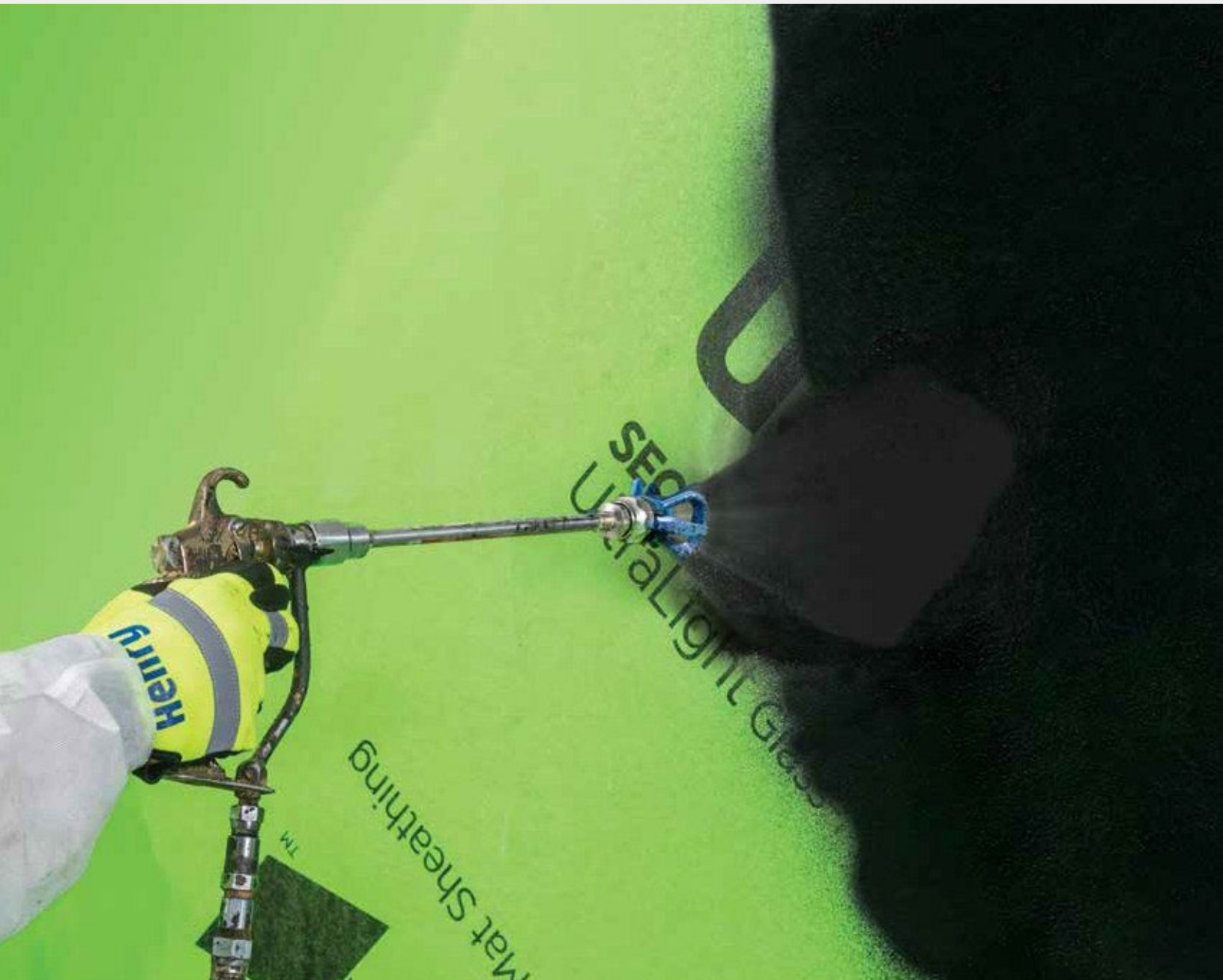


# Air-Bloc All Weather STPE®

UV Resistant, Vapor Permeable Air Barrier

## Installation Manual



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# 1. Introduction

This installation guideline includes materials and installation procedures for Henry Air-Bloc All Weather STPE®, a UV resistant, fluid-applied vapor permeable air barrier. This high-solids, moisture-cure, silane terminated polyether “STPE” product quickly attains rain wash-off resistance and can be applied to damp substrates. Air-Bloc All Weather STPE® meets and exceeds commercial air and water resistive barrier requirements for above-grade walls. Air-Bloc All Weather STPE® is integrated into the wall construction to provide an air and water resistive barrier while allowing the passage of water vapor to facilitate drying of underlying materials. Proper placement of Air-Bloc All Weather STPE® membrane within the wall assembly will provide protection against water intrusion and uncontrolled air leakage, which improves energy efficiency and longevity.

