
SPEC NOTE: **Air-Bloc 17MR.** This specification is ideally suited for a fluid applied elastomeric mold-resistive air barrier in accordance with the requirements of the International Building Code (IBC) for the building envelope. Air-Bloc 17MR is used in cavity wall construction to provide an air and watertight membrane yet allows for the passage of water vapor. This specification includes materials and installation procedures for Air-Bloc 17MR, an elastomeric mold resistive air barrier membrane in accordance with the requirements of the (IBC) for the building envelope.

SPEC NOTE: This document is intended as a reference for the recommended installation procedures of the products/assembly described below. Although this specification section follows the recommendations of the Construction Specifications Institute (CSI), Manual of Practice including MasterFormat, SectionFormat, and PageFormat; It is the discretion of the project specification author to use the information within as a whole, or in part, to set a minimum standard of performance for specified products/assembly on a project specific basis. Areas noted “[project specific]” are intentionally omitted and shall be updated and coordinated by the project specification author.

SPEC NOTE: This document includes Henry notes for information purposes and to assist the architect/specification writer in making appropriate decisions. A Henry “SPEC NOTE” will always immediately precede the text to which it is referring. The section serves as a guideline only and should be edited with deletions and additions to meet specific project requirements.

SPEC NOTE: Delete “SPEC NOTE” sections in the final copy of the specification.

SECTION 07 27 26 FLUID-APPLIED MEMBRANE AIR BARRIERS

PART 1: GENERAL

1.1. GENERAL REQUIREMENTS

- A. The General Conditions, Supplementary Conditions, Instructions to Bidders, and Division 01-General Requirements shall be read in conjunction with and govern this section.
- B. The Specification shall be read as a whole by all parties concerned. Each Section may contain more or less than the complete Work of any trade. The Contractor is solely responsible to make clear to the Subcontractor the extent of their Work.

1.2. SUMMARY

- A. This Section includes requirements for supplying labor, materials, tools, and equipment to complete the Work as shown on the Drawings Architectural Division as specified herein including, but not limited to, the following:
 - 1. Adhesives/Primers
 - 2. Fluid Applied, Vapor Permeable Air & Water Barrier Membrane
 - 3. Transition Membranes
 - 4. Sealant
 - 5. Thru-wall flashing
 - 6. Insulation Adhesive (Optional)

SPEC NOTE: Coordination of terminations, transitions, and penetrations (TPTs) are pertinent to ensure chemical compatibility and adhesion of adjacent products. Edit the following related sections as required to ensure a continuous air and water tight building envelope. Contact manufacturer(s) where products transition from one assembly to another to confirm minimum installation requirements for warranty issuance.

1.3. RELATED REQUIREMENTS

- A. DIVISION 03 – Concrete Section [project specific]
- B. DIVISION 04 – Masonry Section 04 20 00 – Unit Masonry
- C. DIVISION 06 – Wood, Plastics, and Composites Section 06 16 00 Sheathing

SPEC NOTE: 2012 IECC requires a continuous air barrier. Contact product manufacturers and coordinate dampproofing/waterproofing with this section to ensure compatibility and/or single source warranty.

- D. DIVISION 07 – Thermal and Moisture Protection Section 07 10 00 - Dampproofing and Waterproofing

SPEC NOTE: Inclusion of plastic thermal insulation may require NFPA 285 compliance. Contact product manufacturers to confirm passing assemblies.

- E. DIVISION 07 – Thermal and Moisture Protection Section 07 21 00 - Thermal Insulation

SPEC NOTE: Climate zones 4 and greater require a vapor retarder in accordance with the International Building Code (IBC) and the National Building Code of Canada (NBC). Coordinate and/or delete related requirement below as needed.

- F. DIVISION 07 – Thermal and Moisture Protection Section 07 26 00 - Vapor Retarders
- G. DIVISION 07 – Thermal and Moisture Protection Section 07 62 00 - Sheet Metal Flashing and Trim

SPEC NOTE: 2012 IECC requires a continuous air barrier on building envelope systems. Contact product manufacturers and coordinate membrane roofing with this section to ensure compatibility and/or single source warranty.

