



FW-100-A Acrylic Air & Water Barrier, Vapor Retarder for Frame Wall Surfaces Commercial

Product Description

Wall Guardian FW-100-A is a one-component acrylic based, liquid applied, elastomeric, air and water barrier, vapor permeable (breathable/retarder).

Basic Use

To provide a vapor permeable air and water barrier on construction surfaces such as gypsum board, OSB sheathing, plywood, CMU and other construction surfaces.

Limitations

Apply at temperatures over 40°F (10°C). Do not apply when rain is forecast within the next 12 hours. Store product in temperatures above freezing at all times.

Technical Data

Vehicle Base	Acrylic
Color	Blue
Weight per Gallon	11.2 lbs
Solids by Weight	64%
Solids by Volume	52 +/- 2%
Water Vapor Permeance ASTM E96 B	11.5 perms
Air Permeance ASTM E2178 (CFM/ ft ²) 21mil dry thickness @ ΔP = 0.3 in water	<0.0001 CFM/ ft ²
Tensile /Elongation @ 73F ASTM D2370 Initial Elongation Initial Tensile Strength	124% 300 psi
Water Resistance AATCC 127	Pass
Fastener Sealability ASTM D1970	Pass
Pull Adhesion ASTM D4541 Method E	156 psi on OSB
Pull Adhesion ASTM D4541 Method E	288 psi on CMU
Full Scale Wall Testing ASTM 2357 System Air Leakage Required 0.04 CFM/ ft ²	0.0004 CFM/ ft²
Penetration Check	PASS
Water Penetration of Exterior Windows ASTM E331 2 hr.+2 hr.+15 min	PASS
NFPA 285 Fire Test Method Combustible Components	PASS
ASTM E84 Surface Burning Characteristics Class A Fire Rated	Flame spread index – 20 Smoke developed index – 25
Dry Time Sets to Touch Recoat	4 – 6 hours 24 hours
VOC g/L	< 50 g/L
Recycled content by weight	25%
Exposure	6 months
Solvent	Water
Clean up	Warm soapy water

Advantages

- ✓ **Passes NFPA 285 Fire Test-** Standard Fire Test Method for evaluation of Fire Propagation characteristics of exterior Non-Load-bearing Wall Assemblies Containing Combustible Materials.
- ✓ **Class A Fire Rating** - The most widely accepted flame-spread classification.
- ✓ **Exceeds New ASTM E2357 Standard** - protects against air passage and associated energy losses.
- ✓ **ABAA Evaluated Air Barrier Assembly** - Air Barrier Association of America evaluates and approved all components of entire assembly and passed individual and assembled testing.
- ✓ **Vapor Permeability** - prevents moisture from being trapped in the wall cavity by allowing controlled diffusion of water vapor.
- ✓ **Single Component** - allows for fast and easy application. Creates a monolithic protective barrier.
- ✓ **Ease Of Application** – can be brushed, rolled or sprayed.
- ✓ **6 Months Long-Term Exposure** - allows for greater flexibility during construction cycle
- ✓ **Excellent Adhesion** - to all common surfaces.
- ✓ **Very Low VOC** - content less than 50 g/L meets LEED intent.
- ✓ **25% Recycled Content** - meets LEED intent.
- ✓ **Water Based** - no harmful odors or solvent fumes. No chemical needed to clean equipment.

Surface Preparation

All surfaces must be cleaned. Remove all dirt, debris, and any contamination which could prevent proper adhesion.

Joint and Crack Treatment

Joints between panels of exterior grade gypsum, plywood and rigid insulation up to 1/4" wide shall be filled with a 1/16" x 3/4" cap bead application of GreatSeal LT-100 Liquid Tape. Joints between panels wider than 1/4" must be sealed with 4" wide UT-40 Universal Tape.

Surfaces should be flashed in with beams, columns, window and doorframes, etc.: using UT-40 Tape lapped a minimum of 2" on both substrates. Mechanical attachment should be made to all window and doorframes, or a properly designed sealant joint provided.

Application

FW-100-A may be applied with heavy brush, rollers, heavy-duty spray equipment or spreaders on a completely dry surface. FW-100-A may be applied in a single coat.

In all cases FW-100-A must be vigorously stirred prior to application.

Mark areas off and ensure that the appropriate volume has been applied over each area. During spraying, the product should be applied in horizontal strokes, then vertical strokes in a cross-hatch method to ensure even application. Spot check the thickness with a wet film thickness gauge. All OSB and rough surface spray applications must be immediately back-rolled.

Coverage Rates

Requires a minimum application rate of 2.5 gallons per 100 ft² (40 ft² per gallon) or 40 mils wet film thickness over OSB, plywood, Dens Glass Gold or any exterior gypsum sheathing after sheathing joints are treated with LT-100. Coverage may vary depending on application technique and may be reduced over rough and uneven substrates. The goal should be a continuous membrane at a thickness of 40 mils wet, adjust coverage rate accordingly.

Note: Printing ink on sheathing boards or OSB may be lifted by the application of FW-100-A and show on surface. This does not affect the performance of the product.

System Components

FW-100-A - for vertical envelope applications.

LT-100 Liquid Tape – For board to board joints, penetrations and inside corners.

UT-40 Universal Tape - for details and transitions.

AP-42 Primer – Acrylic high tack primer for secure adhesion of UT-40 Universal Tape over OSB and Exterior Drywall and Wall Guardian FW-100A Air & Water Barrier, Vapor Retarder.

OR

BP-40 Universal Tape Butyl Primer– High tack SBS rubber based primer for use under UT-40 Universal Tape and Wall Guardian FW-100A Air & Water Barrier, Vapor Retarder.

Gorilla Flash VF-1000 Copper flashing - laminated thru-wall flashing

Shelf Life

Wall Guardian FW-100A 5 gallon pails, 1 year when properly stored.

Wall Guardian FW-100A 55 gallon Drums, 9 months when properly stored.

Storage

Store unopened containers in a cool, clean, dry area.

Packaging

5 gallon pails (18.9 liters)

55 gallon drums (208.2 liters)

Technical Services

Technical advice on use of material for specific application and end-user requirements are available from the manufacturer. Material Safety Data Sheet (MSDS) should be consulted for further information. This product is for industrial and professional use only.

Warranty

This product is manufactured of good materials and by competent workmen. Seller's and manufacturers only obligations shall be to replace such quantity of product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising from the use or the inability to use the product. Before using, user shall determine the suitability of the product for his/her intended use; and user assumes all risk and liability.