier flashing material with vapour permeance and resistance to air and liquid leakage properties compatible with the primary air barrier transition membrane.
a. VaproLiqui-Flash™: 592 ml sausage
b. Water Vapour Permeance tested to ASTM E398: minimum at 0.30 mm 458 ng/Pa.s.m^2

SPEC WRITERS NOTE: Best construction practice for wood frame construction is to protect the rough openings with the two-part system of CanFlashing™ Self-Adhered flashing and the vapour permeable VaproLiqui-Flash™, which allows vapour diffusive drying, reducing the risk of wood deterioration due to long-term moisture exposure. Or as alternates, for steel stud frame construction with gypsum sheathing surfaces, a VaproBond™ or Vapro-SS Flashing™ may be used as Part Two to protect the head, jamb, and sill of rough openings.

2. ALTERNATE for Part Two: VaproBond™ Flashing Water Impermeable Low Vapour Permeance Flashing for Rough Openings.
   For fenestration flashing over pre-cut CanFlashing™ Self-Adhered, provide VaproBond™ Flashing by VaproShield, a modified silicone sealant.
   VaproBond™ Flashing: 592 ml sausage.
   Elongation: 1,500 % when tested in accordance with ASTM D412.
   Water Vapour Permeance tested to ASTM E398: minimum at 0.79 mm 125 ng/Pa•s•m^2.

3. ALTERNATE for Part Two: VaproBlock Flashing™ Water And Vapour Impermeable Flashing For Rough Openings.
   a. For fenestration flashing over pre-cut CanFlashing™ Self-Adhered shall include VaproBlock Flashing™ by VaproShield,
   b. VaproBlock Flashing™: 0.17 m, 0.3 m, 0.37 m x 30.5 m long.
   c. Tensile Strength: 3.85 N/mm MD, 3.85 N/mm XMD when tested in accordance with ASTM D882.
   d. Elongation at Break: 541% MD, 617% XMD when tested in accordance with ASTM D882.

D. Interior Air and Water seal:
   1. For the fenestration system, provide VaproAirSeal™ by VaproShield, an air and water-tight single-component advanced polymer sealant for the interior seal of installed windows.
      a. Service Temperature -40°C - 60°C
      b. Skin Time Less than 20 minutes @ 25°C / 50% RH
      c. Tack Free Time < 60 minutes @ 25°C / 50% RH
      d. Cure Rate 6.35 mm 48 hours
      e. VOC < 23 g/L
      f. Elongation @ Break 200-250%
      g. UV Rating: No discoloration or change in appearance after 2500 hours of UV
      h. Lap Shear 0.62 MPa
      i. Tensile Strength 1.03 – 1.38 MPa

D. Through Wall Flashing:
   1. For thru-wall flashing, provide Vapro-SS Flashing™ by VaproShield, a flexible 0.05 mm stainless steel sheet with a 0.20 mm butyl adhesive backing. Provide VaproTermination Bar™ when the top section of the Vapro-SS Flashing™ is exposed.
      a. Vapro-SS Flashing™: [0.102] [0.152] [0.305] [0.457] [0.61] m x 15.24 m long.
      b. Tensile Strength/Puncture: 689 MPa when tested in accordance with ASTM D882 and 17.2 MPa when tested in accordance with ASTM E154
      c. VaproTermination Bar™: 25 mm wide x 2.4 m long, UV-resistant rigid thermoplastic extrusion, if required by the sequence of installation.

E. Transition Flashing:
   1. Transition flashing includes VaproSilicone Transition™ Sheet by VaproShield, a flexible 2 mm extruded silicone sheet adhered with VaproBond.
      a. VaproSilicone Transition™: [0.102] [0.15] [0.23] m x 15.24 m long.
      b. Dynamic Movement Capability: +200 / -50 % when tested in accordance with ASTM C1523.
      c. Elongation: 400 % when tested in accordance with ASTM D412.
      d. Tensile Strength: 2.03 MPa when tested in accordance with ASTM D412.
      e. Tear Strength: 3.5 N/mm when tested in accordance to ASTM D624.

