SECTION 07 27 27.01
WATER-RESISTIVE AIR BARRIER MEMBRANE

SPEC WRITERS NOTE: This specification includes materials and installation procedures for **WrapShield RS™** Rain Screen with Integrated Tape Water-Resistive Vapor Permeable Air Barrier Sheet Membrane with attached drainage matrix. **WrapShield RS™** Rain Screen with an attached drainage matrix is used behind rain screen wall cladding assemblies such as pressure equalized cladding systems incorporating composite and metal materials, masonry and stone veneers, stucco and mechanically attached EIFS. With a vapor permeance rating of greater than 50 perms (2861 ng/Pa.s.m^2) **WrapShield RS™** Rain Screen sheet membrane prevents air leakage and allows the wall assembly to breathe or 'dry-out' as necessary to meet the conditions of seasonal changes for each climate zone. The high-performance drainage matrix provides a cavity of different depths behind the cladding to facilitate water drainage and cavity drying. 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.

PART 1 - GENERAL

1.01 GENERAL REQUIREMENTS

A. This Specification shall be read as a whole by all parties concerned. Each Section may contain more or less the complete work of any trade. The Contractor is solely responsible to make clear to the Subcontractors the extent of their work and coordinate overlapping work.

1.02 SYSTEM DESCRIPTION

A. Supply labor, materials and equipment for a mechanically attached water-resistive weather barrier membrane system.

B. Complete Work as shown on the Drawings and specified herein to bridge gaps and seal the water-resistive vapor permeable air barrier membrane against air leakage and water intrusion, including:
   1. Connections of the walls to the roof membrane
   2. Connections of the walls to the foundations
   3. Seismic and expansion joints
   4. Openings and penetrations of window and door frames, store front, curtain wall
   5. Piping, conduit, duct and similar penetrations
   6. Masonry ties, screws, bolts and similar penetrations
   7. All other air leakage pathways in the building envelope

C. Install primary water-resistive vapor permeable air barrier, flashing, and accessories.

1.03 RELATED SECTIONS

A.	Masonry Veneer:	Section [04 XX XX]
B.	Gypsum Sheathing:	Section [06 XX XX]
C.	Plywood Sheathing:	Section [06 XX XX]
D.	Insulation:	Section [07 XX XX]
E.	Roofing:	Section [07 XX XX]
F.	Wall Panels:	Section [07 XX XX]
G.	Flashing	Section [07 XX XX]
H.	Sealants	Section [08 XX XX]
I.	Door Frames	Section [08 XX XX]
J.	Window Frames	Section [08 XX XX]

1.04 REFERENCE STANDARDS

A. ASTM International (ASTM):
   1. ASTM D 5034 - Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test).
   2. ASTM E 96/E 96M - Test Methods for Water Vapor Transmission of Materials.
   3. ASTM E398 Standard Test Method for Water Vapor Transmission Rate of Sheet Materials Using Dynamic Relative Humidity Measurement.
   4. ASTM E 2178 - Standard Test Method for Air Permeance of Building Materials.
   5. ASTM E 2357 - Standard Test Method for Determining Air Leakage of Air Barrier Assemblies.
   6. ASTM E 283 - Standard Test Method for Determining Rate of Air Leakage Through Exterior

Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.

7. ASTM E 84 - Test Method for Surface Burning Characteristics of Building Materials.

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

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

1.05 SUBMITTALS

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

B. Submit samples of the following:
1. Manufacturer's sample warranty
2. Water-resistive vapor permeable air barrier sheet, minimum 8 by 10 inches (203 by 254 mm)
3. Components, minimum 12-inch (305 mm) lengths
4. Membrane flashings
5. Fasteners, clips, strapping, cladding attachment fasteners and masonry ties
6. Sealants

1.06 QUALITY ASSURANCE

A. Single Source: Mechanically attached water-resistive vapor 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 minimum 10 years of continued experience in the manufacture and supply of highly vapor permeable water resistive air barrier products successfully installed in similar project applications.
2. Manufacturer of specified products listed in this Section to have experienced in-house technical and field observation personal qualified to provide expert technical support.

