PART 1 - GENERAL

1.01 SECTION INCLUDES
   A. Factory assembled aluminum/aluminum and aluminum/wood bi-fold patio doors, glass and glazing, operable hardware, weatherstripping and [grilles].
   B. Anchorages, attachments, and accessories.

1.02 RELATED SECTIONS
   A. Section 01340 - Shop Drawings, Product Data, and Samples.
   B. Section 01610 - Delivery, Storage, and Handling.
   C. Section 01710 - Final Cleaning.
   D. Section 07200 - Batt and Blanket Insulation.
   E. Section 07920 - Sealants and Caulking.
   F. Section 08800 - Glass and Glazing.

1.03 REFERENCES
   A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM):
      1. ASTM E-283 - Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.
      2. ASTM E-547 - Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Difference.
   B. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA):
   C. WINDOW & DOOR MANUFACTURERS ASSOCIATION (WDMA):
      1. WDMA I.S-4 – 07 Industry Standard for Water-Repellent Preservative Treatment for Millwork
   D. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
   E. NATIONAL FENESTRATION RATING COUNCIL (NFRC)

1.04 PERFORMANCE CRITERIA
   A. Patio Door units shall meet requirements in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11.
   B. Air leakage shall not exceed 0.30 cfm per sq.ft. of sash when tested in accordance with ASTM E-283 at 1.57 psf.
   C. No water penetration shall be allowed when tested in accordance with ASTM E-547.
   D. Window units shall withstand positive and negative wind loads without damage. The units shall be tested in accordance with ASTM E-330.

1.05 SUBMITTALS
   A. Shop drawings shall be submitted in accordance with Section 01340.
   B. Product data in the form of general catalogs, test lab reports, product performance, and warranty information shall be submitted in accordance with Section 01340.
   C. Samples showing glazing, quality of construction, and finish shall be submitted in accordance with Section 01340.

1.06 DELIVERY, STORAGE, AND HANDLING
   A. In compliance with Section 01610, door units shall be delivered undamaged and with protective packaging. Complete installation and finishing instructions shall be included.
   B. Store units in a clean, dry place off the ground in an upright position.
PART 2 - PRODUCTS

2.01 MANUFACTURER
   A. Pinnacle Select Bi-Fold Patio Door units as manufactured by Windsor Windows & Doors.

2.02 MATERIALS
   A. Frame: Shall be thermally-broken aluminum frame. Interior portions of the jambs and sill shall be clear pine on the wood interior version and painted aluminum on the aluminum interior version. Exterior portion of head and side jambs shall be color-matched extruded aluminum. Sill shall be thermally broken bronze or mill aluminum with interior water dam. Drainage system with exterior weep covers incorporated into sill. 2 to 8 panels available in various configurations. 10 to 16 panels available in bi-parting configurations. Fir interior option is available. Recessed sill available with drainage and without.
   B. Door Panels: Shall be thermally-broken aluminum. Stiles and rails are 2 1/16” wide, and panel thickness is 2 3/8” for aluminum interior and 2 5/8” for wood interior. Corners shall be mitered. Gaskets are applied to the back side of glass stops. Doors are shipped knocked down for field assembly. Pine or Fir interior option is available.
   C. Finish: All aluminum exterior and interior surfaces shall be covered with a factory applied, polyester powder-coat paint in 23 standard and 27 feature colors.
   D. Glazing: Shall be 1” tempered double pane LoE 366 insulating glass as standard, glazed with gaskets, and interior stops. LoE 270 and Dual LowE options are available. Cardinal’s Preserve ™ option is available on most glass options. It is a removable, factory-applied protective film adhered to both interior and exterior surfaces of the glass.
   E. Weatherstripping: Shall include flexible gaskets between jambs and panel and between all panels for positive protection against air and water infiltration.
   F. Hardware: Installed multi-point hardware has three-point or four-point, side engage, tongue locking system. Three handlesets are available in black, bronze, white, and satin chrome. Twinbolts are installed and offered in black, bronze, or color-matched.
   G. Screens: Not available as a factory option
   H. Grilles: Not available as a factory option
PART 3 – EXECUTION

3.01 EXAMINATION
   A. Verify that there is no visible damage to the unit before installation.

3.02 INSTALLATION
   A. Verify the rough opening is of the recommended size and that it is plumb, level, and square.
   B. Install the window unit in accordance with the manufacturer’s recommendations.
   C. Install sealant, backing material, and insulation around opening perimeter in accordance with Section 07900 and Section 07920.

3.03 ADJUSTMENT AND CLEANING
   A. Operate unit and verify that all hardware operates freely. Make any adjustments necessary.
   B. Cover the window unit to avoid damage due to spray paint, plaster, and other construction operations.
   C. Remove all visible labels and instructions.
   D. Final cleaning of glass in accordance of Section 01