- H. DIVISION 07 – Thermal and Moisture Protection 07 50 00 Membrane Roofing

SPEC NOTE: Confirm sealant and air barrier assembly compatibility and/or single source warranty:
1. Contact product manufacturers and coordinate this section with joint sealant Section 07 92 00.
2. Contact product manufacturers and coordinate this section glazing sealant Section 08 40 00.

- I. DIVISION 07 – Thermal and Moisture Protection Section 07 92 00 - Joint Sealants
- J. DIVISION 08 –Openings Section 08 40 00 - Entrances, Storefronts, and Curtain Walls

SPEC NOTE: Projects not referencing LEED delete Sections “1.3. K”, “1.4.C.7”, “1.5.D”, and “1.7.B.1.d” as stated below.

K. DIVISION [project specific] - LEED Requirements Section [project specific] – [project specific].

1.4. ALTERNATES

- A. Primary membranes defined as Water Resistive Coatings are only considered acceptable substitutions when installed in conjunction with EIFS in accordance with ICC-ES AC 212 and are not considered acceptable substitutions for wall assemblies with alternate claddings.
- B. Submit requests for alternates in accordance with Section [project specific].
- C. Alternate submission format to include:
 - 1. Evidence that alternate materials meet or exceed performance characteristics of product requirements and documentation from an approved independent testing laboratory certifying that the performance of the system including auxiliary components exceed the requirements of the local building code.
 - 2. References clearly indicating that the Air Barrier Manufacturer has successfully completed projects of similar scope and nature on an annual basis for a minimum of ten (10) years.
 - 3. Air Barrier Manufacturer’s guide specification.
 - 4. Air Barrier Manufacturer’s complete set of technical data sheets for assembly.
 - 5. Air Barrier Manufacturer’s complete set of details for assembly.
 - 6. Product certification that the assembly components are supplied and warranted by single source Air Barrier Manufacturer.
 - 7. LEED HPD declaration
 - 8. Air Barrier Manufacturer statement that anticipated wall assembly passes NFPA 285.
 - 9. Sample warranty as specified.
- D. Submit requests for alternates to this specification a minimum of ten (10) working days prior to bid date. Include a list of twenty-five (25) projects executed over the past five (5) years.
- E. Acceptable alternates will be confirmed by addendum. Substitute materials not approved in writing prior to tender closing shall not be permitted for use on this project.

1.5. REFERENCES

- A. American Architectural Manufacturers Association (AAMA):
 - 1. AMMA 2400-02, Standard Practice for Installation of Windows with a Mounting Flange in Stud Frame Construction
- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM D412, Standard Test Method for Vulcanized Rubber and Thermoplastic Elastomers - Tension
 - 2. ASTM D471, Standard Test Method for Rubber Property - Effect of Liquids
 - 3. ASTM D1970, Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection
 - 4. ASTM D2243, Standard Test Method for Freeze-Thaw Resistance of Water-Borne Coatings
 - 5. ASTM D5590, Standard Test Method for Determining the Resistance of Paint Films and Related Coatings to Fungal Defacement by Accelerated Four-Week Agar Plate Assay
 - 6. ASTM E84, Standard Test Method for Surface Burning Characteristics of Building Materials
 - 7. ASTM E96, Standard Test Methods for Water Vapor Transmission of Materials
 - 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 E330, Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference
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 E1354, Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter
12. ASTM E1677, Standard Specification for Air Barrier (AB) Material or System for Low-Rise Framed Building Walls
13. ASTM E2112, Standard Practice for Installation of Exterior Windows, Doors and Skylights
14. ASTM E2178, Standard Test Method for Air Permeance of Building Materials
15. ASTM E2357, Standard Test Method for Determining Air Leakage of Air Barrier Assemblies

SPEC NOTE: If wall assembly is not required to comply with NFPA 285 delete “1.4.C.8”, “1.5.C”, and “1.7.B.3” of this Section:

- C. National Fire and Protection Agency (NFPA):
 1. NFPA 285, Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components
- D. US Green Building Council (USGBC), Leadership in Energy and Environmental Design (LEED):
 1. LEED Reference Guide, Version 4.0, and USGBC Project Calculation Spreadsheet. Web Site <http://www.usgbc.org>.