# 2. Product Descriptions

**Main Membrane:** Henry® Air-Bloc All-Weather STPE® is a high-solids, low VOC fluid-applied membrane for use in above-grade walls as an air and water resistive barrier. The product is installed to opaque wall substrates, then covered with a code-approved exterior cladding or thermal barrier. Air-Bloc All-Weather STPE® cures with ambient moisture to form a tough, monolithic rubber-like membrane. This UV-resistant, black membrane can endure one year of exposure before cladding installation and can be used behind open-joint rain screen cladding. Air-Bloc All-Weather STPE® is an excellent alternative to water-based materials where faster and more robust resistance to rain and tolerance of substrate dampness is required. Air-Bloc All-Weather STPE® is provided in 5-GAL (18.9 L) pails or 55-GAL (208 L) drums and is applied by roller, brush, or spray.

**Accessories:** Air-Bloc All-Weather STPE® works with Henry® accessory products to provide a continuous air and water resistive barrier. The main membrane and accessories comprise a system. Accessory types are self-adhered flashings, adhesives/primers, sealants, and liquid flashing.

**Self-Adhered Flashings:** These products are used in transitions, joints, openings, and terminations. They are composed of dimensionally stable, strong, flexible facers factory-laminated with adhesive. Products are provided in rolls of various sizes with a release liner which is removed to expose adhesive during installation.

Henry Self-Adhered Flashings		
Product Name	Description	Features
Blueskin® SA*	40 mil (1 mm) membrane of blue poly facer and modified asphalt adhesive. Available in 75-ft (22.9 m) rolls of 4" (10 cm), 6" (15 cm), 9" (23 cm), 12" (30 cm), 18" (45 cm), 26" (66 cm), 36" (90 cm) and 48" (120 cm) width. Install at 40°F (4°C) and above	Standard detail flashing. 90-day outdoor exposure.
Blueskin® SA LT*	Same as Blueskin® SA, but tackier adhesive for installation down to 10°F (-12°C)	Same as Blueskin® SA, but low-temp installation.
Blueskin® Metal Clad®*	40 mil (1 mm) membrane of aluminum foil surface poly facer and modified asphalt adhesive. Available in 75-ft (22.9 m) rolls of 36" (90 cm) width and 100-ft (30.5 m) rolls of 18" (45 cm), 12" (30 cm), 9" (23 cm), 6" (15 cm) and 4" (10 cm) width. Install at 40°F (4°C) and above	UV resistant detail flashing. More window silicones adhere well to facer. 1-year outdoor exposure.
Blueskin® Metal Clad® LT*	Same as Blueskin® Metal Clad, but tackier adhesive for installation down to 15°F (-12°C). Available in 75-ft (22.9 m) rolls of 36" (90 cm) width and 100-ft (30.5 m) rolls of 12" (30 cm) and 9" (23 cm) width.	Same as Blueskin® Metal Clad, but low-temp installation
Blueskin® Butyl Flash	19 mil (0.5mm) membrane of white poly facer and non-asphalt butyl adhesive. Available in 75-ft (22.9 m) rolls of 4" (10 cm), 6" (15 cm), 9" (23 cm) and 12" (30 cm) width. Install at 20°F (-7°C) and above.	Non-asphalt adhesive, can install over Air-bloc All Weather STPE. 150-day outdoor exposure. Ideal for sealing window flanges and metal counterflashing.
Blueskin® TWF*	40 mil (1 mm), yellow poly facer, modified asphalt adhesive. Available in 75-ft rolls of 12" (30 cm), 18" (45 cm), 24 (60 cm) and 36" (90 cm) width. Install at 20°F (-7°C) and above.	Designed for through-wall flashing applications in masonry veneer walls.

\*Do not install these asphalt-based flashings over Air-Bloc All Weather STPE®. Install to building substrate.

