SECTION 072500 - WEATHER BARRIERS

Revise this Section by deleting and inserting text to meet Project-specific requirements.

Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

1. GENERAL
   * + 1. RELATED DOCUMENTS

Retain or delete this article in all Sections of Project Manual.

* + - * 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
      1. SUMMARY
         1. Section Includes:

Revise subparagraphs below to suit Project.

Building paper.

Building wrap.

Flexible flashing.

Drainage material.

* + - 1. SUBMITTALS
         1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
         2. Manufacturer’s installation instructions shall be provided along with product data.
         3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
         4. Product Data: For each type of product.

For building wrap, include data on air and water-vapor permeance based on testing according to referenced standards.

Include manufacturer’s installation instructions.

* + - * 1. Shop Drawings: Show details of building [**paper**] [**wrap**] at terminations, openings, and penetrations. Show details of flexible flashing applications.
        2. Quality Control Submittals:

Evaluation Reports: For **[water-resistive barrier] [and] [flexible flashing],** from UNIFORM CODE-ES.

1. PRODUCTS

Before inserting names, verify that manufacturers and products listed there comply with requirements retained or revised in descriptions and are both available and suitable for the intended applications. For definitions of terms and requirements for Contractor's product selection.

* + - 1. WATER-RESISTIVE BARRIER

Usually retain this article; a water-resistive barrier over sheathing is inexpensive and is required behind masonry veneers. Delete article if a water-resistive barrier will interfere with exterior insulation and finish systems or similar construction.

Retain one of two "Building Paper" paragraphs or "Building Wrap" paragraph below.

* + - * 1. Building Paper: ASTM D226, Type 1 (No. 15 asphalt-saturated organic felt), unperforated.

Option in "Building Paper" paragraph below is based on "Super Jumbo Tex 60 Minute" by Fortifiber Building Systems Group.

* + - * 1. Building Paper: Water-vapor-permeable, asphalt-saturated kraft building paper that complies with UNIFORM CODE-ES AC38, Grade D **[; except with water-resistance rating not less than 1 hour]**.

Design Consultant to review code references and verify that the referenced sections/tables are current. Note that code references shall be based on the current version of the Uniform Code.

Note that ASTM E1677 is for air barrier materials for low-rise buildings. This standard allows 15 times as much air infiltration as the limit for air barrier materials in many building codes.

* + - * 1. Building Wrap: ASTM E1677, Type I air barrier; with flame-spread and smoke-developed indexes of less than 25 and 450, respectively, when tested according to ASTM E84; UV stabilized; and acceptable to authorities having jurisdiction.

Coordinate permeance value retained or inserted in "Water-Vapor Permeance" subparagraph below with products retained. Consult manufacturers' literature.

Water-Vapor Permeance: Not less than **[75 perms] [20 perms] [8 perms] <Insert value>** per ASTM E96, Desiccant Method (Procedure A).

"Air Permeance" subparagraph below is based on UNIFORM CODE-ES and Massachusetts State Building Code criteria for air barrier materials. Note that this requirement is far more stringent than the requirement in ASTM E1677 and that most building wrap products cannot comply. Before retaining, consult manufacturers' literature.

Air Permeance: Not more than 0.004 cfm/sq. ft. at 0.3-inch wg when tested according to ASTM E2178.

Allowable UV Exposure Time: Not less than three months.

Retain "Flame Propagation Test" subparagraph below if required. Tested products are not available from all manufacturers for all types of assemblies.

Flame Propagation Test: Materials and construction shall be as tested according to NFPA 285.

* + - * 1. Building-Wrap Tape: Pressure-sensitive plastic tape recommended by building-wrap manufacturer for sealing joints and penetrations in building wrap.
      1. FLEXIBLE FLASHING
         1. Butyl Rubber Flashing: Composite, self-adhesive, flashing product consisting of a pliable, butyl rubber compound, bonded to a high-density polyethylene film, aluminum foil, or spunbonded polyolefin to produce an overall thickness of not less than [**0.025 inch**] [**0.030 inch**] [**0.040 inch**].

Retain "Flame Propagation Test" subparagraph below if required. Tested products are not available from all manufacturers for all types of assemblies.

Flame Propagation Test: Materials and construction shall be as tested according to NFPA 285.

* + - * 1. Rubberized-Asphalt Flashing: Composite, self-adhesive, flashing product consisting of a pliable, rubberized-asphalt compound, bonded to a high-density polyethylene film, aluminum foil, or spunbonded polyolefin to produce an overall thickness of not less than **[0.025 inch] [0.030 inch] [0.040 inch].**

Flame Propagation Test: Materials and construction shall be as tested according to NFPA 285.

Retain "Flame Propagation Test" subparagraph below if required. Tested products are not available from all manufacturers for all types of assemblies.

* + - * 1. Primer for Flexible Flashing: Product recommended in writing by flexible flashing manufacturer for substrate.
        2. Nails and Staples: Product recommended in writing by flexible flashing manufacturer and complying with ASTM F1667.
      1. DRAINAGE MATERIAL
         1. Drainage Material: Product shall maintain a continuous open space between water-resistive barrier and exterior cladding to create a drainage plane and shall be used under [**siding**] [**portland cement plaster**] [**adhered masonry veneer**].

Retain "Flame Propagation Test" subparagraph below if required. Tested products are not available from all manufacturers for all types of assemblies.

Flame Propagation Test: Materials and construction shall be as tested according to NFPA 285.

1. EXECUTION
   * + 1. WATER-RESISTIVE BARRIER INSTALLATION
          1. Cover exposed exterior surface of sheathing with water-resistive barrier securely fastened to framing immediately after sheathing is installed.
          2. Cover sheathing with water-resistive barrier as follows:

Cut back barrier 1/2 inch on each side of the break in supporting members at expansion- or control-joint locations.

Apply barrier to cover vertical flashing with a minimum 4-inch overlap unless otherwise indicated.

Retain "Building Paper" or "Building Wrap" paragraph below to coordinate with products retained in Part 2.

* + - * 1. Building Paper: Apply horizontally with a 2-inch overlap and a 6-inch end lap; fasten to sheathing with galvanized staples or roofing nails.
        2. Building Wrap: Comply with manufacturer's written instructions and warranty requirements.

Seal seams, edges, fasteners, and penetrations with tape.

Extend into jambs of openings and seal corners with tape.

* + - 1. FLEXIBLE FLASHING INSTALLATION
         1. Apply flexible flashing where indicated to comply with manufacturer's written instructions.

Prime substrates as recommended by flashing manufacturer.

Lap seams and junctures with other materials at least 4 inches except that at flashing flanges of other construction, laps need not exceed flange width.

Lap flashing over water-resistive barrier at bottom and sides of openings.

Lap water-resistive barrier over flashing at heads of openings.

After flashing has been applied, roll surfaces with a hard rubber or metal roller to ensure that flashing is completely adhered to substrates.

* + - 1. DRAINAGE MATERIAL INSTALLATION
         1. Install drainage material over building wrap and flashing to comply with manufacturer's written instructions.

END OF SECTION 072500