1.6. ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 1. Coordinate the Work of this Section with the installation of exterior substrate. Sequence Work so that installation of fluid-applied air barrier coincides with installation of substrate preparation without causing delay to the Work.
- B. Pre-installation meetings:
 1. When required, and with prior notice, an Air Barrier Manufacturer representative will meet with the necessary parties at the jobsite to review and discuss project conditions as it relates to the integrity of the assembly.

1.7. SUBMITTALS

- A. Provide the following requested information in accordance with Section [project specific] Submittal Procedures.
- B. Action Submittals:
 1. Product Data:
 - a. Air Barrier Manufacturer’s guide specification.
 - b. Air Barrier Manufacturer’s complete set of technical data sheets for assembly.
 - c. Air Barrier Manufacturer’s complete set of standard detail drawings.
 - d. LEED HPD declaration
 2. Certificates:
 - a. Product certification that the assembly components are supplied and warranted by single source Air Barrier Manufacturer.
 - b. Statement that installing contractor is authorized by Air Barrier Manufacturer to complete Work as specified.

3. Tests and Evaluation Reports:
 - a. NFPA 285 wall assembly compliance:
 1. Air Barrier Manufacturer statement that anticipated wall assembly passes NFPA 285.
4. Warranty:
 - a. Sample warranty as specified.

1.8. QUALITY ASSURANCE

- A. Single Source Responsibility:
 1. Obtain fluid-applied membrane air barrier, transition membranes, air barrier sealants, primers, mastics, and adhesives from a single Air Barrier Manufacturer regularly engaged in the manufacturing and supply of the specified products.
 2. Contactor to verify product compliance with federal, state, and local regulations controlling use of Volatile Organic Compounds (VOC).
- B. Manufacturer Qualifications:
 1. Air Barrier Manufacturer shall demonstrate qualifications to supply materials of this section by certifying the following:
 - a. Air Barrier Manufacturer must not issue warranties for terms longer than they have been manufacturing and supplying specified products for similar scope of Work.
- C. Installer Qualifications:
 1. Perform Work in accordance with Air Barrier Manufacturer published literature and as specified in this section.
 2. Maintain one (1) copy of Air Barrier Manufacturer's instructions on site.
 3. At all times during the execution of the Work allow access to site by the Air Barrier Manufacturer representative.
 4. If meeting with Air Barrier Manufacturer during project construction, contact Air Barrier Manufacturer a minimum of two weeks prior to schedule meeting.

 SPEC NOTE: Mock-ups establish quality of Work for the materials indicated in this Section. Delete the following paragraph if the scope of work in this Section is minimal and a mock-up is not required.

1.9. MOCK-UPS

- A. Mock-ups:
 1. Where directed by [engineer] [architect] [consultant] construct mock-ups to verify selections made under submittals and to set quality standards for materials and execution in accordance with Section [project specific].

1.10. DELIVERY, STORAGE, AND HANDLING

- A. Delivery of Materials:
 1. Materials shall be delivered to the jobsite in undamaged and clearly marked containers indicating the name of the Air Barrier Manufacturer and product.
- B. Storage of Materials:
 1. Store materials as recommended by Air Barrier Manufacturer and conforming to applicable safety regulatory agencies. Refer to all applicable data including but not limited to MSDS sheets, Product Data sheets, product labels, and specific instructions for personal protection.
 2. Keep solvents away from open flame or excessive heat.
 3. Products should be stored in closed containers.

4. Store rolled materials on end in original packaging.
5. Protect rolls from direct sunlight until ready for use.
6. Refer to Air Barrier Manufacturer published literature.

- C. Handling:
1. Refer to Air Barrier Manufacturer published literature.

1.11. SITE CONDITIONS

- A. Environmental Requirements:
1. No Work shall be performed during rain or inclement weather.
 2. No Work shall be performed on frost or wet covered surfaces.
- B. Protection:
1. Cap and protect exposed back-up walls against wet weather conditions during and after application of membrane.
- C. Ensure all preparation Work is completed prior to installing fluid-applied membrane air barrier.

1.12. WARRANTY

- A. Manufacturer Material Warranty:
1. Provide Air Barrier Manufacturer's standard material warranty.

