#### EFFECTIVE NOVEMBER 29, 2021 AND SUPERSEDES ALL PREVIOUS VERSIONS.

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<u>SPEC NOTE:</u> **Henry**<sup>®</sup> **Blueskin**<sup>®</sup> **VP100 Self-Adhered Water Resistive Air Barrier.** This specification is ideally suited for buildings installing a self-adhered water resistive barrier (WRB) in accordance with the WRB requirements of the International Building Code (IBC). 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 a reference for the recommended installation procedures of the products/assembly described. 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 to set a minimum standard of performance for specified products/assembly on a project specific basis. Update "[project specific]" notes and coordinate as required.

# SECTION 07 25 00 WEATHER BARRIERS

## **PART 1 - GENERAL**

## 1.1. SUMMARY

- A. This Section includes requirements for supplying labor, materials, tools, and equipment to complete the Work as shown on the architectural drawings and as specified.
  - 1. Adhesive/Primer
  - 2. Self-Adhered Water Resistive Air Barrier
  - 3. Flashing
  - 4. Sealant

# 1.2. RELATED REQUIREMENTS

- A. DIVISION 04 Masonry Section 04 20 00 Unit Masonry
- B. DIVISION 06 Wood, Plastics, and Composites Section 06 16 00 Sheathing
- C. DIVISION 07 Thermal and Moisture Protection Section 07 21 00 Thermal Insulation
- D. DIVISION 07 Thermal and Moisture Protection Section 07 26 00 Vapor Retarders
- E. DIVISION 08 Openings Section 08 40 00 Entrances, Storefronts, and Curtain Walls

#### 1.3. ALTERNATES

- A. Submit requests for alternates to this specification in accordance with Section [project specific] Submittal Procedures.
- B. Materials must meet the following criteria:
  - 1. Complies with the ICC-ES Acceptance Criteria for Water Resistive Barriers (AC 38)
  - 2. Drainage efficiency >95% (ASTM E2273): pass
  - 3. Surface Burning Characteristics (ASTM E84):
    - a. Flame Spread Index: Class A
  - 4. Water penetration resistance around nails (AAMA 711): pass
- C. Alternate submission format to include:
  - 1. References indicating the Water Resistive Manufacturer has successfully completed projects of similar scope and nature on an annual basis for a minimum of ten (10) years.

- 2. Product Data:
  - a. Water Resistive Barrier Manufacturer's guide specification
  - b. Water Resistive Barrier Manufacturer's technical data sheets
  - e. Water Resistive Barrier Manufacturer's details
- 3. Evaluation report:
  - a. ICC-ES evaluation report
- 4. Sample warranty

#### 1.4. REFERENCES

- A. American Architectural Manufacturers Association (AAMA):
  - AAMA 711- Voluntary Specification for Self-Adhering Flashing Used for Installation of Exterior Wall Fenestration Products
- B. American Society for Testing and Materials (ASTM):
  - ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
  - 2. ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials
  - 3. ASTM E2178 Standard Test Method for Air Permeance of Building Materials
  - 4. ASTM E2273 Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies
- C. International Code Council Evaluation Services (ICC-ES):
  - 1. ICC-ES AC-38 Water-Resistive Barriers

# 1.5. ADMINISTRATIVE REQUIREMENTS

- A. Pre-installation meetings:
  - 1. Review and discuss project conditions as it relates to the integrity of the assembly.

# 1.6. SUBMITTALS

- A. Provide the action submittals in accordance with Section [project specific] Submittal Procedures.
- B. Action submittals:
  - 1. Product data:
    - a. Water Resistive Barrier Manufacturer's guide specification
    - b. Water Resistive Barrier Manufacturer's technical data sheets
    - c. Water Resistive Barrier Manufacturer's details
  - 2. Evaluation report:
    - a. ICC-ES evaluation report
  - 3. Sample warranty

# 1.7. QUALITY ASSURANCE

- A. Single source responsibility:
  - 1. Obtain water resistive barrier and auxiliary materials from a single Water Resistive Barrier Manufacturer regularly engaged in the manufacturing and supply of the specified products.
  - 2. Verify product compliance with federal, state, and local regulations.
- B. Manufacturer qualifications:
  - 1. Water Resistive 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 Water Resistive Barrier Manufacturer published literature and as specified in this section.
  - 2. Maintain one (1) copy of Water Resistive Barrier Manufacturer's installation instructions on site.