C. Fire Performance Characteristics: Provide water-resistive barrier meeting the following fire-test characteristics.
1. Surface-Burning Characteristics: ASTM E 84 Class "A" Rating (Membrane with 7 mm drainage matrix):
Flame spread index: 5 or less Smoke
developed index: 175 or less

1.07 1.07 MOCK-UP

A. Construct mock-up in accordance with Section 01 43 39 – Mock-ups.

B. Provide mock-up of specified water-resistive vapor permeable air barrier materials under provisions of Section 01 33 23 - Shop Drawings, Product Data and Samples.

C. Where directed by [engineer] [architect] [consultant], construct typical exterior wall panel, 6 foot long by 6 foot wide incorporating the sheathing surfaces 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 vapor permeable air barrier membrane application and lap seams.
1. Perform water spray test of mockup to demonstrate performance, as per ASTM Standards.

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

1.08 PRE-INSTALLATION CONFERENCE

A. Contractor shall convene [one] week prior to commencing work of this section, under provisions of Section 01 31 19 – Project Meetings.

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

1.09 DELIVERY, STORAGE AND HANDLING

A. Refer to 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 mechanically attached water-resistive vapor permeable air barrier system throughout the scope of this section.
   1. Air barrier vapor permeable membrane to include self-adhered or mechanically attached air barrier, transition membranes and sealants at penetrations.
   2. Drainage plane to include drainage cavity, water resistive barrier and flexible flashings to the exterior.

1.11 ALTERNATES
Submit request for alternates in accordance with Section 01 25 00 – Substitution Procedures.
A. Submit requests for alternates a minimum of ten (10) working days prior to bid date.
B. 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, vapor permeance and air leakage rates of the fully self-adhered water-resistive vapor 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 mechanically attached water-resistive vapor permeable air barrier membrane system showing a continuous plane of water and air tightness throughout the building enclosure.
   3. Manufacturer of alternate materials has experienced in-house technical and field observation personal qualified to provide expert technical support.
C. Acceptable alternates will be confirmed by addendum. Substitute materials not approved in writing prior to bid date shall not be permitted for use on this project.

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

PART 2 - PRODUCTS

2.01 MATERIALS
A. Primary mechanically attached water-resistive vapor permeable air barrier membrane components and accessories must be obtained from a single-source manufacture to ensure total system compatibility and integrity.
   1. Mechanically attached water-resistive vapor permeable air barrier membrane by VaproShield LLC., Gig Harbor, WA, Phone: (866) 731-7663, Website: www.vaproshield.com.
B. WATER-RESISTIVE VAPOR PERMEABLE MECHANICALLY ATTACHED AIR BARRIER MATERIALS (Basis of Design)
   1. Primary mechanically attached air barrier sheet membrane shall be WrapShield RS® Rain Screen water-resistive vapor permeable air barrier sheet membrane by VaproShield, a zero VOC vapor 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: Orange with allowable UV exposure for 90 days, prior to coverage.
      b. Breaking strength and Elongation to ASTM D 5034: 100.1 lbf (445.3 N), machine direction; 86.1 lbf (383 N), cross-machine direction.
      c. Water Vapor Permeance tested to ASTM E 96 Method B: minimum of 66.9 perms (3828 ng/Pa.s.m^2)
      d. Water Vapor Permeance tested to ASTM E398: minimum of 71.91 perms (4114 ng/Pa.s.m^2)

e. Air Leakage: ≤0.0001 cfm/ft^2 @ 1.57 psf (≤0.0004 L/s m^2 @ 75 Pa) when tested in accordance with ASTM E 2178 and <0.01 cfm/ft^2 @ 1.57 psf (<0.01 L/s m^2 @ 75 Pa)) when tested in accordance with ASTM E 2357.
f. Water Resistance tested to AATCC 127, 550 mm hydrostatic head for 5 hours: No leakage
g. Application Temperature: No minimum temperature.
h. Surface Burning Characteristics tested to ASTM E 84 (membrane with 7 mm matrix): Class A, Flame-spread index of 5, Smoke-developed index of less than 175.
i. Physical Dimensions: 0.022 inches (0.56 mm) thick and 59 inches (1.5 m) wide and ⅛ inch (3 mm) matrix; 5.909 oz/yd^2 (200.333 g/m^2), ¼ inch (7 mm) matrix; 7.295 oz/yd^2 (247.333 g/m^2).

