

SECTION 08 14 23

ALUMINUM CLAD WOOD COMMERCIAL DOOR

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Aluminum clad wood commercial door and frame, complete with hardware, glazing, weather strip, jamb extension, and standard or specified anchors, trim, and attachments.

1.2 RELATED SECTIONS

- A. Section 01 33 23—Submittal Procedures: Shop Drawings, Product Data, and Samples
- B. Section 01 62 00—Product Options
- C. Section 01 63 00—Product Substitution Procedures
- D. Section 01 65 00—Product Delivery
- E. Section 01 66 00—Product Storage and Handling Requirements
- F. Section 01 71 00—Examination and Preparation
- G. Section 01 73 00—Execution
- H. Section 01 74 00—Cleaning and Waste Management
- I. Section 01 75 00—Starting and Adjusting
- J. Section 01 76 00—Protecting Installed Construction
- K. Section 06 22 00—Millwork: Wood trim other than furnished by door and frame manufacturer
- L. Section 07 92 00—Joint Sealants: Sill sealant and perimeter caulking
- M. Section 08 71 00—Door Hardware: Hardware other than furnished by door and frame manufacturer
- N. Section 09 90 00—Paints and Coatings: Paint or stain other than factory applied finish

1.3 REFERENCES

- A. WDMA I.S.4: Industry Standard for Water Repellent Preservative Treatment for Millwork.
- B. Sealed Insulating Glass Manufacturers Association / Insulating Glass Certification Council (SIGMA / IGCC).
- C. American Architectural Manufacturers Association (AAMA): 2605: Voluntary Specification for High Performance Organic Coatings on Architectural Extrusions and Panels.
- D. National Fenestration Rating Council (NFRC): 101: Procedure for Determining Fenestration Product Thermal Properties.

1.4 SUBMITTALS

- A. Shop Drawings: Submit shop drawings under provisions of Section 01 33 23.
- B. Product Data: Submit catalog data under provisions of Section 01 33 23.
- C. Samples:
 - 1. Submit corner section under provisions of Section 01 33 23.
 - 2. Include glazing system, quality of construction, and specified finish.
- D. Quality Control Submittals: Certificates: Submit manufacturers certifications indicating compliance with specified performance and design requirements under provisions of Section 01 33 23.

1.5 DELIVERY

- A. Comply with provisions of Section 01 65 00.
- B. Deliver in original packaging and protect from weather.

1.6 QUALITY ASSURANCE

- A. Regulatory Requirements: Emergency Egress or Rescue: Comply with requirements for sleeping units of 2009 North Carolina Building Code.

1.7 STORAGE AND HANDLING

- A. Prime or seal wood surfaces, including surface to be concealed by wall construction, if more than thirty (30) days will expire between delivery and installation.
- B. Store door panels flat on a level surface in a clean and dry storage area under provisions of Section 01 66 00. Seal unfinished top and bottom edges of door panels if door panels are stored at the job site more than one (1) week.
- C. Condition doors to local average humidity before hanging.

1.8 WARRANTY

- A. Doors shall be warranted to be free from defects in manufacturing, materials, and workmanship for a period of ten (10) years from purchase date.
- B. Insulating glass shall be warranted against visible obstruction through the glass caused by a failure of the insulating glass air seal for a period of twenty (20) years from the date of original purchase.
- C. Please see separate manufacturer warranties for Commercial Door hardware components, sills and steel frames.

PART 2 PRODUCTS

2.1 MANUFACTURED UNITS

- A. Description: Factory assembled aluminum clad Commercial Door, as manufactured by Marvin Windows and Doors, Ripley, Tennessee.

2.2 FRAME DESCRIPTION

- A. Finger jointed, edge-glued pine core with clear pine veneer; finger jointed Douglas fir core with clear Douglas fir veneer; finger jointed, edge-glued white oak core with clear white oak veneer; finger jointed, edge-glued cherry core with clear cherry veneer; finger jointed, edge-glued mahogany core with clear mahogany veneer; finger jointed, edge-glued vertical grain Douglas fir core with clear vertical grain Douglas fir veneer.
 - 1. Kiln dried to a moisture content no greater than twelve (12) percent at the time of fabrication.
 - 2. Water repellent, preservative treated in accordance with WDMA I.S.4.
- B. Frame width: 6-9/16 inches (167 mm) with jamb extensions for a 2x8 wall.
- C. Frame thickness: 1-1/16 inches (27 mm).
- D. Exterior extruded aluminum clad 0.050 inch (1.3 mm) thick.
- E. Low profile ADA compliant sill. Jambs extended for a 2x8 wall.

