

## PART 1 GENERAL

## 1.01 SECTION INCLUDES

- A. Clad wood doors with integral frames.

## 1.02 RELATED REQUIREMENTS

- A. Section 072500 - Weather Barriers: Perimeter air and vapor seal between clad wood door frame and adjacent construction.
- B. Section 079200 - Joint Sealants: Sealing joints between frames and adjacent construction.
- C. Section 087100 - Door Hardware.
- D. Section 088000 - Glazing.

## 1.03 REFERENCE STANDARDS

- A. AAMA/WDMA/CSA 101/I.S.2/A440 - North American Fenestration Standard/Specification for windows, doors, and skylights; 2017.
- B. AAMA 2604 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2017a.
- C. ASTM C1036 - Standard Specification for Flat Glass; 2016.
- D. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2018.
- E. ASTM E547 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Difference; 2000 (Reapproved 2016).
- F. NFRC 100 - Procedure for Determining Fenestration Product U-factors; 2014.
- G. WDMA I.S. 4 - Industry Specification for Preservative Treatment for Millwork; 2015a.

## 1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Indicate door core materials and construction; veneer species, type and characteristics.
- C. Shop Drawings: Show doors and frames, elevations, sizes, types, swings, undercuts, beveling, blocking for hardware, factory machining, factory finishing, cutouts for glazing and other details.
- D. Performance Validation: Submit certified label or test report on products as indicated under performance requirements to validate product compliance.

## 1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years of documented experience.

## 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Package, deliver and store doors in accordance with specified quality standard.
- B. Accept doors on site in manufacturer's packaging. Inspect for damage.
- C. Protect doors with resilient packaging \_\_\_\_\_. Do not store in damp or wet areas; or in areas where sunlight might bleach veneer. Seal top and bottom edges with tinted sealer if stored more than one week. Break seal on site to permit ventilation.

## PART 2 PRODUCTS

## 2.01 MANUFACTURERS

- A. Wood Doors with Exterior Aluminum Cladding and Interior Wood Facing:
  - 1. Marvin Windows & Doors\_\_\_\_\_.

## 2.02 COMPONENTS

- A. Clad Wood Doors: See drawings for locations and additional requirements.
- B. Exterior Clad Wood Doors: Water-repellent and preservative-treated lumber in accordance with WDMA I.S. 4.
  - 1. Thickness: 1-3/4 inches (44 mm), unless otherwise indicated.
  - 2. Exterior Door Cladding: Aluminum sheet as indicated.
  - 3. Exterior Frame Cladding: Extruded aluminum as indicated.
- C. Configuration: As indicated on drawings.
- D. Door Product Type: SHD - Side-hinged door, in accordance with AAMA/WDMA/CSA 101/I.S.2/A440.
- E. Integral Wood Frame: Water-repellent and preservative-treated lumber in accordance with WDMA I.S. 4, kiln dried and suitable for stain or painted finish.
  - 1. Frame Depth: As indicated on drawings.
- F. Glazing: Double glazed, clear, high performance Low-E coated, manufacturer's standard gas filled, fully tempered, with glass thicknesses as recommended by manufacturer for specified wind conditions.
  - 1. Annealed Type: ASTM C1036, Type I - Transparent Flat, Class 1 - Clear, Quality - Q3 (architectural).
  - 2. Fully Tempered Glass: ASTM C1048, Kind FT - Fully Tempered.
  - 3. High Performance Low-E Coating: Magnetron sputtering vapor deposition (MSVD) titanium dioxide (TiO<sub>2</sub>) coating, applied to No. 2 surface.
  - 4. Air Space: 3/4 inch (19 mm).
- G. Glazing Stops: Wood, of same species as door facing, butted corners; prepared for countersink style tamper proof screws.
  - 1. Apply silicone glazing sealant to exterior glazing stops as recommended by manufacturer.
  - 2. Apply water repellent treatment to wood glazing stops.
- H. Grilles:
  - 1. Full Divided Lites: Permanent interior and exterior grille and between the glass spacer, style and color as indicated.

- I. Weatherstripping: Flexible foam with butt joint corners at perimeter of frame.
- J. Door Stops: Clear preservative treated wood, finished to match frame.
- K. Door Sill: Extruded 6063-T5 aluminum, 1/2 inch (12.7 mm) low profile threshold with compressible bulb weatherstripping and attached to frame jambs.
  - 1. Color: Mill finish.

## 2.03 DOOR INTERIOR WOOD FACINGS

- A. Wood Finish: Factory applied primer and field applied opaque finish.

## 2.04 DOOR EXTERIOR CLADDING

- A. Aluminum Cladding: 6063-T5 aluminum cladding on exterior side, 0.045 inch (1.14 mm) minimum thickness, factory fabricated, factory glazed; complete with integral sloped sill/threshold, flashings, and anchorage devices.
- B. Exterior Aluminum Finish: Class II color anodized.
  - 1. Color: Color as selected by Architect from manufacturer's standard colors.
- C. Aluminum Members: Factory finished; solid corner construction; thermally broken.
- D. Drainage: Provide drainage to exterior for moisture entering joints and glazing spaces and for condensation occurring within frame construction.

## 2.05 PERFORMANCE REQUIREMENTS

- A. Performance Validation: Side hinged doors (SHD) in compliance with AAMA/WDMA/CSA 101/I.S.2/A440 performance requirements as indicated, or an independent test report for indicated products itemizing compliance and acceptable by authorities having jurisdiction.
- B. Design Pressure (DP): In accordance with applicable codes.
- C. Water Penetration Resistance: No uncontrolled leakage on interior face when tested in accordance with ASTM E547 at differential pressure of 15 percent of Performance Grade (PG).
- D. Thermal Transmittance: U-factor of 0.33, maximum, that includes window glazing, door and frame system based on average window size required for project and determined in accordance with NFRC 100.

## 2.06 FABRICATION

- A. Fabricate doors in accordance with door quality standard specified.
- B. At exterior doors, provide aluminum flashing at the top and bottom rail and the sill of glazed openings for full thickness and width of door.
  - 1. Provide manufacturers standard nailing fin at jambs and head of integral door frame.
- C. Factory machine doors for hardware other than surface-mounted hardware, in accordance with hardware requirements and dimensions.
- D. Factory fit doors for frame opening dimensions identified on shop drawings, with edge clearances in accordance with specified quality standard.

- E. Cut and configure exterior door edge to receive recessed weatherstripping devices.
- F. Provide edge clearances in accordance with the quality standard specified.

## 2.07 ACCESSORIES

- A. Door Astragals: Thickness, wood species, and interior and exterior finishes to match door; provide with weatherseals.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that opening sizes and tolerances are acceptable.
- C. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.

### 3.02 INSTALLATION

- A. Install doors in accordance with manufacturer's instructions and specified quality standard.
- B. Assemble multiple units before installation in accordance with manufacturer's installation guidelines.
- C. Use machine tools to cut or drill for hardware.
- D. Coordinate installation of doors with installation of integral frames and hardware.
- E. Coordinate installation of glazing.

### 3.03 TOLERANCES

- A. Comply with specified quality standard for fit and clearance tolerances.
- B. Comply with specified quality standard for telegraphing, warp, and squareness.

### 3.04 ADJUSTING

- A. Adjust doors for smooth and balanced door movement.
- B. Adjust closers for full closure.

### 3.05 CLEANING

- A. Remove protective material from factory finished surfaces.
- B. Clean units using cleaning material and methods in accordance with door manufacturer's written recommendations.

3.06 PROTECTION

- A. Protect installed work from damage due to subsequent construction activity on the site.

**END OF SECTION**