**Adhesives/Primers:** These are liquids applied to surfaces for promoting consistent, strong adhesion of Henry® self-adhered flashings. Applied by roller, brush or aerosol spray and allowed to dry before application of self-adhered flashing.

Henry Adhesives/Primers		
Product Name	Description	Features
Blueskin® Adhesive	Solvent-based contact adhesive. Not for application over Air-Bloc All-Weather STPE® or over polystyrene foam. Packaged in 4.5-GAL (17 L) pour	Quick-drying, high-tack. All-season use

	spout pails.	
<b>Blueskin® LVC Adhesive</b>	Same above but formulated with lower VOC content to meet regulations. Packaged in 4.5-GAL (17 L) pour spout, openable pails.	Same as Blueskin Adhesive, but VOC legal in more jurisdictions
<b>Aquatac™ Primer</b>	Water-based primer. Apply above 40°F (4°C) and allow ample drying time per Product Data Sheet. Packaged in 5-GAL (18.9 L) pails and 1-GAL (3.8 L) cans.	Can be applied over Air-Bloc All-Weather STPE. Low VOC and low odor. Water cleanup when wet.
<b>Blueskin® LVC Spray Primer</b>	Aerosol spray contact adhesive packaged in pressurized cylinders. 30 lb. (13.6 kg) of adhesive per cylinder. Not for application over Air-Bloc All-Weather STPE®	Fast, clean installation. Quick drying.
<b>Blueskin® Spray Prep - Aerosol</b>	Aerosol spray contact adhesive packaged in 15-oz (426 g) portable aerosol cans. Not for application over Air-Bloc All-Weather STPE®	Convenient portable cans, fast, quick-drying installation. Ideal for smaller areas.

**Sealants & Liquid Flashing:** Sealants are non-slump, high-solids moisture-cure materials for filling gaps and joints. Liquid flashings are formulated to spread evenly and hang on vertical and inverted surfaces at 40 mil (1 mm) thickness. Sealants have no exposure limit. Liquid flashings are allowed 1 year exposure. All employ moisture-cure STPE chemistry, which affords strong adhesion to many materials without primer and adhesion to damp substrates. Products are extruded through a caulking gun or applied from a bucket then tooled/troweled within open time.

Henry Sealants and Liquid Flashings		
Product	Description	Features
<b>925 BES™ Building Envelope Sealant</b>	<i>Sealant.</i> For filling joints and sealing terminations. Common uses are sealing board joints, control joints, expansion joints, membrane terminations, screw patches and hardware penetrations. Black, white or gray color. 10.3 fl-oz (305 mL) cartridges or 20 fl-oz (591 mL) sausages. Black available in 2.5 GAL (9.45 L) pails.	Non-slump elastomeric sealant. Use as Henry® system detail sealant and as a general use construction sealant.
<b>Air-Bloc LF®*</b>	<i>Sealant and liquid flashing.</i> Use in same applications as 925 BES, plus liquid flashing use. For liquid flashing, spread a continuous coating at minimum 25 mils (0.6mm) on smooth substrates, minimum 40 mils (1 mm) thickness on rough substrates. Signature blue color, packaged in 20 fl-oz (591 mL) sausages	Specially formulated for spreading evenly as a liquid flashing.
<b>Air-Bloc All-Weather STPE®*</b>	<i>Liquid flashing.</i> Same product that is used on the open wall can be used as liquid flashing when applied at 25 mils (0.6mm) to 40 mils (1 mm) thickness. Requires 925 BES or Air-Bloc LF to fill cracks and gaps exceeding 1/8" (3 mm)	Applied as liquid flashing with brush or roller. Can use same material in flashing details as on wall.

\*Liquid flashing rough substrates include masonry, concrete, plywood, OSB and lumber. Smooth substrates include gypsum sheathing, steel studs and metal.

### 3. Coverage Rates

Air Bloc All-Weather STPE® has nearly 100% solids content, which provides high coverage rates and no shrinkage after cure. Product consumption rates observed in the field will vary according to application method, surface texture and waste. Coverage rates can vary significantly by substrate, particularly among brands of exterior gypsum sheathing and sources of concrete masonry blocks. Mockup construction or field application testing is essential to verify coverage rates and installation requirements on assemblies used on the project. Finished membrane shall be at least 20 mils (0.5 mm) thick and be free of holes or voids. The following coverage rate information is intended to help the user calculate the approximate amount of product needed for a project.