PART 2: PRODUCTS

2.1. MATERIALS MANUFACTURER

- A. Components and auxiliary materials must be obtained as a single-source from the assembly Air Barrier Manufacturer to ensure total system compatibility and integrity.
- B. Acceptable Manufacturers:
1. Henry Company
999 N. Sepulveda Blvd. Suite 800
El Segundo, CA 90245
(800) 486-1278
www.Henry.com

2.2. MATERIALS

- A. Primary Fluid-Applied Membrane Air Barrier (Basis of Design):
1. One-component, water-based, elastomeric emulsion membrane, designed to provide a vapor permeable air and water barrier when applied above-grade wall assemblies, having the following properties:
 - a. Basis of Design Product: Air-Bloc 17MR
 - b. Color: Graphite
 - c. Solids Content:
 1. By Weight: 63%
 2. By Volume: 53%
 - d. Service Temperature:
 1. Low Temperature: -40 degrees F (-40 degrees C)
 2. High Temperature: +180 degrees F (+80 degrees C)
 - e. Application Temperature:
 1. Low Temperature: +20 degrees F (-6 degrees C)
 2. High Temperature: +122 degrees F (+50 degrees C)

- f. Tensile Strength (ASTM D412): 104 psi (717 kPa)
- g. Elongation (ASTM D412): 420%
- h. Low Temperature Flexibility @ -22 degrees F (-30 degrees C) (ASTM D1970): Pass
- i. Freeze-Thaw Resistance (ASTM D2243): Pass; 10 cycles
- j. Nail Sealability (ASTM D1970): Pass
- k. VOC Content: 100 grams/liter max.
- l. Water Absorption (ASTM D471, modified): 5.6%
- m. Water Vapor Permeance (ASTM E96 B) @ 40 mils nominal dry film: 14 perms
- n. Air Permeability:
 - 1. Assembly Air Leakage (ASTM E2357): Pass
 - 2. Building Material (ASTM E2178): 0.0001 cfm/ft² (0.0005 L/s.m²)
- o. Chemical Resistance: Resists salt solutions, mild acids and alkalis. Non-resistant to oils, grease or solvents
- p. Fire Testing (NFPA 285): Complies in various assemblies
- q. Flame Spread/Smoke Development (ASTM E84): 10/15
- r. Resistance to Mold, Mildew, and Fungal Growth (ASTM D5590): No growth

B. Auxiliary Materials

- 1. Transition Membranes:
 - a. Liquid applied flashings:
 - 1. Moisture-curing one component elastomeric liquid applied flashing membrane using a highly advanced STPe (Silyl-Terminated Polyether) polymer, having the following properties:
 - a. Basis of Design Product: Air-Bloc LF
 - b. Color: Blue
 - c. Air Leakage (ASTM E2178): <0.004 L/s/m² @ 75Pa
 - d. Water Vapor Permeance (ASTM E96, Method B): 21.8 perms @25 mils
 - e. Air Leakage of Air Barrier Assemblies (ASTM E2357): Pass
 - f. Water Resistance (AC212/ASTM D2247): Pass
 - g. Nail Sealability (AMMA 711): Pass
 - h. Surface Burning Characteristics (ASTM E84):
 - 1. Class A
 - 2. Flame Spread/Smoke Development (ASTM E84): 20/5
 - i. Tensile Strength (ASTM D412): 132 psi
 - j. Elongation (ASTM D412): 264%
 - b. Self-Adhering flashings:
 - 1. Non-vapor permeable, self-adhered water resistive air and vapor barrier membrane consisting of an SBS rubberized asphalt compound, which is integrally laminated to a blue engineered thermoplastic film, having the following properties:
 - a. Basis of Design Product: Blueskin SA
 - b. Color: Blue
 - c. Water Vapor Permeance (ASTM E96, Method A): .86 perms
 - d. Air Leakage of Air Barrier Assemblies (ASTM E2357): Pass
 - e. Air Leakage (ASTM E2178): <0.0005 L/s/m² @ 75Pa
 - f. Water Tightness (CAN/CGSB-37.58-M86): Pass.
 - g. Nail Sealability (ASTM D1970): Pass.
 - h. Tensile Strength:
 - 1. Membrane (ASTM D412-modified): 500 psi minimum
 - 2. Film (ASTM D828): 5000 psi minimum
 - i. Elongation (ASTM D412-modified): 200% minimum
- 2. Sheathing Joint Membranes:
 - a. Vapor permeable, self-adhered water resistive air barrier membrane consisting of an engineered film and patented, permeable adhesive technology with split-back poly-release film, having the following properties:
 - 1. Basis of Design Product: Blueskin VP160

