

**Section 08 14 23  
Clad Commercial Door**

**Part 1 General**

**1.1 Section Includes**

- A. Aluminum Clad Wood Commercial Door and Frame, complete with hardware, glazing, weather strip, stationary transom, jamb extension, and standard or specified anchors, trim and attachments.

**1.2 References**

- A. WDMA I.S.4: Industry Standard for Water Repellent Preservative Treatment 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. American Society for Testing and Materials (ASTM): E330: Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.

**1.3 System Description**

- A. Design and Performance Requirement. Design Pressure is applicable to individual units and may vary with unit size. (2 1/4" Door only)
  - 1. Units shall be designed to comply with ASTM E330 for structural performance. SHED DP +40/-40 psf (with removable mullion rim device & vertical locking rods) and SHED DP +25/-25 psf (with removable mullion and rim device)

**1.4 Submittals**

- A. Shop Drawings: Submit shop drawings for architect review and approval.
- B. Samples:
  - 1. Submit corner section sample for Owner and Architect review and approval.
  - 2. Include glazing system, quality of construction and specified finish
- C. Quality Control Submittals: Certificates: submit manufacturer's certification indicating compliance with specified performance and design requirement.

## 1.5 Quality Assurance

- A. Requirements: consult local code for IBC [International Building Code] adoption year and pertinent revisions

## 1.6 Delivery

- A. Deliver in original and protect from weather.

## 1.7 Storage and Handling

- A. Prime and seal wood surfaces, including 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 above ground to protect from weather.
- C. Condition doors to local average humidity before hanging

## 1.8 Warranty

Complete and current warranty information is available at [marvin.com/warranty](http://marvin.com/warranty). The following summary is subject to the terms, condition, limitations and exclusions set forth in the Marvin Windows and Door Limited Warranty and Products in Coastal Environments Limited Warranty Supplement:

- A. Clear insulating glass with stainless steel spacers is warranted against seal failure caused by manufacturing defects and resulting in visible obstruction through the glass for twenty (20) years from the original date of purchase. Glass is warranted against stress cracks caused by manufacturing defects from (10) years from the original date of purchase.
- B. Standard exterior aluminum cladding finish is warranted against manufacturing defects resulting in chalk, fade and loss of adhesion (peel) per the American Manufacture's Association's (AAMA) Specification 2605-11 Section 8.4 and 8.9 for twenty (20) years from the original date of purchase.
- C. Factory applied interior finish is warranted to be free from the Finish Defects for a period of five (5) years from the original date of purchase.
- D. Hardware and other non-glass components are warranted to be free from manufacturing defects for ten (10) years from the original date of purchase.

## Part 2 Products

### 2.1 Manufactured Units

- A. Description: Factory assembled Aluminum Clad Commercial Door, as manufactured by Marvin Windows and Doors, Ripley, Tennessee, or Architect Approved Equal. Contractor is responsible for demonstrating that proposed product Substitution is of equal or greater technical value for all items identified in this spec.

### 2.2 Frame Description

- A. Finger-Jointed, edge-glued Mahogany core with non finger-jointed Mahogany veneer.
  - 1. Kiln dried to 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: 4 9/16"
- C. Frame thickness: 1 1/16"
- D. Exterior extruded aluminum clad 0.050" thick
- E. Thermal barrier saddle low profile .250" by 7.125" sill
- F. Optional No Sill – sill supplied and applied by others. Jambs extended 7/8" beyond panel bottom
- G. Steel Frame – 1 3/4" panel doors only: 16 gauge with unequal rabbet. 4 3/4" , 5 3/4" , 6 3/4" , or 7 3/4" frame width. Verify dimension in field.

### 2.3 Panel Description

- A. 2 1/4" Doors: Stiles and top rail contain laminated veneer lumber (LVL) core with non finger-jointed Mahogany. Solid wood bottom and intermediate rails.
- B. Composite panel thickness: 2 1/4"
- C. Exterior extruded aluminum clad 0.055" thick
- D. Top rail width: 6"
- E. Stile width: 6"
- F. Bottom rail height: 11 3/8"
- G. Panel corners glued and fastened with 5/8" x 4" fluted hardwood dowels. Removable interior vinyl glazing stops with non finger-jointed wood covers. 2 1/4" panel: visible nail fastener on glazing stop.