Typical Coverage Rates at Wet Film Thickness of 20 mils (0.5 mm)				
Product	Substrate	Per Unit Volume ft <sup>3</sup> /GAL (m <sup>3</sup> /L)	Yield per Pail ft <sup>2</sup> (m <sup>2</sup> )	Yield per Drum ft <sup>2</sup> (m <sup>2</sup> )
<b>Air-Bloc All Weather STPE®</b>	Gypsum sheathing, plywood, OSB	60 – 75 (1.47 – 1.84)	300 – 375 (27.8 – 34.8)	3,300 – 4,125 (306 – 383)
	Masonry and concrete	40 – 60 (0.98 – 1.47)	200 – 300 (18.6 -27.8)	2,200 – 3,300 (204 – 306)

### 4. Application Conditions

#### 4.01 Safety

Job site safety is of prime consideration. Consult each product’s Safety Data Sheet and Technical Data Sheet before commencing work. Coordinate in advance with jobsite supervision to understand and follow all

site-specific safety requirements and guidelines. Follow OSHA guidelines for use of tools, scaffolding, harnesses, personal protective equipment, ladders, etc. Be aware of surroundings and interaction with other trades – particularly working overhead.

## 4.02 Service Temperature

Air-Bloc All-Weather STPE® cured membrane service temperature is -40°F (-40°C) to 300°F (149°C). Henry® accessory products have a lower maximum service temperature. The maximum system service temperature is controlled by the lowest-service-temperature item in the system. Do not use the Henry® products or their combination in areas expected to exceed the maximum service temperature. Please consult the table for maximum service temperature of Air-Bloc All-Weather STPE® accessories

Service Temperature of Accessory Items	
Accessory Item	Maximum Service Temp
Blueskin® SA*, Blueskin® SA LT*, Blueskin® TWF*	158°F (70°C)
Blueskin® Butyl Flash, Metal Clad® 705FR*, Metal Clad® 705FR LT*	180°F (82°C)
Air-Bloc LF	200°F (93°C)
925 BES Sealant	180°F (82°C)

\*Do not install these asphalt-based flashings over Air-Bloc All Weather STPE®. Install to building substrate.

## 4.03 Site Conditions

### Storage of Henry Products

Store in a conditioned space such as a warehouse or garage whenever possible. For jobsite storage, elevate products from ground and protect from direct sunlight and precipitation. Store solvent-based and aerosol adhesives/primers according to safety protocol on the jobsite. Store STPE-based products in a cool, dry place, below 80°F (27°C). Do not allow Aquatac™ primer to freeze.

### Surface and Weather Temperature

Air-Bloc All Weather STPE® can be applied at ambient temperatures between 10°F (-12°C) and 122°F (50°C). When installing Air-Bloc All Weather STPE® in temperatures above 90°F (32°C), schedule work when substrate is not directly exposed to sun and temperatures are falling to minimize chance of blistering. During cold weather installation, condition the product to 50°F (10°C) or warmer before work. Air-Bloc All Weather STPE® is wash-off resistant and can be exposed to rain within 30 minutes of installation. Air-Bloc All Weather STPE® can be applied to damp substrates, but all surfaces must be dry to touch and free of frost or surface water. Air-Bloc All Weather STPE® is not designed or intended for exposure to negative side bulk water. Walls to which Air-Bloc All Weather STPE® will be applied must be protected at top and backside to prevent water infiltration into the wall cavity behind the installed air barrier assembly. Air-Bloc All Weather STPE® can be applied to the interior side of buildings for the product's air barrier function. But on the interior side it will not perform as a water resistive barrier.

### UV exposure

Air-Bloc All Weather STPE® is UV resistant behind open joint cladding assemblies where intermittent UV exposure is expected. Air-Bloc All Weather STPE® is UV resistant and can be left fully exposed for 12 months during construction.

