EFFECTIVE MARCH 8, 2017 AND SUPERSEDES ALL PREVIOUS VERSIONS.

<u>SPEC NOTE:</u> **Henry**[®] **Blueskin**[®] **TWF Self-Adhered Thru-Wall Flashing.** This specification is ideally suited for cavity wall construction requiring a self-adhering thru-wall sheet flashing. 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.

<u>SPEC NOTE</u>: 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.

<u>SPEC NOTE</u>: 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.

<u>SPEC NOTE</u>: Delete "SPEC NOTE" sections in the final copy of the specification.

SECTION 07 65 26 SELF-ADHERING SHEET FLASHING

PART 1 - GENERAL

1.01. 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 installing Subcontractor the extent of their Work.

1.02. 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. Adhesive/Primer
 - 2. Thru-Wall Flashing
 - 3. Sealant

<u>SPEC NOTE:</u> 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.

1.03. RELATED REQUIREMENTS

A. DIVISION 03 – Section 03 40 00 – Precast Concrete

- B. DIVISION 04 Section 04 20 00 Unit Masonry
- C. DIVISION 05 Section 05 50 00 Metal Fabrications
- D. DIVISION 06 Section 06 16 00 Sheathing
- E. DIVISION 07 Section 07 10 00 Dampproofing and Waterproofing

SPEC NOTE: Confirm sealant and air barrier assembly compatibility and/or single source warranty:

1. Contact product manufacturers and coordinate this section with Air Barriers Section 07 27 00.

2. Contact product manufacturers and coordinate this section with joint sealant Section 07 92 00.

- F. DIVISION 07 Section 07 27 00 Air Barriers
- G. DIVISION 07 Section 07 92 00 Joint Sealants

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

1.04. ALTERNATES

- A. Submit requests for alternates in accordance with Section [project specific].
- B. 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 Self-Adhering Sheet Flashing Manufacturer has successfully completed projects of similar scope and nature on an annual basis for a minimum of ten (10) years.
 - 3. Self-Adhering Sheet Flashing Manufacturer's guide specification.
 - 4. Self-Adhering Sheet Flashing Manufacturer's complete set of technical data sheets for assembly.
 - 5. Product certification confirming assembly components are supplied and warranted by a single source Self-Adhering Sheet Flashing Manufacturer.
 - 6. LEED HPD declaration
 - 7. Sample warranty as specified.
- C. 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.
- D. 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.

1.05. REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension
 - 2. ASTM D570 Standard Test Method for Water Absorption of Plastics
 - 3. ASTM D882 Standard Test Method for Tensile Properties of Thin Plastic Sheeting

- 4. ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials
- 5. ASTM E154 Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover
- B. US Green Building Council (USGBC), Leadership in Energy and Environmental Design (LEED)

1.06. ADMINISTRATIVE REQUIREMENTS

- A. Pre-installation meetings:
 - 1. When required, and with prior notice, an Self-Adhering Sheet Flashing 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.

1.07. SUBMITTALS

- A. Provide the following requested information in accordance with Section [project specific] Submittal Procedures.
- B. Action Submittals:
 - 1. Product Data:
 - a. Self-Adhering Sheet Flashing Manufacturer's guide specification.
 - b. Self-Adhering Sheet Flashing Manufacturer's complete set of technical data sheets for assembly.
 - c. Self-Adhering Sheet Flashing Manufacturer's complete set of details for assembly.
 - 2. Certificates:
 - a. Product certification confirming assembly components are supplied and warranted by a single source Self-Adhering Sheet Flashing Manufacturer.
 - b. LEED HPD declaration
 - 3. Warranty:
 - a. Sample warranty as specified.

1.08. QUALITY ASSURANCE

- A. Single Source Responsibility:
 - 1. Obtain self-adhering sheet flashing and auxiliary materials including adhesive/primer and sealants from a single Self-Adhering Sheet Flashing 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. Self-Adhering Sheet Flashing Manufacturer shall demonstrate qualifications to supply materials of this section by certifying the following:
 - a. Self-Adhering Sheet Flashing 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 the Self-Adhering Sheet Flashing Manufacturer's published literature and as specified in this section.
 - 2. Maintain one (1) copy of the Self-Adhering Sheet Flashing Manufacturer's application instructions on site.
 - 3. At all times during the execution of the Work allow access to site by the Self-Adhering Sheet Flashing Manufacturer representative.
 - 4. If meeting with the Self-Adhering Sheet Flashing Manufacturer during project construction, contact the Self-Adhering Sheet Flashing Manufacturer a minimum of two weeks prior to schedule meeting.

1.9. 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 Self-Adhering Sheet Flashing Manufacturer and product.

B. Storage of Materials:

- 1. Store materials as recommended by the Self-Adhering Sheet Flashing 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 Self-Adhering Sheet Flashing Manufacturer's published literature.
- C. Handling:
 - 1. Refer to Self-Adhering Sheet Flashing Manufacturer's published literature.

1.10. SITE CONDITIONS

- A. 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.
- 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 self-adhering sheet flashing.
- D. All equipment shall be grounded during operations.

1.11. WARRANTY

- A. Manufacturer's Single Source Warranty:
 - 1. Manufacturer must warrant the material against product defect for a period of [one (1)] [five (5)] [ten (10)] years from date of purchase.