2. Color: Blue
3. Air Leakage (ASTM E2178): <0.02 L/s/m² @ 75Pa
4. Water Vapor Permeance (ASTM E96, Method A): 29 perms
5. Air Leakage of Air Barrier Assemblies (ASTM E2357): Pass
6. Resistance to Water Penetration (ICC-ES AC 38): Pass.
7. Nail Sealability (ASTM D1970): Pass
8. Surface Burning Characteristics (ASTM E84):
 - a. Class A
 - b. Flame Spread/Smoke Development (ASTM E84): 0/105
9. Tensile Strength (ASTM D828): 182N MD/129N CD
10. Cycling and Elongation (ICC-ES AC48): Pass
- b. Contact Air Barrier Manufacturer for a complete list of authorized transition membranes.

SPEC NOTE: Delete adhesives/primers that do not comply with ordinances and/or not relevant to specification.

3. Adhesives and Primers:
 - a. Spray adhesive, and having the following properties:
 1. Basis of Design Product: Blueskin Spray Prep
 2. Color: Clear amber
 3. Solids Content (By Weight): 35%
 4. Aerosol
 - b. Synthetic rubber based adhesive type, quick setting, having the following properties:
 1. Basis of Design Product: Blueskin Adhesive
 2. Color: Blue.
 3. Solids Content (By Weight): 35%.
 4. Solvent based: Maximum VOC: 450 g/L
 - c. Polymer emulsion based adhesive type, quick setting, low VOC content, having the following properties:
 1. Basis of Design Product: Blueskin LVC Adhesive
 2. Color: Blue.
 3. Solids Content (By Weight): 40%.
 4. Solvent based: 240 g/L.
 - d. Polymer emulsion based primer for self-adhered membranes, and having the following properties:
 1. Basis of Design Product: Aquatac Primer
 2. Color: Aqua.
 3. Solids Content (By Weight): 58%.
 4. Water based: Maximum VOC: 50 g/l
4. Sealants:
 - a. Building Envelope Sealant:
 1. Moisture cure, medium modulus polymer modified sealing compound, having the following properties:
 - a. Basis of Design Product: HE925 BES Sealant
 - b. Complies with Fed. Spec. TT-S-00230C, Type II, Class A.
 - c. Complies with ASTM C920, Type S, Grade NS, Class 35.
 - d. Elongation: 450 – 550%.
 - e. Remains flexible with aging.
 - b. Sheathing Joint Sealants:
 1. As recommended by Air Barrier Manufacturer
 - c. Contact Air Barrier Manufacturer for a complete list of authorized sealants.
5. Self-Adhesive Thru-Wall Flashing Membrane:
 - a. Non-vapor permeable, self-adhered water resistive air and vapor barrier membrane consisting of an SBS rubberized asphalt compound, which is integrally laminated to a

blue engineered thermoplastic film, having the following properties:

1. Basis of Design Product: Blueskin TWF
2. Color: Yellow
3. High Temperature Stability - Flow Resistance (ASTM D5147): Pass
4. Air leakage (ASTM E283): 0.005 L/s.m² @ 75 Pa
5. Water vapor permeance (ASTM E96, Method B): 0.03 perms
6. Low temperature flexibility (CGSB 37-GP-56M): Pass

SPEC NOTE: THERMAL SHORT CIRCUITING - Select To reduce heat loss and restrict air convection between the air barrier membrane and insulating materials, secure the insulation in place with an insulation adhesive applied in a serpentine pattern and butter the joints of panels. Coordinate with the Cavity Wall Insulation Section. Choose 2.2.C & 3.3.L for the insulation adhesive and methods of installation

C. Insulation Adhesive: (optional)

1. Synthetic rubber base compound having the following characteristics:
 - a. Basis of Design Product: Air-Bloc 21
 - b. Color: Cream.
 - c. Compatible with air barrier membrane, substrate and insulation materials.
 - d. Long term flexibility (CGSB 71-GP-24M): Pass.
 - e. Chemical resistance: Alkalis, mild acid and salt solutions.

