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SPEC NOTE: **Henry**® **Air-Bloc® 16MR Air and Vapor Barrier.** This specification is ideally suited for cavity wall construction requiring a water resistive barrier membrane that blocks the passage of water vapor. Although prepared in CSI three (3) part format, this specification should be adapted to suit the requirements of the individual project and be included as a separate section under Division 07 - Thermal and Moisture Protection.

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.

SPEC NOTE: Wall systems requiring compliance with NFPA 285: contact the local Henry® sales representative or Technical Services at (800) 486-1278.

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**SECTION 07 27 00**

**AIR BARRIERS**

1. **GENERAL**
	1. GENERAL REQUIREMENTS
		1. The General Conditions, Supplementary Conditions, Instructions to Bidders, and Division 01- General Requirements shall be read in conjunction with and govern this section.
		2. 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 installing Subcontractor the extent of their Work.
	2. SUMMARY
		1. 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. Adhesive/Primer
			2. Fluid Applied Air and Vapor Barrier
			3. Air Barrier/Thru-wall Flashing
			4. Sealant
			5. Insulation Adhesive (Optional)

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SPEC NOTE: Coordination of terminations, transitions, and penetrations are pertinent to ensure chemical compatibility and adhesion of adjacent products. Edit the following related sections as required for project specific needs and 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.

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* 1. RELATED REQUIREMENTS

* + 1. DIVISION 03 – Section 03 40 00 – Precast Concrete
		2. DIVISION 04 – Section 04 20 00 – Unit Masonry
		3. DIVISION 05 – Section 05 40 00 – Cold-Formed Metal Framing
		4. DIVISION 05 – Section 05 50 00 – Metal Fabrications
		5. DIVISION 06 – Section 06 16 00 – Sheathing

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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.

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* + 1. DIVISION 07 – Section 07 10 00 – Dampproofing and Waterproofing

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

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* + 1. DIVISION 07 – Section 07 21 00 – Thermal Insulation

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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.

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* + 1. DIVISION 07 – Section 07 26 00 – Vapor Retarders
		2. DIVISION 07 – Section 07 40 00 – Roofing and Siding Panels

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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. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

* + 1. DIVISION 07 – Section 07 50 00 – Membrane Roofing
		2. DIVISION 07 – Section 07 62 00 – Sheet Metal Flashing and Trim
		3. DIVISION 07 – Section 07 65 00 – Flexible Flashing

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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.

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* + 1. DIVISION 07 – Section 07 92 00 – Joint Sealants
		2. DIVISION 08 – Section 08 11 00 – Metal Doors and Frames
		3. DIVISION 08 – Section 08 44 00 – Curtain Wall and Glazed Assemblies
		4. DIVISION 08 – Section 08 50 00 – Windows

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SPEC NOTE: Projects not referencing LEED delete Sections “1.03. Q”, “1.04.B.7”, “1.05.D”, and “1.07.B.2.b” as stated below.

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* + 1. DIVISION [project specific] - Section [LEED Requirements project specific] – [project specific].

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SPEC NOTE: If wall assembly is not required to comply with NFPA 285 delete “1.04.B.8”, “1.05.C”, and “1.07.B.3” of this Section:

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* 1. ALTERNATES
		1. Submit requests for alternates in accordance with Section [project specific].
		2. 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 confirming assembly components are supplied and warranted by a single source Air Barrier Manufacturer.
			7. LEED HPD declaration
			8. Air Barrier Manufacturer statement that anticipated wall assembly compliance with NFPA 285.
			9. Sample warranty as specified.
		3. 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.
		4. 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.
	2. REFERENCES
		1. American Architectural Manufacturers Association (AAMA):
			1. AAMA 711-13 - Voluntary Specification for Self-Adhering Flashing Used for Installation of Exterior Wall Fenestration Products
			2. AAMA 2400-02 - Standard Practice for Installation of Windows with a Mounting Flange in Stud Frame Construction
		2. American Society for Testing and Materials (ASTM):
			1. ASTM D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting
			2. ASTM D903 - Standard Test Method for Peel or Stripping Strength of Adhesive Bonds
			3. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials
			4. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials
			5. ASTM E283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen
			6. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights, and Curtain Walls by Uniform Static Air Pressure Difference
			7. ASTM E2178 - Standard Test Method for Air Permeance of Building Materials
			8. ASTM E2357 - Standard Test Method for Determining Air Leakage of Air Barrier Assemblies
		3. 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
		4. US Green Building Council (USGBC), Leadership in Energy and Environmental Design (LEED)
	3. ADMINISTRATIVE REQUIREMENTS
		1. 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.
	4. SUBMITTALS
		1. Provide the following requested information in accordance with Section [project specific] Submittal Procedures.
		2. Action Submittals:
			1. Product Data:
				1. Air Barrier Manufacturer’s guide specification.
				2. Air Barrier Manufacturer’s complete set of technical data sheets for assembly.
				3. Air Barrier Manufacturer’s complete set of guide details for assembly.
			2. Certificates:
				1. Product certification confirming assembly components are supplied and warranted by a single source Air Barrier Manufacturer.
				2. LEED HPD declaration
			3. Tests and Evaluation Reports:
				1. NFPA 285 wall assembly compliance:

Air Barrier Manufacturer statement that anticipated wall assembly complies with NFPA 285.

* + - 1. Warranty:
				1. Sample warranty as specified.
	1. QUALITY ASSURANCE
		1. Single Source Responsibility:
			1. Obtain air barrier and auxiliary materials including adhesive/primer, air barrier, flashings, and sealants 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).
		2. Manufacturer Qualifications:
			1. Air Barrier Manufacturer shall demonstrate qualifications to supply materials of this section by certifying the following:
				1. Air Barrier Manufacturer must not issue warranties for terms longer than they have been manufacturing and supplying specified products for similar scope of Work.
		3. Installer Qualifications:
			1. Perform Work in accordance with the Air Barrier Manufacturer’s published literature and as specified in this section.
			2. Maintain one (1) copy of the Air Barrier Manufacturer’s installation 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 the Air Barrier Manufacturer during project construction, contact the Air Barrier Manufacturer a minimum of two weeks prior to schedule meeting.

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SPEC NOTE: Mock-ups establish quality of work and is recommended where practical. Projects not referencing Mock-Ups delete Section “1.09” as stated below.

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* 1. MOCK-UPS
		1. Mock-ups: Construct mock-ups to verify selections made under submittals and to set quality standards for materials and execution in accordance with Section [project specific] for mock-ups and as follows:
			1. Where directed by [engineer] [architect] [consultant], construct typical exterior wall section, six and one-half (6.5) feet by six and one-half (6.5) feet, incorporating [project specific], substrate materials, and adjacent materials including flashing, door frame, window frame, attachment of insulation and [project specific]; showing vapor permeable water resistive air barrier application details.
		2. Notify [engineer] [architect] [consultant] a minimum seven (7) days prior to mock-up construction.
		3. Review and acceptance of mock-ups does not constitute approval of deviations from the Contract Documents contained in mock-ups unless [engineer] [architect] [consultant] specifically notes such deviations in writing.
		4. Once reviewed by [engineer] [architect] [consultant], acceptable mock-up can form a permanent part of the Work, and will form the basis for acceptance for the remainder of the project.
		5. Remove and replace materials found unacceptable at no additional cost to Owner.
	2. DELIVERY, STORAGE, AND HANDLING
		1. 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.
		2. Storage of Materials:
			1. Store materials as recommended by the Air Barrier Manufacturer and conforming to applicable safety regulatory agencies. Refer to all applicable data including, but not limited to, SDS information, Product Data sheets, product labels, and specific instructions for personal protection.
			2. Keep solvents away from open flame or excessive heat.
			3. Store materials in original packaging.
			4. Protect rolls from direct sunlight until ready for use.
			5. Refer to Air Barrier Manufacturer’s published literature.
		3. Handling:
			1. Refer to Air Barrier Manufacturer’s published literature.
	3. SITE CONDITIONS
		1. Environmental Requirements:
			1. No Work shall be performed during rain or inclement weather.
			2. No Work shall be performed on frost covered or wet surfaces.
		2. Protection:
			1. It is the responsibility of the installing Subcontractor to protect all surfaces not included in scope of Work from overspray including, but not limited to, windows, doors, adjacent areas, and vehicles.
			2. Cap and protect exposed back-up walls against wet weather conditions during and after application of membrane.
		3. Ensure all preparation Work is completed prior to installing air barrier.
		4. All equipment shall be grounded during operations.
	4. WARRANTY