SPEC WRITERS NOTE: Acceptable substrates for WrapShield RS® Rain Screen water-resistive vapor permeable air barrier sheet membrane include DensGlass®, exterior grade gypsum board, plywood, precast concrete, cast-in place concrete, concrete block, brick, steel, aluminum, OSB and galvanized metal. Best practice guidelines for the mechanically attached application of WrapShield RS® Rain Screen on clean sheathing surfaces. Applications of WrapShield RS® Rain Screen on sheathing surfaces clean of oil, dust, or other contaminates including primers, should be followed by two handed roller pressure of the integrated tape to insure good adhesion, immediately after installation of material.

C. WATER-RESISTIVE VAPOR PERMEABLE TRANSITION AND FLASHING MEMBRANE Part I of II Flashing System
1. Self-adhered air barrier transition and flashing membrane for all window jambs, headers, door openings, inside and outside corners, and other transitions shall be pre-cut VaproFlashing SA™ Self Adhered or VaproFlashing™ by VaproShield, a zero VOC fully self-adhered or mechanically attached water-resistive vapor permeable sheet membrane having the following properties:
a. VaproFlashing SA™ Self-Adhered Orange: 11 $^3/_4$ inches (30 cm) or 19 $^2/_3$ inches (50 cm) wide x 164 feet (50 m) long
i. Air Leakage: ≤0.00002 cfm/ft^2 @ 1.57 psf (≤0.0001 L/s m^2 @ 75 Pa) when tested in accordance with ASTM E 2178 and <0.01 cfm/ft^2 @ 1.57 psf (<0.01 L/s m^2 @ 75 Pa)) when tested in accordance with ASTM E 2357
ii. Water Vapor Permeance tested to ASTM E 96 Method B: minimum 50 perms (2861 ng/Pa.s.m^2)
iii. Water Vapor Permeance tested to ASTM E398: minimum of 50 perms (2861 ng/Pa.s.m^2)
iv. Water Resistance tested to AATCC 127, 550 mm hydrostatic head for 5 hours: No leakage
b. VaproFlashing™ Orange: 11 $^3/_4$ inches (30 cm) or 19 $^2/_3$ inches (50 cm) wide x 164 feet (50 m) long
i. Air Leakage: ≤0.0001 cfm/ft^2 @ 1.57 psf (≤0.0004 L/s m^2 @ 75 Pa) when tested in accordance with ASTM E 2178 and <0.01 cfm/ft^2 @ 1.57 psf (<0.01 L/s m^2 @ 75 Pa)) when tested in accordance with ASTM E 2357
ii. Water Vapor Permeance tested to ASTM E 96 Method B: minimum of 66.9 perms (3828 ng/Pa.s.m^2)
iii. Water Vapor Permeance tested to ASTM E398: minimum of 71.91 perms (4114 ng/Pa.s.m^2)
iv. Water Resistance tested to AATCC 127, 550 mm hydrostatic head for 5 hours: No leakage

D. VAPROLIQUI-FLASH™ VAPOR PERMEABLE WATER RESISTIVE FLASHING FOR ROUGH OPENINGS
1. Window and door pre-cut VaproFlashing SA™ Self Adhered or VaproFlashing™ shall include VaproLiqui-Flash™ by VaproShield, a liquid-applied vapor permeable air barrier flashing material with vapor permeance and resistance to air leakage properties compatible with the primary air barrier membrane.

SPEC WRITERS NOTE: Best construction practice for wood frame construction is to protect the head, jambs and sill of rough openings with the self-adhering water resistive vapor permeable air barrier membrane and VarpoLiqui-Flash™ system to reduce the risk of wood deterioration. Alternatively, for steel stud frame construction with DensGlass® or gypsum sheathing surfaces a Vapro-SS Flashing™ may be used to protect the head, jamb and sill of rough openings.