PANEL DESCRIPTION

- A. Stiles: finger jointed, edge-glued LVL. Rails: finger jointed, edge-glued pine. Cherry veneer.
 - 1. Kiln dried to a moisture content no greater than twelve (12) percent at time of fabrication.
 - 2. Water repellent, preservative treated in accordance with WDMA I.S.4.
- B. Stiles contain laminated veneer lumber (LVL) core, solid wood top and bottom rail, with clear pine. Maple veneer.
- C. Composite panel thickness: 2 ¼ inches (57mm).
- D. Exterior extruded aluminum clad 0.055 inch (1.4 mm) thick.

- E. Top rail width: 2 ¼ inch panel 8 1/8 inches (206 mm).
- F. Stile width: 6 inches (152 mm).
- G. Bottom rail height: 11-3/8 inches (289 mm).
- H. Panel corners glued and fastened with 5/8 X 4 inch (16 mm X 102 mm) fluted hardwood dowels. Removable interior vinyl glazing stops with clear wood covers; 2 ¼ inch panel – nailed on glazing stops.

2.4 GLAZING

- A. Select quality complying with ASTM C 1036. Comply with 16 CFR 1201 Safety Standard for Architectural Glazing Materials. Tempered insulating glass IGMA/IGCC certified to performance level CBA when tested in accordance with ASTM E 774.
- B. Glazing Method: Tempered Insulating Glass (Altitude Adjusted).
- C. Glass Type: Clear; Low E II—Argon Gas; Laminated glass complying with Impact Zone 3
- D. Glazing Seal: Silicone bedding, exterior.

2.5 FINISH

- A. Exterior: Aluminum clad. Fluoropolymer modified acrylic topcoat applied over primer. Meets or exceeds AAMA 2605 requirements.
 - 1. Standard Color: Stone White
- B. Interior: Treated bare wood

2.6 HARDWARE

- A. Hinges: 4 ½" X 4 ½" square corner ball bearing hinges. Finish: Stainless Steel.
- C. Locking System: Von Duprin 98 L, Von Duprin 98 EO
- D. Closers: LCN 1461, parallel arm attaches to push side of door (includes Extra Duty Arm and Self Reaming and Tapping Screws) Finish: Aluminum (BHMA 689)

2.7 WEATHER STRIP

- A. Head jamb and side jambs to have two sets of bulb weather strip, locking stiles have pile weather strip maintaining contact with door panels.

2.8 JAMB EXTENSION

- A. Factory loose, for 2x8 wall thickness.
- B. Finish: Match interior frame wood species and finish.

2.9 ACCESSORIES AND TRIM

- A. Installation and Hardware Accessories:
 - 1. Factory installed vinyl nailing fin/drip cap.
 - 2. Installation brackets: 9-3/8 inches (238 mm).

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Before Installation, verify openings are plumb, square, and of proper dimension as required in Section 01 71 00.
- B. Acceptance of Conditions: Beginning of installation confirms acceptance of existing conditions.

3.2 INSTALLATION

- A. Comply with Section 01 73 00.
- B. Assemble and install doors and frames according to manufacturer's instructions and reviewed shop drawings.
- C. Install frames and stationary panels as required.
- D. Install accessory items as required.
- E. Use finish nails to apply wood trim and mouldings.

3.3 STARTING AND ADJUSTING

- A. Adjust door to work freely with hardware functioning properly.

3.4 CLEANING

- A. Remove visible labels and adhesive residue according to manufacture's instructions.
- B. Leave doors and glass in a clean condition. Final cleaning as required in Section 01 74 00.

3.5 PROTECTING INSTALLED CONSTRUCTION

- A. Comply with Section 01 76 00.
- B. Cover doors and frames during painting or other construction operations that may cause damage.

END OF SECTION