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SPEC NOTE: Henry® offers multiple warranty configurations for Air-Bloc® 16MR Air and Vapor Barrier. Choose from the following and delete sections not applicable to the project specific specification.

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* + 1. Manufacturer's Single Source Warranty; choose from the following:
			1. Product Warranty:
				1. Manufacturer must warrant the material against product defect for a period of one (1) year from date of purchase.
			2. Assembly Warranty:
				1. Manufacturer must warrant the assembly against product defect for a period of ten (10) years from the date of substantial completion.
1. **PRODUCTS**
	1. MANUFACTURERS
		1. Air Barrier and auxiliary materials must be obtained as a single-source from the Air Barrier Manufacturer to ensure total system compatibility and integrity.
		2. Acceptable Manufacturers:
			1. Henry® Company

999 N. Sepulveda Blvd. Suite 800

El Segundo, CA 90245

(800) 486-1278

[www.henry.com](http://www.henry.com)

* 1. MATERIALS
		1. Primary Fluid-Applied, Air and Vapor Barrier (Basis of Design):
			1. Fluid-applied vapor impermeable air and water barrier consisting of a single component water-based elastomeric formulation that cures to a tough monolithic rubber-like membrane; having the following typical physical properties:
				1. Basis of Design: Henry® Air-Bloc® 16MR Air and Vapor Barrier
				2. Color: Gray
				3. Water Vapor Permeance (ASTM E96 Method A): 0.03 perms
				4. Air Leakage of Air Barrier Assemblies (ASTM E2357): Pass
				5. Air Permeance (ASTM E2178): Pass
				6. Elongation (ASTM D412): 270%
				7. Tensile Strength (ASTM D412): 100 psi (689 kPa)
				8. Surface Burning Characteristics (ASTM E84):

Flame Spread: Class A

Smoke Development: Class A

* + - * 1. Minimum Application Temperature: 20 degrees F (-6 degrees C)
				2. Water Penetration Resistance Around Nails (ASTM D1970): Pass
				3. Maximum VOC: 68 g/l
		1. Assembly Auxiliary Materials:

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

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* + - 1. Adhesives/Primers:
				1. Standard VOC adhesive:

Synthetic rubber based quick setting adhesive; having the following typical physical properties:

Basis of design: Henry® Blueskin® Adhesive

Color: Blue

Maximum VOC: 450 g/L

Drying time (initial set): 30 minutes

Low Application Temperature: 10 degrees ºF (-12 degrees ºC)

* + - * 1. Low VOC adhesive:

Synthetic rubber based quick setting adhesive with low VOC content; having the following typical physical properties:

Basis of design: Henry® Blueskin® LVC Adhesive

Color: Blue

Maximum VOC: <240 g/L

Drying time (initial set): 30 minutes

Low Application Temperature: 10 degrees F (-12 degrees C)

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SPEC NOTE: Henry® Blueskin® Spray Prep Adhesive is recommended for use with Henry® Air-Bloc® LF Liquid-Applied Flashing over raw gypsum sheathing edges. Projects not utilizing Henry® Air-Bloc® LF Liquid-Applied Flashing delete Section “2.02.B.1.c” as stated below and coordinate with Section “3.03.C Application of flashing”.