E. ALTERNATE: VAPRO-SS FLASHING™ WATER IMPERMEABLE FLASHING FOR ROUGH OPENINGS
   1. Window and door shall include Vapro-SS Flashing™ by VaproShield, a flexible 2 mil (0.05 mm) stainless steel sheet with an 8 mil (0.20 mm) butyl adhesive backing.
      a. Vapro-SS Flashing™: 4, 6, 9, 12, 18 or 24 inches (10.2, 15.2, 22.9, 30.5, 45.7, 61 cm) x 50 feet (15.24 m) long.
      b. Tensile Strength/Puncture: 100,000 psi when tested in accordance with ASTM D882 and 2,500 psi when tested in accordance with ASTM E154.

F. THROUGH WALL FLASHING
   1. Thru-wall flashing shall include Vapro-SS Flashing™ by VaproShield, a flexible 2 mil (0.05 mm) stainless steel sheet with an 8 mil (0.20 mm) butyl adhesive backing and may include a VaproTermination Bar™ when the top section of the Vapro-SS Flashing™ is exposed.
      a. Vapro-SS Flashing™: 4, 6, 9, 12, 18 or 24 inches (10.2, 15.2, 22.9, 30.5, 45.7, 61 cm) x 50 feet (15.24 m) long.
      b. Tensile Strength/Puncture: 100,000 psi when tested in accordance with ASTM D882 and 2,500 psi when tested in accordance with ASTM E154
      c. VaproTermination Bar™: 1 inch (25 mm) wide x 8 feet (2.4 m) long, UV-resistance rigid thermoplastic extrusion, if required by sequence of installation.

2.02 PENETRATION SEALANT
   A. Provide sealant for penetrations as recommended by manufacturer and as specified under Division 07 Section: Sealants. Appropriate sealants shall be VaproBond™ or VaproLiqui-Flash™.

PART 3 EXECUTION

3.01 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 shall mean 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 attachment of the mechanically attached water resistive air barrier membrane and flashings. Fill voids and gaps in substrate greater than $^{7}/_{8}$ inch (22 mm) in width to provide an even surface. Strike masonry joints full-flush.
   C. No minimum application temperature of mechanically attached water-resistive vapor permeable air barrier sheet membrane and mechanically attached flashings.
   D. Ensure all preparatory work is complete prior to applying primary mechanically attached water-resistive vapor permeable air barrier sheet membrane.
   E. Mechanical fasteners used to secure sheathing surfaces or penetrate sheathing surfaces shall be set flush with sheathing, fastened into solid backing and covered with the upper overlapping membrane. If exposed fasteners are present on the surface of the membrane, cover and seal with Vapro-LiquiFlash™ or VaproBond™.
   F. If exposed fasteners are required, use VaproCaps™ to insure water/air tight seal.

3.02 COORDINATION OF MECHANICALLY ATTACHED VAPOR PERMEABLE WATER RESISTIVE AIR BARRIER MEMBRANE INSTALLATION
   A. Download Installation Instructions at http://vaproshield.com/public-documents/installation-instructions.
   B. Installation Summary:
      a. Mechanically attached water-resistive vapor permeable air barrier sheet membrane should be installed horizontally over the outside face of exterior sheathing surfaces or other approved substrates.
      b. Complete detail work at; wall openings, building transitions and penetrations prior to field applications.
      c. Install mechanically attached water-resistive vapor permeable air barrier sheet membrane

over the outside face of exterior sheathing surfaces or substrate, measure and pre-cut into manageable sized sheets to suit the application conditions.

d. Install mechanically attached water-resistive vapor permeable air barrier sheet membrane complete and continuous to substrate in a sequential minimal 6-inch (76 mm) horizontal overlapping weatherboard.

e. Stagger all vertical end lap seams and overlap a minimum of 12 inch (305 mm).

f. Roll installed membrane with roller to ensure positive contact and adhesion immediately after the integral tape release film has been removed at the horizontal overlaps.