### Substrate compatibility

Air-Bloc All Weather STPE® is compatible with the following substrates when properly prepared:

- Gypsum Sheathing
- Galvanized Steel
- Masonry
- Concrete
- Stainless Steel
- Coated Metal
- Coated-Glass-Faced and Foil-Faced Polyiso
- Wood Sheathing (OSB & Plywood)
- Dimensional lumber

## 5. Surface Evaluation

Henry advises installers not to proceed with installation of Air-Bloc All Weather STPE® until substrates have been inspected and compliant with requirements; any deficiencies have been corrected. Installation over unsuitable substrates can result in extra work and/or a non-warrantable installation.

### Glass Mat Faced Gypsum Sheathing

Gypsum sheathing boards must be clean, frost-free, serviceable, and properly secured to framing per sheathing manufacturer's requirements and building codes. Sheathing boards that display mechanical or moisture damage, excessive UV exposure, or do not comply with sheathing manufacturer's requirements must be repaired or replaced.

### Plywood/ Oriented Strand Board "OSB"/ Lumber

Plywood/OSB must be clean, frost-free, serviceable, and properly secured to framing per building codes. Plywood/OSB that has been damaged by exposure to moisture (inter-ply delamination/swelling/buckling) must be replaced. All wood substrates must have less than 20% moisture content. Fire-treated or pressure-treated wood must be kiln-dried.

### Concrete Masonry Unit "CMU"/ Concrete

Masonry surfaces including CMU and concrete must be smooth, clean and free of frost, form release and curing compounds, oil, efflorescence, laitance or other contaminants. Surface honeycombs, bug holes greater than 1/4" (6 mm) and cracks wider than 1/8" (3 mm) should be repaired using appropriate methods and product(s) such as Air-Bloc LF®. Mortar joints must be struck flush or tooled, free of voids, fins, and mortar droppings. New concrete must cure a minimum of 3 days. Mortar and cementitious repair products must cure a minimum of 24 hours. Injection grouting of CMU must be completed a minimum of 3 days prior to air barrier installation.

## 6. Installation

Review Project details to determine the location and extent of the air barrier installation. Protect adjacent surfaces and areas not scheduled to receive air barrier products. Review product technical data, make positive identification of products on site and check the product expiration dates before proceeding. Refer to the Henry Air-Bloc All-Weather STPE® Architectural Details for depiction of products as used in common details. Keep records and inspection of work according to Project requirements. Do not cover any air barrier work with overburden until it has been inspected and approved by the appropriate Party.

### 6.01 Adhesive/Primer Application

Where specified on the respective Product Data Sheet, prepare all surfaces accepting Henry® self-adhered flashing with a Henry® adhesive/primer. All Henry® self-adhered flashings must be pressed firmly to substrate and at laps with a suitable roller tool. Self-adhered flashing is best installed to the building substrate rather than over Air Bloc All-Weather STPE®. Blueskin® Butyl Flash can be installed over Air-Bloc All-Weather STPE®, provided the cured membrane is prepared with Aquatac™ primer. Heed installation temperature and service temperature limits indicated in this document. Raw edges of gypsum sheathing shall be coated with Henry adhesive/primer before installing liquid flashing.

### 6.02 Sheathing Joints

For sheathing joints up to 1/4" (6 mm) width, extrude a 3/8" (9 mm) bead of Henry® sealant over the joint then strike the sealant with a trowel to pack the joint and form a 2" (5 cm) width ribbon of sealant centered over joint. At joints 1/4" - 1/2" (6 mm to 12 mm) wide, install Henry® self-adhered flashing centered over joint, extending minimum 2" (5 cm) beyond the joint on both sides. Alternatively, insert non-gassing backer rod into joint so that backer rod is recessed a minimum 1/4" (6 mm) below field surface of sheathing. Over the backer rod, install Henry® sealant and tool sealant into joint and onto adjacent sheathing to form a 2" (5 cm) width ribbon of sealant centered over joint. On plywood board joints, minimum 4" (10 cm) width Henry® self-adhered flashing centered over the joint is the preferred detailing method due to typical higher movement of plywood. Alternatively, plywood board joints up to 1/4" (6 mm) width can be treated with a 2" width (5 cm) ribbon of 40 mil (1mm) thickness Henry® liquid flashing, at discretion of others, if the plywood is deemed stable.

