



FW-100 Air, Water Barrier & Vapor Retarder System Specifications

PART 1: GENERAL

1.01 Description of Work

- A. This specification is for the application of Wall Guardian FW-100 to provide a continuous air barrier system where indicated.

1.02 References

- A. ASTM D 2939: Solids by Weight and Volume
- B. ASTM D 412: Tensile Strength & Elongation
- C. ASTM D 4586 modified: Elevated Temperature Sag Resistance
- D. ASTM E 96, Method B: Water Vapor Permeance (perms)
- E. ASTM E 283 modified: Air Rate Leakage Thru Cured film
- F. FL Building Code, TAS 114: Bond Strength to Concrete, Structural Performance/Adhesion Under Static Air Pressure ("Wind Resistance")

1.03 Quality Assurance

- A. Installer: Submit in writing a document stating that the applicator of the primary air barrier system specified is an acceptable applicator to the manufacturer
- B. Perform Work in strict adherence to the manufacturer's instruction
- C. Maintain one (1) copy of manufacturer's application instructions on job site
- D. Allow access to the Work by the air barrier manufacturer's representative
- E. Components used in this section shall be obtained from a single distributor
- F. With 7 days notice a pre-job conference is to convene prior to commencing the Work
- G. Mock up: as directed by the architect and it may remain as part of the Work

1.04 Product Storage And Handling

- A. Deliver materials to the job site in undamaged and original packaging indicating the name of the manufacturer and the product
- B. Store roll materials on end and in original packaging and always above 40°F. Keep away from all flame or excessive heat

1.05 Job Condition

- A. Work is to be performed only in climatic conditions stipulated by manufacturer which are normally 40°F and rising with a maximum Relative Humidity of 80%. No application in the presence of dew, fog or when rain is forecast within 12 hours.
- B. All preparation work must be complete prior to installation of air barrier membrane

1.06 Protection And Coordination

- A. Ensure that the air barrier membrane is continuous where indicated in the drawings

PART 2: PRODUCTS

2.01 Characteristics

- A. Vehicle Base: Asphalt
- B. Water Vapor Permeance: 11.6 perms
- C. Weight per Gallon: 8.6 lbs.
- D. Solids by Weight: 59 ± 2%
- E. Solids by Volume: 58 ± 2%
- F. Elongation @ break: >90%
- G. Tensile Strength: 29 psi
- H. Dry Time:
- I. Sets to Touch in 4-6 hours

- J. Recoat in 24 hours
 - K. Exposure: 6 months
 - L. Solvent: Mineral Spirits
 - M. Clean Up: Mineral Spirits
- 2.02 Air Barrier Properties at 26.7 ft²/gallon**
- A. Sag/Flow – ASTM D4586: none @ 180°F
 - B. Air Rate Leakage – ASTM E283: none
 - C. Bond Strength to Concrete, FBC (FL Bldg Code), TAS 114, Appendix H, Sec 2: > 1000 lb
 - D. Structural Performance, TAS 114 performed, Moisture Vapor Permeance after 250 hrs QUV (ASTM E96, Method B): 20.5 perms

PART 3: EXECUTION

3.01 Examination

- A. Verify that surfaces and conditions are ready to accept the Work of this section. Follow all manufacturer instructions on acceptability of substrate.

3.02 Preparation

- A. All substrates must be sound, hand dry, clean and free of oil, grease, excess mortar, dust or other contaminants. Starting the work is an acceptance of the substrate.

3.03 Installation

- A. Transition Tape
 - 1) Joints between panels of exterior grade gypsum, plywood and rigid insulation up to ¼” wide shall be filled with a trowel application of FW-100 and reinforced with a strip of 2” wide glass fiber tape prior to application of liquid membrane or the application GreatSeal LT-100 Liquid Tape.
 - 2) Joints between panels wider than ¼” shall be filled with a trowel application of FW-100 and reinforced with a strip of 2” wide glass fiber tape prior to application of liquid membrane or the application of UT-40 Universal Tape.
 - 3) Surfaces should be flashed in with beams, columns, window and doorframes, etc. using UT-40 Universal Tape lapped a minimum of 2” on both substrates.
 - 4) Mechanical attachment should be made to all window and doorframes, or a properly designed sealant joint provided.
- B. Air Barrier
 - 1) Frame Walls with OSB, plywood, gypsum sheathing including Dens Glass Gold
 - a. FW-100 may be applied with heavy brush, rollers, heavy-duty spray equipment or spreaders on a completely dry surface.
 - b. FW-100 may be applied in a single coat.
 - c. Mark areas off and ensure that the appropriate volume has been applied over each area.
 - d. During spraying, the product should be applied in horizontal strokes, then vertical strokes in a cross-hatch method to ensure even application.
 - e. Apply Wall Guardian FW-100 at 3.75 gallons per 100ft² minimum.
 - 2) CMU Walls
 - a. Must use an ASTM C 578 Type IV or X outboard insulation 1” thick
 - b. Apply Wall Guardian FW-100 at 3.75 gallons per 100 ft² minimum.

3.04 Protection of Finished Walls

- A. These materials are not meant for permanent exposure: 6 months maximum

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