PART 1 - GENERAL

1.01 SECTION INCLUDES
   A. Factory assembled aluminum clad wood outswing patio doors [including sidelites] glass and glazing, operable hardware, weatherstripping, insect screen, 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.
   E. Window units shall meet impact requirements in accordance with AAMA 506-2000 / ASTM E-1886-05 / ASTM E-1996-06.

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, window 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 Series Clad Outswing Patio Door units as manufactured by Windsor Windows & Doors.

2.02 MATERIALS
A. Frame: Select softwoods treated with water repellent preservative in accordance with NWWDA I.S.-4. Exposed exterior portion of head and jambs shall be extruded aluminum sealed at corners with closed cell foam gaskets and fastened with aluminum corner keys. Interior face of jambs shall be clear stain grade. Sill shall be aluminum with solid oak threshold with protective covering. Mill finish sill standard; bronze anodized sill with protective coating optional. Doors will have a single frame with a continuous head and sill. Frame width is adjustable from 4 9/16” to 7 1/4” with available interior jamb extenders. Frame is supported with extruded aluminum nailing fin. Installation clips and screws will be provided with units.

B. Door Panels: Shall be softwoods with Ponderosa pine veneers treated with water repellent preservative. Stiles and rails shall be fastened with ribbed hardwood dowels. Exterior surfaces shall be clad with aluminum extrusion with lapped and sealed corners. Foam tape is applied to the back side of glass stops. Stiles are 4 7/8” wide, top rail is 5 3/16” wide, and bottom rail is 8 9/16” wide. Bi-hinge option available (both panels operate).

C. Finish: All aluminum exterior surfaces shall be covered with a factory applied, polyester powder-coat paint in 22 standard and 20 feature colors. Anodized colors are also available.

D. Glazing: Shall be ¾” Sea Storm™ Laminated LoE2 insulating glass as standard, glazed with double-faced tape plus a full perimeter of structural silicone, and interior wood stops. Cardinal's Preserve™ option is standard for Sea Storm™ Impact IG. It is a removable, factory-applied protective film adhered to both interior and exterior surfaces of the glass.

E. Weatherstripping: Shall include flexible weatherable PVC and foam seal between jambs and panel. Pile weatherstripping also used between head and side jambs and panel.

F. Hardware: Finish matched strike plates and adjustable hinges shall be installed with each operating panel for smooth operation. The multi-point hardware has a five-point, side engage, tongue-locking and shootbolt system. Head and sill strikes are stainless steel. A variety of hardware finishes are available. Handle sets are ordered and shipped separately.

G. Screens: Screens are not available on outswing doors.

H. Grilles: (Extra when specified) Colonial grilles shall be select pine with moulded edges. Stick grilles are fastened to sash with press pins, while perimeter grilles use a hidden clip system. Stick grilles and perimeter grilles are available in 7/8” or 1-1/4” widths. White, cinnamon, bronze, tan, ivory, hunter green, or black; aluminum inner grilles (in air space) are also available in 13/16” flat or 3/4” profiled. Two-toned inner grilles are available with a white interior, and a bronze, green, tan, ivory, or black exterior. Windsorlite (WDL) simulates true divided lite, but is created by adhesively fixing the wood interior and aluminum exterior to the surfaces of the insulated glass. WDL is available in 5/8”, 7/8” and 1-1/4” widths. See Divided Lite Options for profile details. All are available with or without inner bar between the glass. Exterior bars are available in 22 standard and 20 feature colors.
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.
   D. For installation details reference Florida drawing numbers 1373 and 1374.

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