### 6.03 Fastener Heads

Fasteners securing sheathing must be installed per sheathing manufacturer's requirements and with proper torque resulting in fastener head being flush or slightly recessed from face of sheathing. Fastener heads must not protrude from the face of the sheathing. Countersunk fasteners and unused vacated fastener holes must be sealed and stuck

flush using Henry sealant or liquid flashing. Fastener heads that are installed flush with the face of the sheathing do not require detailing prior to installation of Air-Bloc All Weather STPE®.

#### **6.04 Inside/Outside Corners**

Sheathing inside and outside corners must be treated with either 1) Henry® self-adhered flashing or 2) Henry® liquid flashing. Self-adhered or liquid flashing must extend at least 2" (5 cm) onto each side of the transition. Inside corners must also be filled with a cove of Henry® sealant to assure complete seal and no bridging of self-adhered flashing. Inside and outside corners in cast-in-place concrete or CMU wall do not require any additional detailing beyond coating with Air-Bloc All-Weather STPE® at 20 mils (0.5 mm) thickness.

#### **6.05 Pipe/Duct Penetrations**

Penetrations can generally be treated in the same manner referenced in inside/outside corners section above, however detailing products must extend a minimum of 2" (5 cm) onto field of wall and pipe/duct component. Penetrations through CMU/ concrete must be secured and grouted in place to restrict movement. Electrical conduit must be rigid type at section where air barrier will interface. Metal or rigid PVC pipe shall be clean, free of rust, scale and contaminants. Pipes must be lightly abraded and wiped free of resulting dust prior to detailing.

#### **6.06 Floorline Deflection Joints**

Henry® self-adhered flashing shall be installed at deflection joints using a bellows method of installation. The bellowed portion of the membrane can be either: 1) a convex bellows configuration installed over a protruding backer rod; 2) a concave bellows in which membrane slack is looped into the deflection joint gap.

#### **6.07 Control/Expansion Joints**

Control joints up to ¼" (6 mm) wide in sheathing and masonry substrates can be detailed as per Method 1 or 2 of inside/outside corners section above. Control joints wider than ¼" (6 mm) must be treated as per Method 1 only using a 40-mil Henry® self-adhered flashing. Expansion joints up to ½" (12 mm) wide that are not designed for seismic movement can generally be treated with a Henry® self-adhered flashing installed in a bellowed fashion as referenced in the floorline deflection joint section above. For expansion joints wider than ½" (12 mm) or joints designed for seismic movement, contact the local Henry® sales representative or Henry® Technical Services.

#### **6.08 Through-Wall Flashing**

In masonry veneer applications, through wall flashing is used at the window head, window sill, shelf angle, head of wall, base of wall and anywhere the cavity space between the veneer and back-up wall is interrupted. Through-wall flashing is attached to the backup wall and terminates at the exterior finish. Through wall flashing is a critical component for managing moisture by directing it from the water resistive barrier to the exterior. Henry® Blueskin® TWF is a self-adhered through-wall flashing suitable for use in the Air-Bloc All-Weather STPE® system. Blueskin® TWF is best installed to the building substrate, before Air-Bloc All-Weather STPE®. If sequence requires Blueskin® TWF to be installed after Air-Bloc All Weather STPE®, the liquid membrane must be fully cured, the surface must be prepared with Aquatac™ Primer and Blueskin Butyl Flash must be installed over the primed liquid membrane as an intermediate layer separating Air-Bloc All-Weather STPE® and Blueskin® TWF. Seal the termination of Blueskin® TWF on the wall with a tooled ribbon of Henry® sealant. Blueskin® TWF can also be secured to the wall mechanically with a termination bar if required in the Project specification. At the veneer, Blueskin® TWF is typically installed onto a metal drip edge protruding to daylight. Blueskin® TWF is not suitable for permanent exposure, and the flashing edge should be kept back ½" (1 cm) from exterior finish. Consult the Blueskin® TWF product data sheet for more information.

#### **6.09 Rough Openings for Windows and Doors**

Wrap rough openings with Henry® self-adhered flashing or Henry® liquid flashing returning into the opening as required to make the seal to the window/door frame and bearing 3" (7.5 cm) onto the field of the wall.

#### **6.10 Field Installation of Air-Bloc All Weather STPE**

Air-Bloc All Weather STPE® can be applied using roller, brush, or approved spray technique. Apply Air-Bloc All Weather STPE® to field of wall including all surfaces planned to receive the air barrier. Overlap Air-Bloc All Weather STPE® on previously installed Henry flashing and detailing products a minimum of 1" (2.5 cm) to achieve continuity of the air barrier system.