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* + - * 1. Aerosol spray adhesive:

Quick drying spray adhesive used to prepare construction surfaces for the application of flashings; having the following typical physical properties:

Basis of design: Henry® Blueskin® Spray Prep Adhesive

Color: Clear amber

Solids by weight: 35%

Drying time (initial set): 3 minutes

Low Application Temperature: -10 degrees F (-23 degrees C)

* + - * 1. Quick setting primers:

Synthetic rubber based quick setting adhesive with low VOC content; having the following typical physical properties:

Basis of design: Henry® Blueskin® LVC Spray Primer

Color: Blue

Maximum VOC: 250 g/L

Dry time: 1-3 minutes

Low Application Temperature: 40 degrees F (4.4 degrees C)

Polymer emulsion water based quick setting adhesive with low VOC content; having the following typical physical properties:

Basis of design: Henry® Aquatac™ Primer

Color: Aqua

Maximum VOC: 50 g/L

Drying time (initial set): 30 minutes

Low Application Temperature: 25 degrees F (-4 degrees C)

* + - 1. Liquid-Applied Flashing:
				1. Moisture-curing single component elastomeric liquid-applied flashing using a highly advanced Silyl-Terminated Polyether (STPE) polymer curing to a monolithic membrane; having the following typical physical properties:

Basis of design: Henry® Air-Bloc® LF Liquid-Applied Flashing

Color: Blue

Air Permeance (ASTM E2178): Pass

Water Vapor Permeance (ASTM E96): 21.8 perms @ 25 mils

Air Leakage of Air Barrier Assemblies (ASTM E2357): Pass

Water Resistance (AC212/ASTM D2247): Pass

Nail Sealability (AAMA 711): Pass

Surface Burning Characteristics (ASTM E84):

Flame Spread: Class A

Smoke Development: Class A

Elongation (D412): 264%

Low Application Temperature: 20 degrees F (-7 degrees C)

* + - 1. Self-Adhered Flashing:
				1. Non-vapor permeable, self-adhered water resistive air and vapor barrier consisting of a synthetic butyl compound integrally laminated to a white engineered polypropylene film surface; having the following typical physical properties:

Basis of design: Henry® Blueskin® Butyl Flash

Color: White

Thickness: 14 mils (0.36 mm)

Water Vapor Permeance (ASTM E96): 0.14 perms

Nail Sealability (ASTM D1970): Pass

Elongation (ASTM D412): 825% minimum

Low Application Temperature: 25 degrees F (-4 degrees C)

* + - * 1. Non-vapor permeable, self-adhered water resistive air and vapor barrier consisting of an SBS rubberized asphalt compound integrally laminated to a high strength polyethylene with surface layer of metallic aluminum film; having the following typical physical properties:

Basis of design: Henry® Metal Clad® Self-Adhered Water Resistive Air Barrier

Color: Metallic Aluminum

Thickness: 45 mils (1.14 mm)

Water Vapor Permeance (ASTM E96): 0.014 perms

Nail Sealability (ASTM D1970): Pass

Elongation (ASTM D412): 85%

Low Application Temperature: 20 degrees F (-7 degrees C)

* + - * 1. Non-vapor permeable, self-adhered water resistive air and vapor barrier consisting of an SBS rubberized asphalt compound integrally laminated to a blue engineered thermoplastic film surface; having the following typical physical properties:

Basis of design: Henry® Blueskin® SA Self-Adhered Water Resistive Air Barrier

Color: Blue

Thickness: 40 mils (1 mm)

Water Vapor Permeance (ASTM E96): 0.86 perms

Nail Sealability (ASTM D1970): Pass

Elongation (ASTM D412-modified): 200% minimum

Low Application Temperature: 41 degrees F (5 degrees C)

* + - * 1. Low temperature non-vapor permeable, self-adhered water resistive air and vapor barrier consisting of an SBS rubberized asphalt compound integrally laminated to a blue engineered thermoplastic film surface; having the following typical physical properties:

Basis of Design: Henry® Blueskin® SA LT Low Temp Self-Adhered Water Resistive Air Barrier

Color: Blue

Thickness: 40 mils (1 mm)

Water Vapor Permeance (ASTM E96): 0.86 perms

Nail Sealability (ASTM D1970): Pass

Elongation (ASTM D412-modified): 200% minimum

Low Application Temperature: 10 degrees F (-12 degrees C)

* + - 1. Sealants:
				1. Building Envelope Sealant:

Moisture cure, medium modulus polymer modified sealing compound; having the following typical physical properties:

Basis of design: Henry® 925 BES Sealant

Color: Varies

Elongation: 450 – 550%.