PART 3: EXECUTION

3.1. EXAMINATION

A. Substrate Conditions:

1. Verify substrates to receive work and surrounding adjacent surfaces are in accordance with Air Barrier Manufacturer published literature prior to installation of fluid applied membrane air barrier assembly.
2. Sheathing panels must be securely fastened and installed flush to ensure a continuous substrate in accordance with Air Barrier Manufacturer published literature.
3. Fastener penetrations must be set flush with sheathing and fastened into solid backing.
4. Mortar joints in concrete block and form tie holes/voids in poured concrete shall be filled, flush, smooth, and allowed to be cured for a minimum of twenty-four (24) hours.
5. New concrete should be cured for a minimum of sixteen (16) hours after forms are removed.
6. Cap and protect exposed back-up walls against wet weather conditions prior to application of fluid applied membrane air barrier assembly.

B. Notify contractor in writing of any conditions that are not acceptable.

C. The installing contractor shall examine and determine that surfaces and conditions are ready to accept the Work of this section in accordance with published literature. Commencement of Work or any parts thereof shall mean installer acceptance of the substrate.

3.2. PREPARATION

A. All surfaces must be sound, dry to touch, clean, and free of oil, grease, dirt, excess mortar, frost, laitance, loose and flaking particles, or other contaminants.

B. Protect adjacent surfaces not included in scope of Work to prevent spillage and overspray.

- C. Hot weather or direct-sun applications over porous substrates, such as concrete, promote rapid surface drying and can form blisters in the fluid applied membrane air barrier during curing. To aid in blister prevention prepare substrate in accordance with one of the following optional procedures:
1. Prime coat:
 - a. Apply a thin prime coat of fluid applied membrane air barrier to substrate.
 - b. Allow fluid applied membrane air barrier to fully cure prior to subsequent application.
 - c. Install primary fluid applied membrane air barrier to Air Barrier Manufacturer minimum recommended mil thickness.
 2. Two coat:
 - a. Apply fluid applied membrane air barrier to achieve one-half (1/2) of Air Barrier Manufacturer minimum recommended mil thickness.
 - b. Allow fluid applied membrane air barrier to fully cure prior to subsequent application.
 - c. Apply fluid applied membrane air barrier to achieve one-half (1/2) of Air Barrier Manufacturer minimum recommended mil thickness.
 - d. Overall dry mil thickness shall be in accordance with Air Barrier Air Barrier Manufacturer published literature.

3.3. INSTALLATION

- A. Ensure substrate is ready to receive fluid applied membrane air barrier in accordance with published literature.
- B. If fluid applied membrane air barrier should freeze while in storage, move containers to a controlled environment above 32 degrees F (0 degrees C) until thawed and re-mix using a hand operated power mixer prior to use.
- C. Fluid applied membrane air barrier shall not be applied when ambient (air) and substrate temperatures are below 20 degrees F (-6 degrees C).
- D. Do not proceed with application of air barrier membrane when rain is expected within 16 hours.
- E. Apply sealant at sharp corners, changes in substrate plane, penetrations, and edges to form a smooth transition from one plane to another.
- F. Non-Moving Substrate Joint and Crack Treatment:
1. Gaps equal to or less than 3/8 inch (10 mm) wide:
 - a. Sheathing Joint Sealant:
 1. Apply sealant at rate recommended by Air Barrier Manufacturer.
 2. Spread sealant at joint extending a minimum one (1) inch beyond gap to ensure a continuous air and watertight assembly.
 2. Gaps equal to or less than 1/2 inch (12 mm) wide:
 - a. Building Envelope Sealant:
 1. Apply sealant at rate recommended by Air Barrier Manufacturer.
 2. Spread sealant at joint extending a minimum one (1) inch on each side of substrate gap.
 - b. Liquid applied flashings:
 1. Apply liquid applied flashing at rate recommended by Air Barrier Manufacturer.
 2. Apply liquid applied flashing in accordance with Air Barrier Manufacturer published literature extending a minimum of two (2) inches on each side of substrate gap.
 - c. Self-adhering flashings:
 1. Apply primer to substrate and allow curing in accordance with published literature prior to installation of self-adhered flashing.