#### **6.11 Cladding Installation over Air-Bloc All Weather STPE**

Exterior cladding must be fastened to sound base through the Air-Bloc All Weather STPE® membrane. Henry does not recommend adhesive bonding of any claddings or finishes to Air-Bloc All-Weather STPE®. Some types of hardware which have a flange or a gasket compressing against Air -Bloc All-Weather STPE® may attain an air and watertight seal without additional detailing. Common screw penetrations usually require detailing with Henry® sealant. Air and water tightness performance and associated detailing requirements shall be determined on the project through mockup and/or field testing. Cladding installation over the products shall not proceed until the installed Air-Bloc All Weather STPE® system has been inspected and approved by the required Parties.

## 6.12 Spray Application Requirements

Henry® has evaluated various spray rigs for dispensing Air Bloc All-Weather STPE®. Equipment cleanliness and maintenance, temperature conditioning of materials and equipment, and adherence to operating protocol are critical to success in spraying Air-Bloc All Weather STPE®. Air-Bloc All-Weather STPE® is a moisture-cure material which requires prompt flush and clean-up with solvent during work stoppage. It is also a high-solids, viscous fluid. The same properties that give the product its high coverage rate, fast cure, and rain wash off resistance also make it more challenging to spray than water-based products.

Prior to spraying Air-Bloc All Weather STPE®, the pump, hose, and gun should be flushed with virgin mineral spirits or naphtha to remove any residual moisture in the delivery system prior to commencing spray application. If other coatings were previously sprayed through the system, the system must be completely cleaned to remove any residual product and subsequently flushed as described above prior to spraying. Due to the risk of material curing in the equipment, Henry recommends that a spray rig should be dedicated exclusively to handling moisture-cure materials.

When material is kept warm and sufficient pressure is maintained at gun tip, Henry Air-Bloc All Weather STPE® can be sprayed, even in cold outdoor conditions. **Material temperature from pump to spray tip and fluid pressure at the spray tip during installation determine sprayability of Air-Bloc All Weather STPE®.** A quick-read thermometer can be used to determine material temperature as it contacts substrate. Spray equipment must be carefully selected based on project needs and upon recommendations of the spray equipment supplier.

The following airless spray and air-assisted spray configurations are suggestions from leading spray equipment suppliers for spraying Air-Bloc All Weather STPE®.

**Airless Spray Systems:** This technique uses high pressure and a narrow orifice at the tip to produce a spray fan. Airless spray produces a fine, precise spray provided that sufficient pressure at the tip can be sustained during application. The pressure at the tip depends upon the product temperature, hose length, hose diameter and tip size. The configurations listed below provide effective airless spray of Air-Bloc All-Weather STPE®:

### **Airless Spray Configuration 1: Product temperature at 70°F (21°C) and above**

**Pump:** Capable of supplying a minimum spray tip pressure of 2,500 psi (172 bar). Typically achieved by pump designed for high solids coating that can produce minimum pump pressure of 4,000psi (276 bar) such as Graco GH833, 675DI, GH933.

**Hose:** Typical max. total length of 150' (45 m) consisting of ½" (12 mm) ID hose with optional ⅜" (9 mm) ID whip.

**Gun:** Heavy duty texture mastic gun such as Graco 241705 or contractor grade direct feed gun.

**Tip:** 0.019" to 0.029" (75 – 114 µm)

### **Airless Spray Configuration 2: Product temperature of 60°F (16°C) and above**

**Pump:** Capable of supplying a minimum spray tip pressure of 3,100 psi (214 bar). Typically achieved by pump designed for high solids coating that can produce minimum pump pressure of 7,000 psi (483 bar) such as Graco GH933.

**Hose:** Typical max. total length of 150' (45 m) consisting of ½" (12 mm) ID hose with optional ⅜" (9 mm) ID whip.

**Gun:** Heavy duty texture mastic gun such as Graco 241705 or contractor grade direct feed gun.

**Tip:** 0.019" to 0.029" (75 – 114 µm)

### **Airless Spray Configuration 3: Product Temperature of 50°F (10°C) and above**

**Pump:** Capable of supplying a minimum spray tip pressure of 3,800 psi (262 bar). Typically achieved by pump designed for high solids coating that can produce minimum pump pressure of 7,000 psi (483 bar) such as Graco GH933.