* + - * 1. Termination Sealant:

Sealing compound; having the following typical physical properties:

Basis of Design: Henry® Polybitume® 570-05

Color: Black

* + - 1. Joint Treatment Mesh:
				1. Open weave glass fabric yarn saturated with synthetic resins, having the following typical physical properties:

Basis of Design: Henry® 183 Repair Fabric Yellow Fiberglass

* + 1. Additional Materials:
			1. Through-Wall Flashing:
				1. Non-vapor permeable self-adhered through-wall flashing consisting of an SBS rubberized asphalt compound integrally laminated to a yellow engineered thermoplastic film surface; having the following typical physical properties:

Basis of design: Henry® Blueskin® TWF Thru-Wall Flashing

Color: Yellow

Thickness: 40 mils (1.0 mm)

Water Vapor Permeance (ASTM E96): 0.03 perms

High Temperature Stability - Flow Resistance (ASTM D5147): Pass

Low Application Temperature: 20 degrees F (-7 degrees C)

* + - 1. Insulation Adhesive:
				1. Trowel grade solvent-type, synthetic rubber-based insulation contact adhesive; having the following typical physical properties:

Basis of Design: Henry® Air-Bloc® 21 Air and Vapor Barrier & Insulation Adhesive

Color: Cream

Water Vapor Permeance (ASTM E96): 0.03 perms

Maximum VOC: < 250 g/L

1. **EXECUTION**
	1. EXAMINATION
		1. Verification of Conditions:
			1. Verify substrates to receive Work and surrounding adjacent surfaces are in accordance with Air Barrier Manufacturer published literature prior to installation of self-adhered air barrier assembly.
			2. Existing substrate must be continuous and secured prior to application of air barrier.
			3. Sheathing panels must be securely fastened and installed flush to ensure a continuous substrate in accordance with Air Barrier Manufacturer published literature.
			4. Fastener penetrations must be set flush with sheathing and fastened into solid backing.
			5. Strike masonry joints flush.
			6. Concrete surfaces shall be smooth and without large voids, spalled areas or sharp protrusions.
			7. New concrete should be cured for a minimum of sixteen (16) hours days after forms are removed.
			8. Curing compounds or release agents used in concrete construction must be resin based without oil, wax or pigments.
			9. Do not install air barrier over saturated substrates.
		2. Notify Contractor in writing of any conditions that are not acceptable.
		3. 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’s acceptance of the substrate.
		4. Do not apply air barrier until substrate and environmental conditions are in accordance with Air Barrier Manufacturer’s published literature.
	2. PREPARATION
		1. All surfaces must be sound, dry, clean, and free of oil, grease, dirt, excess mortar, frost, laitance, loose and flaking particles, or other contaminants.
		2. Protect adjacent surfaces not included in scope of Work to prevent spillage and overspray.
		3. Cap and protect exposed back-up walls against wet weather conditions during and after application of membrane.
		4. 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:
				1. Apply a thin prime coat of air barrier to substrate.
				2. Allow air barrier to fully cure prior to subsequent application.
				3. Install air barrier to Air Barrier Manufacturer minimum recommended mil thickness.
			2. Two coat:
				1. Apply air barrier to achieve one-half (1/2) of Air Barrier Manufacturer minimum recommended mil thickness.
				2. Allow air barrier to fully cure prior to subsequent application.
				3. Apply air barrier to achieve one-half (1/2) of Air Barrier Manufacturer minimum recommended mil thickness.
				4. Overall dry mil thickness shall be in accordance with Air Barrier Air Barrier Manufacturer published literature.
	3. INSTALLATION
		1. Ensure substrate is ready to receive air barrier in accordance with Air Barrier Manufacturer’s published literature.
		2. Temperature limitation:
			1. Primary air barrier:
				1. Substrate temperature must be above 20 degrees F (-6 degrees C) and rising.
			2. Auxiliary products:
				1. Temperature limitations may vary. Refer to Air Barrier Manufacturer published literature.
		3. Application of flashing:

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SPEC NOTE: Installation of Henry® Blueskin® Butyl Flash typically does not require adhesive/primer when installed on dry and clean, non-cementitious substrates where temperature applications are greater than 25 degrees F (-4 degrees C). For concrete and masonry substrates or where adhesion is less than desired use Henry® Blueskin® Spray Prep Adhesive or Henry® Aquatac™ Primer.

SPEC NOTE: Installation of Henry® self-adhered membranes typically do not require adhesive/primer when installed over wood substrates.

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* + - 1. Self-adhered flashing:
				1. Where required install adhesive/primer recommended by Air Barrier Manufacturer continuously at rate recommended ensuring complete substrate coverage of anticipated flashing installation area.

Allow adhesive/primer to cure to a tacky film prior to application of flashing.

Only apply adhesive/primer to surfaces which will be covered during the same working day. Primed areas not covered by end of day must be re-primed prior to installation of flashing.

* + - * 1. Measure and cut self-adhered flashing to ensure adequate length to achieve continuous coverage of desired installation.
				2. Peel protective film from leading edge of self-adhered flashing and align top of membrane verifying proper positioning prior to complete film removal and flashing placement.
				3. Press self-adhered flashing firmly into place by applying hand pressure to the middle of the membrane and working the pressure to the edges eliminating wrinkles and air bubbles.
				4. Install self-adhered flashings in shingle fashion to eliminate reverse laps.
				5. Where required, prime laps at rate recommended by air barrier manufacture to ensure complete coverage of anticipated lap installation.
				6. Lap adjoining edges a minimum of two (2) inches.
				7. Roll flashing and laps with countertop roller to obtain thorough adhesion.
				8. Seal end of day exposed leading edges of self-adhered flashing with building envelope sealant.

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SPEC NOTE: Henry® Air-Bloc® LF Liquid-Applied Flashing only requires aerosol spray adhesive at raw gypsum sheathing edges. Projects not utilizing Henry® Air-Bloc® LF Liquid-Applied Flashing or substrates other than gypsum sheathing modify Section “3.03.C Application of flashing” and coordinate with Section “2.02 Materials”.

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* + - 1. Liquid-applied flashing:
				1. Apply a uniform film of aerosol spray adhesive to raw edges of gypsum sheathing at rate recommended by air barrier manufacturer to completely encapsulate cut edge of gypsum sheathing.
				2. Allow adhesive to cure to a tacky film prior to application of liquid-applied flashing.
				3. Apply flashing in accordance with and at rate recommended by air barrier manufacturer.
				4. Spread flashing to achieve a monolithic membrane over substrate requiring flashing.
				5. Allow flashing to cure prior to subsequent installations.

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SPEC NOTE: All assembly detailing is to be completed prior to the placement of Henry® Air-Bloc® 16MR Air and Vapor Barrier unless noted otherwise and as deemed appropriate by Henry® published literature. Refer to Henry® details to verify sequence of construction.

SPEC NOTE: Review and coordinate with specific window manufacturer’s instructions prior to waterproofing window openings. Resolve any conflicts in the specifications, local codes, sequencing, materials or techniques between window manufacturer’s instructions and this Section prior to construction.

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* + 1. Detailing/Flashing:
			1. Complete detailing and flashing installations per Air Barrier Manufacturer’s published literature.
			2. Refer to Air Barrier Manufacturer guide details for further clarification and installation procedures including, but not limited to, the following:
				1. Inside corners
				2. Outside corners
				3. Pipe penetrations
				4. Shelf angles
				5. Wall to foundation transitions
				6. Rough openings:

Install rough opening details per Window Manufacturer’s published literature and in accordance with ASTM E2112.

Wall assemblies containing a vapor retarder on the interior wall assembly:

Extend flashing into rough opening to ensure sufficient membrane for connection with vapor retarder and provide a continuous air barrier assembly.