SPEC WRITERS NOTE: With rain screen wall cladding systems such as composite wall panels and metal siding, air circulation and cavity ventilation are critical in allowing moisture to escape. VaproBattens™ with VaproVent™ Strips or VaproShim SA™ Self-Adhered or VaproMat™ to ensure continuous air flow throughout the cavity, for the life of the building. Include 2.1.H. for Water-Resistive Weather Barrier Batten and Ventilation Accessories.

F. Water-Resistive Weather Barrier: VaproBatten, VaproShim, or VaproMat Accessories Options:
   1. Provide water-resistive weather barrier batten and ventilation accessories by VaproShield made of black PVC material.
      a. VaproShim SA™ Self-Adhered: Neoprene accessory used under horizontal or vertical cladding attachment components to create a vertical rain screen drainage plane for cladding, while sealing fastener penetrations.
      b. VaproMat™: Lightweight, hydrophobic filter fabric with a 3 mm or 7 mm polypropylene drainage matrix attached, designed to keep the drainage cavity clean and unobstructed during the lath and plaster or adhesive mortar installation, promoting rapid draining and drying of the rain screen cavity.
      c. VaproBatten™: Black vinyl extrusion with pre-formed moisture drainage channels configured to create a ventilated airspace between wall cladding and weather-resistive barrier, bull nose edges prevent membrane tearing. Fasteners are installed directly through VaproBatten™ into the structural elements regardless of weather conditions.
      d. VaproVent™ Strips are available in two types: VaproVent™ L Strip and VaproVent™ Hook Strip.
         1) VaproVent™ Gray vinyl L Strips are attached to the top and bottom of VaproBattens™. They prevent insect invasion and provide maximum ventilation.
         (2) VaproVent™ Gray vinyl Hook Strips are used with VaproBattens as a starter strip for vinyl and beveled siding applications, in place of the VaproVent™ L Strip at the bottom of the assembly.

2.2 PENETRATION SEALANT

A. Provide sealant for penetrations as recommended by the manufacturer and as specified under Division 07 Section: Sealants. Appropriate sealants are VaproBond™ or VaproLiqui-Flash™.

2.3 WALL ROLLER

A. Wall roller tool: Provide roller incorporating weighted rollers of heavy-duty design, die-cast type to firmly secure the membrane adhesive to the substrate.

SPEC WRITERS NOTE: VaproShield's self-adhered membranes incorporate a pressure-sensitive adhesive (PSA) that requires pressure rolling to fully activate the adhesion.

PART 3 EXECUTION

3.1 GENERAL

A. Verify that surfaces and conditions are ready to accept the work of this section. Notify [engineer] [architect] [consultant] in writing of any discrepancies. Commencement of the work or any parts thereof means acceptance of the prepared substrates.

B. All surfaces must be dry, sound, clean, free of oil, grease, dirt, excess mortar, or other contaminants detrimental to the adhesion of the water-resistive air barrier membrane and flashings. Fill voids and gaps in the substrate greater than 2 cm in width to provide an even surface. Strike masonry joints full-flush.

C. Minimum application temperature of fully self-adhered membrane and flashings to be above minus 6.7 °C. The application can be installed on most substrates without a primer. Specific jobsite conditions may require additional surface preparation with primer.

D. Ensure all preparatory work is complete prior to applying the primary fully self-adhered vapour permeable air barrier sheet membrane.

E. Mechanical fasteners used to secure sheathing surfaces or penetrate sheathing surfaces must be set flush with sheathing. If exposed fasteners are present on the surface of the membrane, cover and seal with Vapro-LiquiFlash™ or VaproBond™.