- 3. Allow Water Resistive Barrier Manufacturer representative site access during installation.
- 4. Contact the Water Resistive Barrier Manufacturer two weeks prior to scheduling a meeting.

<u>SPEC NOTE</u>: Create mock-up to establish quality of work where practical. Delete the following paragraph if the scope of work in this Section is minimal and a mock-up is not required.

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## 1.8. MOCK-UPS

A. Construct a 6'-0" x 6'-0" (2 m x 2 m) mock-up as specified in this Section to verify assembly and accessory components, and to set quality standards in accordance with Section [project specific].

## 1.9. DELIVERY, STORAGE, AND HANDLING

- A. Delivery of materials:
  - Deliver materials to the jobsite in undamaged and clearly marked containers and/or wrapping indicating the name of the Water Resistive Barrier Manufacturer and product.
- B. Storage of materials:
  - 1. Store materials per product specific technical data sheet.
  - 2. Conform to applicable safety regulatory agencies.
  - 3. Keep solvents away from open flame or excessive heat.
- C. Handling:
  - 1. Refer to product specific Safety Data Sheet.

## 1.10. SITE CONDITIONS

- A. Environmental requirements:
  - 1. Do not perform Work during rain or inclement weather.
  - 2. Do not perform Work on frost covered substrates or surfaces that are wet to touch.
  - 3. Refer to product specific technical data sheet.
- B. Protection:
  - 1. It is the responsibility of the installing subcontractor to protect all surfaces not included in scope of Work from damage.
- C. Complete preparation Work prior to installing the water resistive barrier assembly

## 1.11. WARRANTY

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<u>SPEC NOTE:</u> Henry<sup>®</sup> Company offers two (2) warranty configurations. Select one (1) of the following warranty terms and desired warranty durations. Delete sections not applicable to project specific conditions.

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- A. Single source warranty:
  - 1. Installing Subcontractor Warranty:
    - a. Installing subcontractor must warrant the system and installation. Provide material and labor costs for repair for a period of two years from the date of installation completion as a result of any of the following:
      - 1. Faulty workmanship
  - 2. Manufacturer's single source warranty:
    - a. Material warranty:
      - 1. Manufacturer must warrant the material against product defect for a period of one (1) year from date of purchase.
    - b. Moisture Control System Warranty:

- 1. Manufacturer must warrant the system. Provide material and labor costs for repair for a period of fifteen (15) years from the date of purchase as a result of any of the following:
  - a. Manufacturing product defect

## **PART 2 - PRODUCTS**

#### 2.01. MANUFACTURERS

- A. Acceptable manufacturers:
  - Henry Company 999 N. Pacific Coast Highway, Suite 800 El Segundo, CA 90245 (800) 486-1278 www.Henry.com

## 2.02. MATERIALS

- A. Obtain water resistive barrier and auxiliary materials as a single-source system from the Water Resistive Barrier Manufacturer to ensure compatibility and compliance with the following requirements:
  - 1. Complies with the ICC-ES Acceptance Criteria for Water Resistive Barriers (AC 38)
  - 2. Drainage efficiency >95% (ASTM E2273): pass
  - 3. Surface Burning Characteristics (ASTM E84):
    - a. Flame Spread Index: Class A
  - 4. Water penetration resistance around nails (AAMA 711): pass
- B. Self-adhered water resistive barrier (Basis of Design):
  - 1. Self-adhered vapor permeable, water-resistive air barrier membrane consisting of an engineered film and a patented, permeable adhesive technology with split-back poly-release film, having the following properties:
    - a. Basis of Design: Henry® Blueskin® VP100
    - b. Color: Blue
    - c. Air Permeance (ASTM E2178): 0.02 L/m<sup>2</sup>
    - d. Permeability (ASTM E96): 33 perms
    - e. Complies with the ICC-ES Acceptance Criteria for Water Resistive Barriers (AC 38)
    - f. Drainage efficiency >95% (ASTM E2273): pass
    - g. Surface Burning Characteristics (ASTM E84):
      - 1. Flame Spread Index: Class A
  - h. Water penetration resistance around nails (AAMA 711): pass

project specific requirements.