## 2.4 Glazing

- A. Select quality complying with ASTM C1036. 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 E774.
- B. Glazing Method: Tempered Insulating Glass (Altitude Adjusted)
- C. Glass Type: Clear, Bronze, Gray, Reflective Bronze, Low E2 with or without Argon, Low E3 with or without Argon, Obscure, Laminated
- D. Glazing Seal: Silicone bedding, exterior

## 2.5 Finish

- A. Exterior: Aluminum clad. Fluoropolymer modified acrylic topcoat applied over primer. Meets AAMA 2605 requirements.
  - 1. Owner and Architect will select Standard Colors from manufacturer palette: Stone White, Bahama Brown, Bronze, Pebble Gray, Evergreen, Sierra White, Coconut Cream, French Vanilla, Cashmere, Desert Beige, Cumulus Gray, Cadet Gray, Ebony, Arctic White, Cascade Blue, Hampton Sage, Wineberry, Bright Silver (pearlescent), Copper (pearlescent)
- B. Interior Finish:
  - 1. Factory applied water – borne acrylic enamel clear coat. Applied in two separate coats with light sanding between coats.

## 2.6 Hardware

- A. Hinges: 4 ½" x 4 ½" square corner ball bearing hinges.
  - 1. Finish: Stainless Steel (US32D).
- B. Locking System:
  - 1. No lock, no bore is standard. Contractor to bore in field as required to suit selected hardware.
  - 2. Commercial Hardware Package: closer, rim device, mortise lock, removable mullion and kick plate, AS APPROVED BY LOCAL FIRE MARSHALL.
- C. Optional hardware Routs and Preps.
  - 1. Von Duprin Cross Bar Device and Trim Sets
  - 2. Schlage L Mortise Lock and Trim Sets
  - 3. Alarm Lock

## **2.7 Weather Strip**

- A. Head jamb and hinge jamb: bulb type weather strip.
  - 1. Color: black
- B. Locking jamb: Gray pile weather strip
- C. Surface mounted aluminum panel drip mounted at bottom of panel (shipped loose for field application)
  - 1. Standard colors: Matches panel finish with matching screws

## **2.8 Jamb Extension**

- A. Factory installed (loose), for wall thickness indicated or required. Contractor to Field measure and order to suit Field Conditions.
- B. Finish: Match interior frame wood species and finish.

## **2.9 Flat Panels**

- A. Flat Panel
  - 1. 6" intermediate rail constructed of 0.125" aluminum to the exterior with foam backing. Available in all aluminum clad colors. Aluminum clad colors meeting AAMA 2605 requirements.
  - 2. Core is medium density fiberboard (MDF) with non finger-jointed wood laminated to the interior.
- B. Placement
  - 1. High Placement: 40 5/16" on center (OC) of 6" intermediate rail from bottom sill for a 25 1/8" visible panel height.

## **2.10 Accessories and Trim**

### A. Installation and hardware Accessories:

1. Factory installed vinyl nailing fin/drip cap
2. Installation brackets: 6 3/8" ; 9 3/8" ; 15 3/8" or as required by existing conditions.

### B. Masonry brackets: 6", or as required by existing conditions.

### C. Aluminum Extrusions:

1. Profile: Brick Mould Casing; Flat Casing; Mullion Cover; Custom Profiles as required.
2. (Omitted.)
3. Finish: Fluoropolymer modified acrylic topcoat applied over primer. Meets AAMA 2605

requirements. Available in all aluminum clad colors. Owner and Architect to select Manufacturer standard color prior to Contractor placing the order.

## **Part 3 Execution**

### **3.1 Examination**

- A. Verification of Condition: Before installation, verify openings are plumb, square and of proper dimensions as required. Report frame defects or unsuitable conditions to the General Contractor before proceeding.
- B. Acceptance of Condition: Beginning on installation confirms acceptance of existing conditions.

### **3.2 Installation**

- A. Comply with manufacturer's written instructions.
- B. Assemble and install window/door unit(s) according to manufacturer's instruction and reviewed shop drawing.
- C. Install sealant and related backing materials at perimeter of unit or assembly. Do not use expansive foam sealant.
- D. Install accessory items as required.
- E. Use finish nails to apply wood trim and mouldings.

### **3.3 Cleaning**

- A. Remove visible labels and adhesive residue according to manufacturer's instruction.
- B. Leave windows and glass in a clean condition. Final cleaning as required by Bid Documents.

### **3.4 Protecting Installed Construction**

- A. Protect windows from damage by chemicals, solvents, paint or other construction operations that may cause damage.

End of Section