

Section 081423 Clad Commercial Door

Part 1 General

1.1 Section Includes

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

1.2 Related Sections

- A. Section 013323 – Submittal Procedures
- B. Section 017300 - Execution
- C. Section 087100 – Door Hardware: Hardware other than furnished by door and frame manufacturer

1.3 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.

1.4 System Description

- A. Design and Performance Requirement. Design Pressure is applicable to individual units and may vary with unit size. (2 ¼" 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)

1.5 Submittals

- A. Shop Drawings: Submit shop drawings under provision of Section 01 33 23
- B. Product Data: Submit catalog data under provision of Section 01 33 23

C. Samples:

1. Submit corner section under provision of section 01 33 23
2. Include glazing system, quality of construction and specified finish

D. Quality Control Submittals: Certificates: submit manufacture's certification indicating compliance with specified performance and design requirement under provision of section 01 33 26. (2 ¼" Doors only)

1.6 Quality Assurance

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

1.7 Delivery

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

1.8 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 under provision of Section 01660
- C. Condition doors to local average humidity before hanging

1.9 Warranty

Complete and current warranty information is available at 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.

2.2 Frame Description

- A. Finger-Jointed, edge-glued Pine core with non finger-jointed Pine 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" (116mm)
- C. Frame thickness: 1 1/16" (27mm)
- D. Exterior extruded aluminum clad 0.050" (1.3mm) thick
- E. Standard factory installed thermal barrier saddle low profile .500" (13mm) by 7.125" (181mm) sill

2.3 Panel Description

- A. 1 3/4" Doors: Stiles contain laminated veneer lumber (LVL) core with non finger-jointed Pine. Solid wood top, bottom and intermediate rails.
 - 1. Kiln dried to 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. Composite panel thickness: 1 3/4" (44mm); 2 1/4" (57mm)
- C. Exterior extruded aluminum clad 0.055" (1.4mm) thick
- D. Top rail width: 1 3/4" panel: 6" (152mm) or 2 1/4" panel: 8 1/8" (206mm)
- E. Stile width: 6" (152mm)
- F. Bottom rail height: 11 3/8" (289mm)

- G. Panel corners glued and fastened with 5/8" x 4" (16mm x 102mm) fluted hardwood dowels. Removable interior vinyl glazing stops with non finger-jointed wood covers. 1 3/4" panel: no visible fastener holes; 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: Low E2 with Argon.
- 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. Standard Colors: As selected by Architect from manufacturer's standard.
- B. Interior Finish Options:
 - 1. Bare interior finish.

2.6 Hardware –

Coordinate with hardware contractor and Door Hardware Schedule Section 087100 for door prep

- A. Hinges: 4 1/2" x 4 1/2" square corner ball bearing hinges.
 - 1. Finish: As selected by Architect from Manufacturer's standard.

2.7 Weather Strip

- A. Head jamb and hinge jamb: bulb type weather strip.
 - 1. Color: Beige or optional 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. Custom colors: Matches panel finish with stainless steel screws

2.8 Simulated Divided Lites (SDL)

- A. 7/8" (22mm)– with internal spacer bar.
 1. Exterior muntins: Extruded aluminum 0.055" (1.4mm) thick. Color matched panel aluminum cladding color.
 2. Interior muntins: Wood and finish interior of door
 3. Pattern: As indicated on drawings
 4. Interior muntins: Wood and finish interior of door
 5. Standard interior sticking: Ogee

2.9 Accessories and Trim

- A. Installation and hardware Accessories:
 1. Factory installed vinyl nailing fin/drip cap
 2. Installation brackets: 6 3/8" (162mm); 9 3/8" (238mm); 15 3/8" (390mm)
 3. Masonry brackets: 6" (152mm); 10" (254mm)
- B. Aluminum Extrusions:
 1. Profile: Ridgeland Exterior Casing, Mullion Cover; Custom Profiles as indicated on drawings
 2. Finish: Fluoropolymer modified acrylic topcoat applied over primer. Meets AAMA 2605 requirements. Available in all aluminum clad colors. Contact your Marvin representative for custom colors.

Part 3 Execution

3.1 Examination

- A. Verification of Condition: Before installation, verify openings are plumb, square and of proper dimensions as required in Section 01 71 00. 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 Section 01 73 19.

- 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 in accordance with Section 07 92 00 Joint Sealants. 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 in Section 01 74 00.

3.4 Protecting Installed Construction

- A. Comply with Section 01 76 00.
- B. Protecting windows from damage by chemicals, solvents, paint or other construction operations that may cause damage.

End of Section