**Hose:** Typical max. total length of 150' (45 m) consisting of ½" (12 mm) ID hose with optional ⅜" (9 mm) ID whip.

**Gun:** Heavy duty texture mastic gun such as Graco 241705 or contractor grade direct feed gun.

**Tip:** 0.019" to 0.029" (75 – 114 µm)



**NOTE:** Spray pressure at the tip can be measured by connecting a pressure gauge to a T fitting between the hose and spray gun connection. The viscosity of Air-Bloc All Weather STPE® increases as product temperature decreases thus requiring progressively higher fluid pressure to spray colder product. Air Bloc All-Weather STPE® is impractical to spray if minimum product temperature cannot be maintained. Following the specified equipment configurations and maintaining warm product temperature along the entire pathway are essential for successful spray.

Common methods used to maintain favorable product temperature and sustained pressure at gun tip include:

- Condition product and equipment to operating temperature before use.
- Use product in original, unopened containers that has been stored properly and is within shelf life
- Use insulated hoses covered with scuff jacket.
- Keep the spray rig and material in a heated trailer or enclosure during application.
- Reel in the hose when not spraying.
- Use approved drum/pail band and blanket heaters to warm product.
- Use ¾" (18 mm) ID hose

**Air-Assisted Spray Systems:** This technique uses lower pressure and the assistance of compressed air to scatter the product and get it onto the wall. Air-assisted spray employs a lower-cost, lighter-weight rig and is ideal for dispense of Air-Bloc All-Weather STPE® from pails. This technique can produce a void-free, wet film at 20 to 40 mils thick. Rough substrates or very cold material may require back rolling to even out the coating.

#### **Air-Assisted Spray Configuration 1: Product Temp of 40°F and Above**

**Pump:** Graco GMAX 7900HD gasoline-powered spray rig, Graco IronMan 300E electric-powered spray rig or equal.

**Hose:** Graco BlueMax hose; 50' (15 m) of ¾" (9 mm) ID + 3' (1 m) of ¼" (6 mm) ID whip. plus ¼" (6 mm) air hose tethered and jacketed along length of BlueMax hose.

**Gun & Tip:** Graco HD Blue Texture Gun configured with air atomizer kit and flat-tip nozzle

**Compressed Air Supply:** Minimum 15 CFM (425 L/min) at 90 psi (6.5 bar). 10 HP (7.5 kW) gasoline-powered compressor, or equal.

Henry® does not sell or service spray equipment. Please contact your preferred spray equipment supplier for assistance with equipment specification, sales, operation, and maintenance. Contact Henry® if you need assistance in finding a spray equipment supplier.

**CAUTION:** Due to the high pressures and moving parts, spray equipment operation poses risk of damage and injury if done incorrectly. Follow all equipment specification, operation, maintenance, and safety protocols according to the Spray Equipment Supplier.

## 7. Clean Up

Uncured Air-Bloc All Weather STPE® may be flushed from rig by running virgin mineral spirits, xylene, or toluene through the system. Cured material must be removed mechanically. Do not flush equipment with any cleaner or solvent that contains water including some types of recycled or green mineral spirit and paint thinning products. The pump lower, the spray guns and fittings (elbows, swivels, couplers, bushings, etc.) require disassembly and cleaning by hand to fully remove remnant product. Read Safety Data Sheets for cleaning solvents before use. Keep cleaning solvents away from all sources of heat, sparks, flame, lighted smoking materials or any other ignition source. This product cures by reacting with moisture and should not be left in spray guns, pump equipment and hoses for prolonged periods. Consult the spray equipment manufacturer for operating and maintenance information.

## 8. Shelf Life

Air-Bloc All-Weather STPE®, 925 BES™ sealant and Air-Bloc LF® in original, unopened container shelf life is 12 months from date of manufacture when stored in a cool, dry, and shaded location at 80°F (27°C) and below. Henry® adhesive/primers have a 12-month shelf life in original, unopened containers. Do not allow Aquatac™ primer to freeze and do not use adhesives/primers that have gelled

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