PART 1 - GENERAL

1.01 SECTION INCLUDES
A. Factory assembled aluminum clad wood sliding 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.

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 Clad Sliding Patio Door units [including sidelites units] as manufactured by Windsor Windows & Doors.

2.02 MATERIALS
A. Frame: Shall be select softwoods treated with water repellent preservative in accordance with NWWDI I.S.-4. Exposed exterior portion of head and side jambs shall be extruded aluminum sealed at corners with butyl gaskets. Sill and setting block shall be pultruded fiberglass and panels shall operate on stainless steel track cover. Grey sill standard; bronze sill optional. Inactive jamb parting stops shall be clear pine. Active jamb cover shall be extruded aluminum. Threshold shall be solid oak. Overall width of frame shall be 4 9/16”. Jamb extenders are available to match other finished wall thickness. Quad option available consisting of a continuous head and sill with two active center panels. Integral extruded aluminum nail fin is utilized for frame installation. Natural Alder and Fir interior options are available.

B. Door Panels: Shall be select softwoods and engineered laminated cores, treated with water repellent preservative. Stiles and rails are 2 3/4” wide, and panel thickness is 1 3/4”. Corners shall be slotted and tenoned, and securely fastened with screws. Exterior surfaces shall be clad with aluminum extrusion with corners lapped and sealed. Operating panels shall have two end-adjustable tandem ball bearing steel rollers. Foam tape is applied to the back side of glass stops. Doors are available as factory set-up for either OX or XO handing. Optional French stile panels provide a “French Door Appearance”. French sliding panels are glazed with double-faced tape. French panels contain Ponderosa pine veneers. Stiles are 4 9/16” wide. Top and bottom rails are select softwoods. Top rail is 5 3/16” wide. Bottom rail is 8 9/16” wide. Natural Alder or Fir interior option is available.

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 3/4” tempered double pane LoE 366 insulating glass as standard, glazed with double-faced tape, a full perimeter bead of silicone, and interior wood stops. A wide array of other glass options is offered including clear, tinted, and obscure. 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 weatherable PVC and foam seal at the head and jambs with a pile fin-seal weatherstripping at the interlocks. Pile weatherstrip also used at the bottom of operating panel and at the ends of the interlock.

F. Hardware: Shall include 2-point locking system with adjustable keeper on operating panel; thumb latch and handle on screens. Multiple finishes, keyed locks, and security foot bolts are optional. Handle sets are ordered and shipped separately.

G. Screens: (Extra when specified) Shall be a fiberglass BetterVue™ screen set in painted aluminum frame. UltraVue™ Screen option is available. Screen shall be mounted outside of door panels and shall roll on end-adjustable steel rollers. Screens available in 22 standard and 20 feature colors. Our insect screens are intended to allow air and light in and keep insects out. The screen is not intended to stop children, adults, or animals from falling out the door.

H. Grilles: (Extra when specified) Colonial grilles shall be select pine with moulded edges, fastened to sash with press pins. 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, 3/4” profiled or 1” profiled. Two-toned inner grilles (¾” profile only) 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 exterior bars to the surfaces of the insulated glass; when ordered Interior Primed, the interior WDL bars will be cellular PVC. WDL is available in 7/8” and 1 1/4” Standard, 5/8” Putty, and 7/8” Putty exterior with Standard interior. 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.

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