3.03 BUILDING TRANSITION CONDITIONS

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

B. Tie-in to structural beams, columns, floor slabs and intermittent floors, parapet curbs, foundation walls, roofing systems and at the interface of dissimilar materials with self-adhering air barrier transition and flashing membrane.

C. Align and position fully self-adhered air barrier transition and flashing membrane, remove protective film and press firmly into place. Provide minimum 6-inch (152 mm) lap on to substrates.

D. Ensure minimum 6-inch (152 mm) overlap at side and end laps of membrane and 6 inch (152 mm) at inside and outside corners, if joints occur at corner locations.

E. Roll membrane and lap seams with roller to ensure positive contact and adhesion, immediately.

3.04 MECHANICAL EQUIPMENT PENETRATIONS

A. Mechanical pipe, electrical conduit and/or duct work must be secured solid into position prior to installation of mechanically attached water-resistive vapor permeable air barrier sheet membrane.

B. Electrical services penetrating the wall assembly and mechanically attached water-resistive vapor permeable air barrier sheet membrane must be placed in appropriate conduit and secured solid into position.

C. Install manufactured flanged penetration sleeves as recommended by sleeve manufacturer.

D. For straight sided penetrations, cut and fit mechanically attached water-resistive vapor permeable air barrier sheet membrane to accommodate sleeve, install VaproLiqui-Flash to seal the air barrier membrane to ductwork or preformed flange sleeve.

E. For pipe penetrations, refer to manufacturer's standard details.

3.05 WINDOW, DOOR AND OTHER WALL OPENINGS

A. VaproFlashing SA™ Self Adhered or VaproFlashing™ by VaproShield around window or wall openings subject to the opening size and installation of window, door or louver type.

B. VaproFlashing SA™ Self Adhered or VaproFlashing™ air barrier transition and flashing membrane installed 2 ¾ inch (70 mm) into rough wall openings for the sill, jambs and head.

C. For the VaproFlashing SA™ Self Adhered remove release film, align flashing membrane and apply pressure to ensure positive contact. Roll Lap seams to ensure adhesion. Provide lap seams in singled fashion, to shed water.

D. VAPROLIQUI-FLASH VAPOR PERMEABLE WATER RESISTIVE FLASHING FOR ROUGH OPENINGS

1. Download Installation Instructions at http://vaproshield.com/public-documents/installation-instructions.
2. Liquid-applied window and door flashing shall be VaproLiqui-Flash™ by VaproShield, a liquid-applied vapor permeable air barrier flashing material with resistance to moisture and air leakage properties compatible with the primary weather resistant air barrier membrane.
3. Apply a 12-15 wet mil (0.030-0.038 mm) coating onto the installed VaproFlashing SA™ Self Adhered or VaproFlashing™, 1 inch (25.4 mm) onto the face continuing into the rough opening, covering the 2 ¾ inch (70 mm) VaproFlashing SA™ Self Adhered or VaproFlashing™ and the remaining exposed rough opening surface.

E. THROUGH-WALL FLASHING MEMBRANE VAPRO-SS FLASHING VAPOR IMPERMIABLE FLASHING

1. Download Installation Instructions at http://vaproshield.com/public-documents/installation-instructions.
2. Apply through-wall self-adhered flashing membrane along the base of masonry veneer walls and over shelf angles as detailed.
   a. Press membrane firmly into place, overlap minimum 3 inches (76 mm) at all laps. Promptly roll all surfaces using a hand roller to ensure good adhesion.
   b. Applications shall form a continuous flashing membrane and shall extend up a minimum of 6 inches (15 cm) up the back-up wall.
   c. Seal the top edge of the membrane where it meets the substrate using VaproBond™. Trowel-apply a feathered edge to seal termination to shed water or install VaproTermination Bar™ and sealant at the top edge.
   d. Install through-wall flashing membrane 1/2 inch (13 mm) from outside edge of veneer. Provide "end dam" flashing as per brick industry standards.

