SECTION 072500 VAPOR BARRIERS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Vapor Barriers: Materials that form a system to stop passage of air through exterior walls, joints between exterior walls and roof, joints around frames of openings in exterior walls, and ceilings.

1.02 RELATED REQUIREMENTS

1.03 REFERENCE STANDARDS

A. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials; 2023.

1.04 SUBMITTALS

- See Section 013000 Administrative Requirements for submittal procedures.
- B. Product Data: Provide data on material characteristics, performance criteria, and limitations.
- C. Manufacturer's Installation Instructions: Indicate preparation, installation methods, and storage and handling criteria.

1.05 QUALITY ASSURANCE

A. Vapor Permeability (Perm): Measure in accordance with ASTM E 96 Procedure E.

1.06 MOCK-UPS

A. Install vapor barrier materials in mock-up as specified per project design criteria.

1.07 FIELD CONDITIONS

 Maintain temperature and humidity recommended by materials manufacturers before, during, and after installation.

PART 2 PRODUCTS

2.01 VAPOR RETARDER MATERIALS

- A. Vapor Barrier Sheet: ASTM D 4397 flame retardant polyethylene film string reinforced with glass fiber square mesh, clear.
 - 1. Thickness: 6 mil.
 - 2. Water Vapor Permeance: As required by referenced standard for thickness specified.
 - 3. Maximum Vapor Permeability (Perm): 1 ng/S/m/pa.

2.02 ACCESSORIES

- A. Sealants, Tapes, and Accessories Used for Sealing Water-Resistive Barrier and Adjacent Substrates: As indicated or complying with water-resistive barrier manufacturer's installation instructions.
- B. Thinners and Cleaners: As recommended by water-resistive barrier manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces and conditions comply with requirements of this section.

3.02 PREPARATION

- A. Remove projections, protruding fasteners, and loose or foreign matter that might interfere with proper installation.
- Clean and prime substrate surfaces to receive adhesives and sealants in accordance with manufacturer's installation instructions.

3.03 INSTALLATION

A. Install materials in accordance with manufacturer's installation instructions.

3.04 FIELD QUALITY CONTROL

- A. See Section 014000 Quality Requirements for additional requirements.
- B. Owner's Inspection and Testing: Cooperate with Owner's testing agency.
 - Allow access to work areas and staging.
 - 2. Notify Owner's testing agency in writing of schedule for work of this section to allow sufficient time for testing and inspection.
 - 3. Do not cover work of this section until testing and inspection is accepted.
- C. Do not cover installed water-resistive barriers until required inspections have been completed.

3.05 PROTECTION

A. Do not leave materials exposed to weather longer than recommended by manufacturer.

END OF SECTION