- C. Assembly auxiliary materials:
  - 1. Primer:
    - a. Polymer emulsion water based quick setting primer with low VOC content:
      - 1. Basis of design: Henry® Aquatac™ Primer
  - 2. Flashing:
    - a. Self-adhered butyl flashing integrally laminated to a white engineered poly film surface:
      - 1. Basis of design: Henry® FortiFlash® Butyl
  - 3. Sealants:
    - a. Moisture cure sealant:
      - 1. One component, moisture curing, non-sag, gun-grade elastomeric polymer:

- a. Basis of design: Henry® Moistop® Sealant
- b. Termination sealant:
  - 1. One-part high performance synthetic rubber sealant:
    - a. Basis of design: Henry® 212 All Purpose Sealant

## **PART 3 - EXECUTION**

#### 3.01. EXAMINATION

- A. It is the installing subcontractor's responsibility to verify the substrate is in accordance with Water Resistive Barrier Manufacturer requirements and as specified in this Section prior to installation of water resistive barrier. Commencement of the Work indicates installer acceptance of the substrate.
  - 1. Verify surfaces are sound, clean and free of frost, oil, grease, dirt, excess mortar or other contaminants.
  - 2. Substrate must be continuous and secure, and free of projections and irregularities that may be detrimental to membrane installation.
  - 3. Sheathing fasteners must be installed into solid backing and set flush with sheathing.
  - 4. Do not install air barrier over substrates that are wet to touch.
- B. Notify contractor in writing of any conditions that are not acceptable.
- C. Do not apply water resistive barrier assembly components until substrate and environmental conditions are in accordance with Water Resistive Barrier Manufacturer's published literature.

## 3.02. PREPARATION

- A. Verify surfaces are in accordance with the product specific technical data sheet and as stated in this specification.
- B. Protection:
  - Protect top and backside of substrate walls against bulk water during and after application of air barrier.

## 3.03. INSTALLATION

- A. Environmental requirements:
  - 1. Do not perform Work during rain or inclement weather.
  - 2. Do not perform Work on frost covered or wet substrates.
  - 3. Refer to product specific technical data sheet.
- B. Refer to Water Resistive Barrier Manufacturer detail drawings for installation procedures.
- C. Thru-wall flashing:
  - 1. Coordinate with Section [project specific].

SPEC NOTE: Henry Aquatac Primer is required for installations less than 40 °F (4 °C), and where extreme environmental conditions or extended UV exposure is anticipated.

- D. Primary water resistive barrier
  - 1. Where required, install adhesive/primer continuously and at a rate recommended by Water Resistive Barrier Manufacturer.
    - Allow adhesive/primer to cure to a tacky film prior to application of water resistive barrier.

- b. 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 water resistive barrier.
- 2. Peel protective film from water resistive barrier and align top of membrane, verifying proper positioning, prior to complete film removal and placement.
- 3. Press water resistive barrier 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 water resistive barrier in shingle fashion to eliminate reverse laps.
- 5. Where lap adhesion is less than desired, secure lap with adhesive as recommended by the Water Resistive Barrier Manufacturer.
  - Allow adhesive to cure to a tacky film prior to subsequent air barrier installation.
- 6. Lap adjoining edges:
  - Horizontal seams: two (2) inch minimum.
  - Vertical seams: three (3) inch minimum. b.
- Roll water resistive barrier and laps with countertop roller to obtain thorough adhesion. 7.
- 8. Seal permanently exposed reverse laps of water resistive barrier with termination sealant.

SPEC NOTE: Henry requires special consideration detailing where Blueskin VP100 is subject to extreme weather conditions and bulk water within a completed wall assembly. Contact Henry for further clarification.

#### E. **Special Considerations:**

- Contact Air Barrier Manufacturer to verify product and installation requirements.
- 2. Wall assemblies identified as special conditions and requiring supplemental detailing may include, but are not limited to, any of the following:
  - Panelized wall assemblies.
  - Sloped wall assemblies. b.
  - Open rain screen cladding systems permitting permanent direct exposure to bulk c. water onto the air barrier within a completed wall assembly.
  - Claddings impeding drainage and/or promoting hydrostatic pressure: d.
    - Horizontal Z-girts or furring strips installed directly onto air barrier in a manner to encourage water collection.

#### 3.04. FIELD QUALITY CONTROL

- A. Final observation and verification:
  - [Architect] [Consultant] [General Contractor] to complete final observation of water resistive barrier assembly.

#### **CLEANING** 3.05.

A. As the Work proceeds, and upon completion, promptly clean up and remove from the premises all rubbish and surplus materials resulting from the foregoing Work.

END OF SECTION