

# TECHNICAL DATA SHEET Air-Bloc® 33MR

UV-Resistant, Vapor Permeable Air Barrier

Physical Property	Typical Value	Test Method	
Color	Black	-	
Recommended Film Thickness	100 mils (2.54mm) wet 55 mils (1.4 mm) dry		
Solids Content	By Weight: 65% By Volume: 55%		
Weight	12 lbs/gal (1.4 kg/L)	-	
Application Temperature (See Limitations)	40°F to 122°F (5°C to 50°C)	-	
Service Temperature	-40°F to 185°F (-40°C to 85°C)	-	
Drying Time – Skin Formation	2 hours at 68°F (20°C), 50% R.H, dry substrate	-	
Drying Time – Set Through	24 hours at 68°F (20°C), 50% R.H, dry substrate		
Water Vapor Permeance	11.4 Perms at 59 mils (1.5mm) dry	ASTM E96, Method B	
Air Permeance - Material 70°F @ 75Pa, CMU	0.008 L/[sec-m <sup>2</sup> ]	ASTM E283	
Air Permeance - Material 70°F @ 250Pa, CMU	0.017 L/[sec-m <sup>2</sup> ]	ASTM E283	
Air Permeance - Material 70°F @ 500Pa, CMU	0.025 L/[sec-m <sup>2</sup> ]	ASTM E283	
Air Permeance - Material @ 75Pa	0.008L/[sec-m <sup>2</sup> ]	ASTM E2178	
Air Leakage - Assembly	Pass	ASTM E2357	
Elongation	200%	ASTM D412	
Tensile Strength	125 psi (860 kPa)	ASTM D412	
Flame Spread Index	25, Class A	ASTM E84	
Smoke Developed	85, Class A	ASTM E84	
Fire Testing	Complies with NFPA 285 in various wall  assemblies  NFPA 285		
Watertightness	Pass	CAN/CGSB-37.58-M86	
Resistance to Gust Wind Load	Meets Mass/Canadian code requirements for air leakage @ 3000Pa gust load suction pressure	-	
Aging- Long Term Flexibility	No fracturing	CGSB 71-GP-24M	
Nail Sealabilty	Pass	AAMA 711-07(ASTM D1970 modified)	
Weather Resistance – Q-UV Exposure	73 daily cycles of UV and water spray with no observable deterioration		
Resistance to Mold, Mildew & Fungal growth	Pass	ASTM D5590	
Chemical Resistance	Resists salt solutions, mild acids, and alkalis.	-	
VOC Content, max	100 g/L	-	

## Description

**Air-Bloc**<sup>®</sup> **33MR** is a UV and fire-resistant, fluid applied, elastomeric membrane designed to provide a permeable air and water barrier when applied to above-grade wall assemblies. It is single-component, water-based and cures to a tough monolithic rubber-like membrane which resists air leakage, water penetration and long term weathering. **Air-Bloc**<sup>®</sup> **33MR** combines proven performance with the addition of antimicrobial technology and proprietary fire resistance technology to create an integral mold resistant membrane that achieves compliance with stringent NFPA 285 requirements.

#### **Features**

- Seamless, vapor permeable elastomeric membrane for above grade walls
- UV-resistant, fire-resistant, mold/mildew/fungus resistant
- Water-based, does not contain mineral spirit solvents and is environmentally friendly
- Suitable for permanent weather exposure as commonly found in open-joint wall cladding systems
- Excellent adhesion to most wall construction surfaces; can be applied to damp concrete
- Meets highest industry performance standards

#### **Usage**

**Air-Bloc**<sup>®</sup> **33MR** is used in construction of high performance wall assemblies requiring vapor permeability along with water, UV, weather and fire resistance. When integrated with Henry<sup>®</sup> flashing and accessories, **Air-Bloc**<sup>®</sup> **33MR** 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 or with open-jointed rain screen type claddings.

#### **Application**

**Surface Prep**: All surfaces must be sound, dry, 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, concrete block, primed steel, aluminum mill finish, anodized aluminum, and galvanized metal. New concrete should be cured for a minimum of 36 hours before **Air-Bloc 33MR** is applied. Concrete surfaces should be free of large voids and spalled areas.

**Apply**: **Air-Bloc**® **33MR** may be applied by brush, roller or heavy-duty airless spray in a single or dual-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: Apply per published architectural specifications. Typical application rates include:

• 6 gal US / 100 ft² (2.0 L/m²) to give a wet film thickness of approximately 100 mils (2.54 mm), and a nominal cured dry film thickness of 55 mils (1.4mm), depending on texture and porosity of surface

Joint and Crack Treatment: Joints between panels of exterior grade gypsum and plywood should be treated as outlined in the table below. Method #3 in the table below is recommended for plywood in applications where expansion of the joints 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 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 two dissimilar asphalt compatible materials at beams, columns, window and door frames, etc., should be sealed with strips of self-adhered sheet air barrier, lapped a minimum of 3" (75 mm) on both substrates. Surfaces to receive self-adhered sheet air barrier must be prepared per the applicable Technical Data Sheet. For non-asphalt compatible materials, contact your Henry representative for more information. 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:**

Note: Apply per products' published Technical Data Sheets

Non-Moving Joints	Method #1 Sealant Method	Method #2 Fluid Applied Method	Method #3 Self-Adhered Sheet Method
Less than 1/4" (6mm)	925 BES Sealant     Fill and strike smooth     Allow to dry	1. Fill with Air-Bloc® 33MR by trowel or spray, extending beyond joint line a minimum of 3" (75 mm) onto face of substrate 2. Fully embed 2" (50 mm) minimum 183 – Repair Fabric Yellow Fiberglass glass fiber reinforcing tape into wet Air-Bloc® 33MR – centered over joint	<ol> <li>Apply Blueskin®         Adhesive, Blueskin®         LVC Adhesive or         Aquatac™ Primer</li> <li>Allow to dry</li> <li>Apply self-adhered membrane and roll in place.</li> <li>Select One:         Non-permeable option:         <ul> <li>Blueskin® SA</li> <li>Blueskin® SA LT</li> </ul> </li> <li>Metal Clad®</li> </ol>
1/4" (6mm) to 1/2" (12mm)	Same as above	Do not use	Same as above

**Limitations:** Air-Bloc® 33MR shall not be applied when ambient (air) and substrate temperatures are below 40°F (5°C). The product should not be applied if it is raining, or if the possibility of rain is likely within 16 hours. The product should not be applied if it is expected that the ambient temperature will fall below 32°F within 24 hours. Prior to installation of Air-Bloc® 33MR in new building construction, walls where Air-Bloc® 33MR has been applied must be protected at the roof line to prevent water infiltration into the wall cavity.

In hot weather or direct-sun applications over porous substrates, such as concrete, rapid surface drying can form blisters. A thin 'prime coat' application to substrate, which is allowed to dry, often prevents blister formation in subsequent application. Alternatively, a two coat application vs. single heavy coat — with back rolling of base coat — also aids in prevention of blistering in hot weather.

## Air-Bloc® 33MR UV-Resistant, Vapor Permeable Air Barrier

Must be protected from damage during construction. KEEP FROM FREEZING. Do not apply to wet surfaces.

#### **Packaging**

5 gallon (18.82 L) pails 55 gallon (205 L) drums

### **Storage**

Store in a well-ventilated space. Recommended storage temperature from 39°F (4°C) to 104°F (40°C). Avoid freezing during storage.

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