* + - 1. Reverse laps:
				1. Seal permanently exposed leading edges with sealant:

Building envelope sealant

Termination sealant

Liquid flashing

* + - 1. Moving Joints:
				1. Contact Air Barrier Manufacturer.
			2. Transitions:
				1. Contact Air Barrier Manufacturer to coordinate transition of self-adhered air barrier to adjacent areas including, but not limited to, the following:

Roof to air barrier

Air barrier to waterproofing

Fastener penetrations

* + 1. Thru-Wall Flashing:
			1. Coordinate with Section [project specific].
		2. Application of Primary Fluid-Applied, Air and Vapor Barrier:
			1. Apply air barrier in continuous, monolithic application without sags, runs, or voids, transitioning onto flashing membrane and overlapping one (1) inch, to create uniform drainage plane and air barrier.
			2. Install air barrier so that subsequent membrane installation laps one (1) inch onto flashing ensuring an air and air barrier assembly.
			3. Allow air barrier to fully cure prior to placement of insulation.
			4. Total dry film thickness (DFT):
				1. Coverage rates may vary due to surface texture or porosity. Refer to Air Barrier Manufacturer Technical Data Sheet for recommended coverage rates.

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SPEC NOTE: THERMAL SHORT CIRCUITING - To reduce heat loss and restrict air convection between the air barrier and insulating materials, secure the insulation in place with an insulation adhesive applied in a serpentine pattern and butter the joints of the insulation panels. Coordinate this specification with the Cavity Wall Insulation Section.

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* + 1. Insulation Adhesive (Optional):
			1. Coordinate with Section [project specific] for insulating materials.
			2. Upon curing of the air barrier 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.
		2. Fastener Penetrations Through Primary Air Barrier:
			1. It is the responsibility of the installer penetrating the air barrier assembly to properly install fasteners and components in accordance with the Air Barrier Manufacturer’s published literature.
			2. Installation requirements:
				1. Drill fasteners and components with sufficient compression to maintain continuity in the air barrier assembly.
				2. Refer to “Self-tapping fasteners” and/or “Pre-drilled fasteners”.
			3. Supplemental sealant:
				1. Penetrations that do not meet installation requirements require the addition of sealant at point of insertion through the air barrier membrane to maintain continuity in the air barrier assembly.
			4. Self-tapping fasteners:
				1. Fastener head must be larger in diameter than the shank.
				2. Drill fasteners perpendicular to the substrate until flush with the air barrier.
				3. Drill fasteners to provide a continuous compression firmly against the air barrier membrane creating a gasketing seal without damaging the membrane.
				4. Do not install fasteners through air barrier over unsupported areas of the substrate such as sheathing joints.
				5. Overdriven fasteners, improperly installed fasteners, defective/broken fasteners, or fasteners not properly fastened into the building structure beyond the air barrier membrane should be removed and the vacated hole sealed with sealant prior to the installation of the cladding or veneer system.
			5. Pre-drilled fastening assemblies:
				1. Fastening head or assembly component must be larger in diameter than predrilled hole.
				2. Fastening head or assembly component must be mounted flush with the air barrier.
				3. Fastening head or assembly component must provide a continuous compression firmly against the air barrier creating a gasketing seal without damaging the integrity of the air barrier.
				4. Do not install fastening components through air barrier over unsupported areas of the substrate such as sheathing joints.
				5. Seal improperly drilled and/or vacated holes with sealant prior to the installation of the cladding or veneer system.
	1. FIELD QUALITY CONTROL
		1. Damage to surface by other trades shall not be the responsibility of the installing Subcontractor.
		2. Final Observation and Verification:
			1. Final inspection of 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.
		3. Air barrier assembly is not designed for permanent UV exposure. Refer to Air Barrier Manufacturer published literature for product limitations.
	2. CLEANING
		1. 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.
		2. Clean soiled surfaces, spatters, and damage caused by Work of this Section.
		3. Check area to ensure cleanliness and remove debris, equipment, and excess material from the site.

END OF SECTION