1. Section 072500   
   Weather Barriers
   1. PART 1  GENERAL
      1. REFERENCE STANDARDS
         1. ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection; 2021.
         2. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials; 2023.
      2. SUBMITTALS
         1. See Section 013000 - Administrative Requirements for submittal procedures.
         2. Product Data:  Provide data on material characteristics.
   2. PART 2  PRODUCTS
      1. Water-Resistive Barriers
         1. Description:  Materials installed behind exterior wall coverings; designed to prevent liquid water from further penetration into exterior wall assembly. Primary materials include mechanically applied sheets; accessory materials include flashings and seam tapes.
         2. Water-Resistive Barrier Building Wrap:  Mechanically fastened building wrap.
            1. Water Vapor Permeance:  9 to 15 perms when tested in accordance with ASTM E96/E96M, Procedure A.
      2. Accessories
         1. Flexible Flashing:  Self-adhering sheet flashing complying with ASTM D1970/D1970M; waive slip resistance requirement if not installed on roof.
            1. Width:  3 inches.
         2. Threshold Flashing:  Closed-cell foam tape with rubberized adhesive membrane; seals subfloor under threshold.
            1. Width:  5-1/2 inches.
            2. Ultraviolet (UV) and Weathering Resistance:  Approved by manufacturer for up to 30 days of weather exposure.
         3. Stainless Steel Flashing:  Flexible flashing with 2 mil, 0.002 inch thick Type 304 stainless steel sheet, 8 mil, 0.008 inch of butyl adhesive and siliconized release liner.
            1. Roll Length:  50 feet long.
            2. Width:  4 inches wide.
         4. Flashing Tape:  Special reinforced film with high-performance adhesive.
            1. Application:  Window and door opening flashing tape.
            2. Width:  As required for application.
   3. PART 3  EXECUTION
      1. INSTALLATION
         1. Install materials in accordance with manufacturer's installation instructions.
         2. Install continuous water-resistive barriers where indicated on drawings, with sheets lapped to shed water.
         3. Apply sealants within recommended temperature range in accordance with manufacturer's installation instructions.
         4. Mechanically Fastened Sheets:
            1. Install sheets in shingle fashion to shed water; align horizontally.
            2. Overlap seams as recommended by manufacturer, 6 inches, minimum.
            3. Overlap at outside and inside corners as recommended by manufacturer, 12 inches, minimum.
            4. Install water-resistive barrier over jamb flashings.
            5. Install head flashings under water-resistive barrier.
            6. At framed openings with frames having nailing flanges, extend sheet into opening and over flanges; at head of opening, seal sheet over flange and flashing.
         5. Openings and Penetrations in Exterior Water-Resistive Barriers:
            1. Install flashing over sills, covering entire sill framing member, and extend at least 5 inches onto water-resistive barrier and at least 6 inches up jambs; mechanically fasten stretched edges.
            2. At openings filled with frames having nailing flanges, seal head and jamb flanges using a continuous bead of sealant compressed by flange and cover flanges with sealing tape at least 4 inches wide; do not seal sill flange.
            3. At openings filled with nonflanged frames, seal water-resistive barrier to each side of framing at opening using flashing at least 9 inches wide, and covering entire depth of framing.
            4. At head of openings, install flashing under water-resistive barrier extending at least 2 inches beyond face of jambs; seal water-resistive barrier to flashing.
            5. At interior face of openings, seal gaps between window and door frames and rough framing using appropriate joint sealant over backer rod.
            6. Service and Other Penetrations:  Form flashing around penetrating items and seal to surface of water-resistive barrier.
2. END OF SECTION