SPEC WRITERS NOTE: Rough opening flashing system includes two components. Part I: VaproFlashing SA™ Self-Adhered or VaproFlashing™ Water-Resistive Vapor Permeable Air Barrier Sheet and Part II: VaproLiqui-Flash™ or as Alternate, Vapro-SS Flashing™. Vapro-SS Flashing™ is an optional replacement for Part II flashing system or in addition to VaproLiqui-Flash.

F. OPTIONAL VAPRO-SS FLASHING VAPOR IMPERMIABLE FLASHING FOR ROUGH OPENINGS
   1. Self-Adhered stainless-steel membrane for window and door flashing shall be Vapro-SS Flash™ by VaproShield, an impermeable air and water barrier flashing material, replaces VaproLiqui-Flash. Not recommended for wood framing.
   2. Apply Vapro-SS Flash™, 1-inch (25.4 mm) onto the face continuing into the rough opening, covering the 2 ¾ inch (70 mm) Vapro-SS Flash™ and the exposed rough opening surface. Roll installed flashing immediately after installation with roller to insure positive contact and adhesion with substrate.

G. OPTIONAL WATER-RESISTIVE FLASHING AND PENETRATION TAPES
   1. Tapes shall be VaproTape™ by VaproShield: Black, butyl, UV stable, single sided, moisture-resistant flexible tape with adhesive backing having the following properties:
      a. VaproTape™ (Single-Sided): 2 inch (5.08 cm), 3 inch (7.62 cm) or 4 inch (10.16 cm) wide seam tape

3.06 HORIZONTAL INSTALLATION

A. For horizontal applications, align sheets and begin installation of mechanically attached water-resistive weather barrier membrane at bottom or lowest point of wall.
B. To avoid misalignment of subsequent applications, it is recommended to pre-mark or "Snap" a level line to work from.
C. Measure and pre-cut into manageable sized sheets to suit the application conditions.
D. Allow for excess material at bottom of wall to accommodate tie-ins and connections to adjacent surfaces.
E. Align and position mechanically attached water-resistive weather barrier membrane. Provide minimum 6 inch (152 mm) overlap at the horizontal sides, remove release film of the integrated tape and press firmly into place. Stagger all vertical end lap seams and overlaps a minimum of 12 inch (305 mm). Roll lapped Integrated Tape seams with roller to ensure contact and adhesion.
F. Add a continuous bead of VaproBond™ adhesive sealant between the vertical overlapping joints and roll the overlapping surfaces to insure continuous contact and adhesion.
G. Install subsequent sheets of mechanically attached water-resistive weather barrier membrane in overlapping weatherboard format. Ensure sheets lay smooth and flat to surfaces. Roll lapped Integrated Tape seams with roller to ensure contact and adhesion.
H. Refer to http://vaproshield.com/installation/instructions for the most current and complete installation instructions.

3.07 3.08 FASTENING CLIPS AND MASONRY TIES

A. Install clips and masonry ties over primary vapor permeable air barrier membrane.
B. Secure clips and masonry ties with corrosion-resistant, or stainless-steel screws with gasketed fasteners.
C. Consult VaproShield Technical Services for recommendations on appropriate masonry tie types and methods to seal penetrations.

3.09 FIELD QUALITY CONTROL

A. Make notification when sections of work are complete to allow review prior to covering mechanically attached water-resistive weather barrier membrane system, with the installation of the cladding.
B. Owner to engage independent consultant to observe substrate and membrane installation prior to placement of cladding system(s) and provide written documentation of observations.

3.10 PROTECTION

A. Protect wall areas covered with mechanically attached water-resistive weather barrier membrane from damage due to construction activities, high wind conditions, and extended exposure to inclement weather.
B. Review condition of mechanically attached water-resistive weather barrier membrane prior to installation of cladding. Repair, or remove and replace damaged sections with new membrane.

C. Recommend to cap and protect exposed back-up walls against wet weather conditions during and after application of membrane, including wall openings and construction activity above completed mechanically attached water-resistive weather barrier membrane installations.

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

END OF SECTION