TECHNICAL DATA SHEET

Air-Bloc® All Weather STPE

UV-Resistant, Vapor Permeable Air Barrier

Physical property	Typical value	Test method
Color	Black	-
Recommended Film Thickness	20 mils (0.51 mm) wet/dry	-
Solids Content	By Volume: >98%	
Application Temperature (see Limitations)	+10 °F to +122 °F (-12 °C to +50 °C)	-
Service Temperature	-40 °F to +300 °F (-40 °C to +149 °C)	-
Rain Ready Time	within 30 minutes	
Drying Time - Skin Formation	1-2 hours	-
Drying Time - Set Through	24 hours	-
Water Vapor Permeance	19.0 perms	ASTM E96, Method B
Air Permeance - Material @ 75Pa	0.001 cfm/ft² (0.005 L/[sec-m²])	ASTM E2178
Air Leakage - Assembly	Pass	ASTM E2357
Elongation	350%	ASTM D412
Tensile Strength	100 psi (689 kPa)	ASTM D412
Pull-off Adhesion	165 psi - concrete 75 psi - exterior gypsum sheathing 60 psi - OSB	ASTM D4541
Nail Sealability	Pass	AAMA 711-07 (ASTM D1970 modified)
Damp Surface Adhesion	Pass	AAMA 714-19 (ASTM C794)
Water Resistance	Pass	AATCC TM127
Flame Spread Index	20, Class A	ASTM E84
Smoke Developed	10, Class A	ASTM E84
Fire Testing	Complies with NFPA 285 in various wall assemblies; meets IBC 2015 - 1403.5 exception #2	NFPA 285
Crack Bridging	Pass at 15 mil or greater	ASTM C1305
Low Temperature Flexibility	Pass -40 °F	ASTM D1970
Freeze Thaw Stable	No Change	ASTM D2243
Accelerated Weathering	>5000 hours	ASTM G154
Resistance to Mold, Mildew & Fungal Growth	Pass	ASTM D5590
VOC Content, max	25 g/L	EPA Method 24

Description

Henry® Air-Bloc All-Weather STPE is a low VOC, UV and fire-resistant fluid applied, elastomeric membrane designed to provide a vapor permeable, water resistive air barrier when applied to above-grade wall assemblies. It is single-component, moisture cure Silyl Terminated Polyether (STPE) which forms a tough monolithic rubber-like membrane resistant to air leakage, water penetration, and long term weathering. **Air-Bloc All-Weather STPE** can be spray, roll, or brush applied and can be left exposed for use with open- joint cladding.

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Features and benefits

- Superior wash-off resistance offers scheduling flexibility during challenging weather conditions
- Can be left exposed for up to 12 months during construction
- Permanent UV exposure under open joint cladding
- Single component, one coat application; can be spray, roll, or brush applied for fast, easy application
- Excellent adhesion to most substrates; can be applied to damp surfaces
- Can be used as a flashing when the main air barrier membrane is **Air-Bloc All Weather STPE**
- Low temperature application down to 10 °F (-12 °C)
- NFPA 285 compliance: compliant in various wall assemblies; meets IBC 1403.5 exception #2
- Living Building Challenge Declare label (Red List Free)

Usage

Air-Bloc All Weather STPE is used in construction of high performance wall assemblies requiring vapor permeability along with water, UV, weather and fire resistance. When integrated with Henry® flashing and accessories, **Air-Bloc All Weather STPE** forms a complete wall system meeting the highest industry performance standards for use on a variety of wall substrates requiring long term weather exposure prior to cladding installation, including open-joint cladding.

Application

Surface Prep: All surfaces must be sound, clean and free of frost, oil, grease, dirt, excess mortar or other contaminants. Acceptable substrates are exterior-grade gypsum sheathing, plywood, OSB, precast or cast-in-place concrete, primed steel, aluminum mill finish, anodized aluminum, and galvanized metal. New concrete should be cured for a minimum of 3 days before **Air-Bloc All Weather STPE** is applied. Concrete and CMU surfaces should be free of large voids and spalled areas. Fresh mortar joints in CMU should be cured for a minimum of 36 hours.