PART 2 - PRODUCTS

2.01. MANUFACTURERS

- A. Self-adhering sheet flashing and auxiliary materials must be obtained as a single-source from the Self-Adhering Sheet Flashing 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

2.02. MATERIALS

A. Self-Adhering Sheet 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:
 - 1. Basis of design: Henry[®] Blueskin[®] TWF Self-Adhered Thru-Wall Flashing
 - 2. Color: Yellow
 - 3. Thickness: 40 mils (1.0 mm)
 - 4. Water Vapor Permeance (ASTM E96): 0.03 perms
 - 5. High Temperature Stability Flow Resistance (ASTM D5147): Pass
 - 6. Low Application Temperature: 20 degrees F (-7 degrees C)
- B. Assembly Auxiliary Materials:

- 1. Adhesives/Primers:
 - a. Aerosol spray adhesive:
 - 1. Quick drying spray adhesive used to prepare construction surfaces for the application of flashings; having the following typical physical properties:
 - a. Basis of design: Henry® Blueskin® Spray Prep Adhesive
 - b. Color: Clear amber
 - c. Solids by weight: 35%
 - d. Drying time (initial set): 3 minutes
 - e. Low Application Temperature: -10 degrees F (-23 degrees C)
 - b. Quick setting primers:
 - 1. Synthetic rubber based quick setting adhesive with low VOC content; having the following typical physical properties:
 - a. Basis of design: Henry[®] Blueskin[®] LVC Spray Primer
 - b. Color: Blue
 - c. Maximum VOC: 250 g/L
 - d. Dry time: 1-3 minutes
 - e. Low Application Temperature: 40 degrees F (4.4 degrees C)
 - 2. Polymer emulsion water based quick setting adhesive with low VOC content; having the following typical physical properties:
 - a. Basis of design: Henry[®] Aquatac[™] Primer
 - b. Color: Aqua
 - c. Maximum VOC: 50 g/L
 - d. Drying time (initial set): 30 minutes
 - e. Low Application Temperature: 25 degrees F (-4 degrees C)
- 2. Sealants:
 - a. Building Envelope Sealant:
 - 1. Moisture cure, medium modulus polymer modified sealing compound; having the following typical physical properties:
 - a. Basis of design: Henry[®] 925 BES Sealant
 - b. Color: Varies
 - c. Elongation: 450 550%.

PART 3 - EXECUTION

3.01. EXAMINATION

- A. Verification of Conditions:
 - 1. Verify substrates to receive Work and surrounding adjacent surfaces are in accordance with Self-Adhering Sheet Flashing Manufacturer published literature prior to installation of self-adhering sheet flashing.
 - 2. Existing substrate must be continuous and secured prior to application of self-adhering sheet flashing.

- 3. Sheathing panels must be securely fastened and installed flush to ensure a continuous substrate in accordance with Self-Adhering Sheet Flashing 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 fourteen (14) 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 self-adhering sheet flashing over saturated substrates.
- 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's acceptance of the substrate.
- D. Do not apply self-adhering sheet flashing until substrate and environmental conditions are in accordance with Self-Adhering Sheet Flashing Manufacturer's published literature.

3.02. PREPARATION

- A. All surfaces must be sound, dry, clean, and free of oil, grease, dirt, excess mortar, frost, laitance, loose and flaking particles, or other contaminants.
- B. Cap and protect exposed back-up walls against wet weather conditions during and after application of membrane.

3.03. INSTALLATION

- A. Ensure substrate is ready to receive self-adhering sheet flashing in accordance with Self-Adhering Sheet Flashing Manufacturer's published literature.
- B. Temperature limitation:
 - 1. Self-adhering sheet flashing:
 - a. Substrate temperature must be above 20 degrees F (-6 degrees C) and rising.
 - 2. Auxiliary products:
 - a. Temperature limitations may vary. Refer to Self-Adhering Sheet Flashing Manufacturer published literature.
- C. Application of self-adhering sheet flashing:
 - . Where required, install adhesive/primer recommended by Self-Adhering Sheet Flashing Manufacturer continuously at rate recommended ensuring complete substrate coverage of anticipated self-adhering sheet flashing installation area.
 - a. Allow adhesive/primer to cure to a tacky film prior to application of flashing.
 - 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 flashing.
 - 2. Measure and cut self-adhering sheet flashing to ensure adequate length to achieve continuous coverage of desired installation.
 - 3. Peel protective film from self-adhering sheet flashing and align top of membrane verifying proper positioning prior to complete film removal and flashing placement.
 - 4. Press self-adhering sheet 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.

- 5. Install self-adhering sheet flashings in shingle fashion to eliminate reverse laps.
- 6. Where required, prime laps at rate recommended by Self-Adhering Sheet Flashing Manufacturer to ensure complete coverage of anticipated lap installation.
- 7. Lap adjoining edges a minimum of two (2) inches.
- 8. Roll flashing and laps with countertop roller to obtain thorough adhesion.
- 9. Seal end of day and permanently exposed reverse laps of self-adhered flashing with building envelope sealant.

3.04. FIELD QUALITY CONTROL

- A. Damage to surface by other trades shall not be the responsibility of the installing Subcontractor.
- B. Final Observation and Verification:
 - 1. Final inspection of self-adhering sheet flashing shall be carried out by the Owner's representative, the contractor, or Self-Adhering Sheet Flashing Manufacturer as required by warranty.
 - 2. Contact Self-Adhering Sheet Flashing Manufacturer for warranty issuance requirements.
- C. Self-adhering sheet flashings are not designed for permanent UV exposure. Refer to Self-Adhering Sheet Flashing Manufacturer published literature for product limitations.

3.05. 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