3.2 COORDINATION OF SELF-ADHERED VAPOUR PERMEABLE AIR BARRIER MEMBRANE INSTALLATION

A. Download Installation Instructions at www.VaproShield.com.

B. Installation Summary:
1. Self-adhered vapour permeable air barrier sheets may be installed vertically or horizontally over the outside face of exterior sheathing board or other approved substrates.
2. Complete detailed work at wall openings, building transitions, and penetrations prior to field applications.
3. Install the fully self-adhered vapour permeable air barrier sheet over the outside face of the exterior sheathing board or substrate, measure and pre-cut into manageable-sized sheets to suit the application conditions.
4. Install the fully self-adhered vapour permeable air barrier sheet complete and continuous to the substrate in a sequential minimal 76 mm overlapping weatherboard.
5. Stagger all end lap seams.
6. Roll the installed membrane with the roller to ensure positive contact and adhesion with the substrate immediately.
7. At the end of each work day, seal the top edge of the membrane where it meets the substrate with termination sealant VaproBond. Trowel apply a feathered edge to seal termination and shed water.

3.3 BUILDING TRANSITION CONDITIONS

A. Consult published details at www.VaproShield.com.

3.4 MECHANICAL EQUIPMENT PENETRATIONS

A. Consult published details at www.VaproShield.com.

3.5 WINDOW, DOOR AND OTHER WALL OPENINGS

A. Consult published installation instructions at www.VaproShield.com. Two-part flashing system that includes;
1. Part One: CanFlashing™ Self-Adhered flashing CanFlashing™ Self-Adhered air barrier transition and flashing membrane installed into rough wall openings for the sill, jambs, and head.

2. Part Two:
   a. Option 1: VaproLiqui-Flash™, see installation instructions and details at www.VaproShield.com
   b. Option 2: VaproBond™, see installation instructions and details at www.VaproShield.com
   c. Option 3: Vapro-SS Flashing™, see installation instructions and details at wwwVaproShield.com
3. Vapour impermeable flashing system that includes BlockFlashing™ Self-Adhered flashing membrane installed into rough wall openings for the sill, jambs, and head. VaproBond sealant is used to seal the corner seams.

3.6 THROUGH-WALL FLASHING/TRANSITION MATERIAL

A. Vapro-SS Flashing available in [10.2 cm] [15.2 cm] [30.5 cm] [457 mm] x 15.24 m, see installation instructions and details at www.VaproShield.com

3.7 SEISMIC AND EXPANSION JOINTS

A. Option A: VaproSilicone Transition Materials™ available in [10.2 cm] [15.2 cm] [22.7 cm] x 15.2 m. See installation instructions and details at www.VaproShield.com.

B. Option B: CanFlashing™ Self-Adhered available in [29.8 cm] [50.0 cm] x 50 m, see installation instructions and details at www.VaproShield.com

3.8 CLADDING ATTACHMENT METHODS

A. All cladding systems must be installed in a rainscreen application providing uninhibited drainage and ventilation between the cladding and CanShield™ VP WRB Air Barrier. Consult VaproShield Technical for information on fastener penetrations.

3.9 FIELD QUALITY CONTROL

A. Make a notification when sections of work are complete to allow review before fully covering a self-adhered water-resistive vapour-permeable air barrier system.

B. Owner to engage an independent consultant to observe substrate and membrane installation before placement of cladding system(s) and provide written documentation of observations.

3.10 PROTECTION

A. Protect wall areas covered with self-adhered water-resistive vapour-permeable air barrier from damage due to construction activities, high wind conditions, and extended exposure to inclement weather.

B. Review the condition of a fully self-adhered water-resistive vapour permeable air barrier prior to installation of cladding or exterior insulation. Repair, or remove and replace damaged sections with new membrane.

C. Terminate and protect substrate against wet weather conditions during application of membrane by sealing exposed leading edge with VaproBond sealant at the end of the workday.

D. Remove and replace the water-resistive weather barrier membrane affected by chemical spills or surfactants.

END OF SECTION