Apply: Air-Bloc All Weather STPE may be applied by brush, roller or heavy-duty airless spray in a single coat application. Apply in continuous, monolithic application without sags, runs or voids, transitioning onto flashing membrane to create a uniform drainage plane and air barrier. Regularly monitor wet mil thickness during application to assure adequate coverage.

Coverage Rates:

Application rates at wet film thickness of 20 mils (typical)*.

Product	Substrate	Coverage Rate square feet per gallon	Coverage Rate square feet per 5 gallon pail
Air-Bloc All Weather STPE	Smooth: Exterior Gypsum Sheathing, OSB	60-75	300-375
	Rough: CMU, Concrete	40-60	200-300

* Application rates can vary significantly based on texture and porosity of substrate.

Spray Recommendations: To achieve an optimal spray pattern **Air-Bloc All Weather STPE** requires 3300 psi – 4000 psi at the gun. It is important that the spray equipment be well maintained to deliver consistent psi while spraying. Ensure all equipment is free from water prior to use and clean equipment with mineral spirits after use. For further detail, please refer to Henry Air-Bloc All Weather STPE Installation Guideline.

Joint and Crack Treatment: Joints between panels of exterior grade gypsum should be treated as outlined in the table below. Method #2 in the table below is recommended when moderate expansion/contraction is possible. Mortar joints on CMU walls should be struck full and flush with block surface. Cracks in masonry and concrete up to ½" (12 mm) wide shall be filled with a trowel application of **Henry® 925 BES Sealant** and allowed to cure overnight prior to application of the fluid applied air barrier to the surface, or alternatively, the cracks may be sealed with a strip of self-adhered sheet air barrier. Transition joints between dissimilar materials that are asphalt compatible should be sealed with strips of self-adhered sheet air barrier lapped a minimum of 3" (75mm) onto both substrates. Typical locations include tie-ins at beams, columns, and some window and door frames. Surfaces to receive self-adhered sheet air barrier must be prepared per the applicable Technical Data Sheet. Dynamic or expansion joint treatment must be in compliance with the project's architectural details and specifications.

Sheathing or Substrate Non-Moving Joint Treatment Options:
Apply per products' published Technical Data Sheets.

Non-Moving Joints	Method #1 Liquid Flashing/Sealant Method	Method #2 Self-Adhered Sheet Method
Method #1 - up to 1/4" (6mm) Method #2 - up to 1/2" (12mm)	**1.** **Henry 925 BES Sealant** or **Henry Air-Bloc LF** **2.** Fill and strike smooth **3.** Allow to dry	**1.** Apply **Henry Blueskin Adhesive, Henry Blueskin LVC Adhesive,** or **Aquatac Primer** **2.** Allow to dry **3.** Apply self-adhered membrane and roll in place Refer to **Air-Bloc All Weather STPE** Installation Guideline for applicable flashing membranes.

NOTE: When installing self-adhered sheet membrane directly onto **Air-Bloc All Weather STPE,** use only **Aquatac Primer**

Refer to **Air-Bloc All Weather STPE** Installation Guideline for detailed application information.

Limitations: **Air-Bloc All Weather STPE** shall not be applied when ambient (air) and substrate temperatures are below +10 °F (-12 °C). The product should not be applied in the rain or on wet surfaces; damp surfaces are acceptable. Walls to which **Air-Bloc All Weather STPE** will be applied must be protected at top and back sides to prevent infiltration into the wall cavity behind the installed air barrier assembly. **Air-Bloc All Weather STPE** is not designed or intended for exposure to negative side bulk water.

Clean Up: Clean-up of spray equipment containing uncured material may be accomplished by flushing with mineral spirits. Read solvent Safety Data Sheets 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 unless equipment contains moisture lock hoses, fittings and seals. Equipment without these components can allow moisture vapor to migrate into spray equipment resulting in cured material build up on hose walls and at unsealed connections potentially causing an increase in operating pressure and material flow restriction.

Product size/packaging

5 gallon pails
55 gallon drums

Storage

Store in a cool, dry and shaded location. Recommended storage temperature between +32 °F and +100 °F (0 °C and 37.8 °C).

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on the Henry® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.