2. Apply self-adhering flashing in accordance with Air Barrier Manufacturer published literature extending a minimum of three (3) inches on each side of substrate gap.
 3. Roll membrane with countertop roller to eliminate air pockets between self-adhered flashing and substrate ensuring full adhesion of membrane onto substrate.
 4. Seal exposed leading edges of self-adhered membrane with sealant.
3. Gaps greater than 1/2 inch wide:
 - a. Contact Air Barrier Manufacturer.
 4. Refer to Air Barrier Manufacturer published literature for a complete list of authorized Non-Moving Substrate Joint and Crack Treatment details.
- G. Moving Joints:
1. Contact Air Barrier Manufacturer.
- H. Refer to Air Barrier Manufacturer detail drawings for installation procedures including, but not limited to, the following:
1. Inside corners
 2. Outside corners
 3. Crack treatment
 4. Penetrations
 5. Rough openings
 6. Control joints
 7. Expansion joints
 8. Changes in substrate
- I. Contact Air Barrier Manufacturer to coordinate transition of fluid applied membrane air barrier to adjacent areas including, but not limited to, the following:
1. Roof to air barrier
 2. Air barrier to waterproofing
 3. Fastener penetrations
- J. Thru-Wall Flashing:
1. Coordinate with Section [project specific].
- K. Primary Liquid Air Barrier Membrane
1. Install fluid applied membrane air barrier in accordance with Air Barrier Manufacturer published literature to ensure an air and watertight fluid applied membrane air barrier assembly.
 2. Fluid applied membrane air barrier assembly must be installed in a monolithic application without sags, runs or voids, and transitioning with auxiliary components to create a uniform drainage plane and air barrier.
 3. Install fluid applied membrane air barrier and transition membranes so that subsequent membrane installation laps one (1) inch (2.5 cm) onto existing membrane ensuring an air and watertight fluid applied membrane air barrier assembly.
 4. Fluid applied membrane air barrier total dry thickness shall be in accordance with Air Barrier Manufacturer published literature. Refer to Air Barrier Manufacturer Technical Data Sheet.

SPEC NOTE: THERMAL SHORT CIRCUITING - Select To reduce heat loss and restrict air convection between the air barrier membrane and insulating materials, secure the insulation in place with an insulation adhesive applied in a serpentine pattern and butter the joints of panels. Coordinate with the Cavity Wall Insulation Section. Choose 2.2.C & 3.3.L for the insulation adhesive and methods of installation

- L. Insulation Adhesive (Optional):
 - 1. Coordinate with Section [project specific] for insulating materials.
 - 2. Upon curing of the air barrier membrane system apply insulation adhesive in a serpentine pattern.
 - 3. Immediately embed insulation into the adhesive and press firmly into place to ensure full contact. Apply additional adhesive if allowed to skin over.
 - 4. Fully butter all joints of insulation panels with adhesive during installation, with the exception of expansion joints.

3.4. FIELD QUALITY CONTROL

- A. Final Observation and Verification:
 - 1. Final inspection of fluid applied membrane air barrier assembly shall be carried out by the Owner's representative, the contractor, or Air Barrier Manufacturer as required by warranty.
 - 2. Contact Air Barrier Manufacturer for warranty issuance requirements.
- B. Fluid applied membrane air barrier assembly is not designed for permanent UV exposure. Refer to Air Barrier Manufacturer published literature for product limitations.

3.5. CLEANING

- A. Promptly as the Work proceeds, and upon completion, clean up and remove from the premises all rubbish and surplus materials resulting from the foregoing Work.
- B. Clean soiled surfaces, spatters, and damage caused by Work of this Section.
- C. Check area to ensure cleanliness and remove debris, equipment, and excess material from the site.

END OF SECTION