

## SECTION 08405

### METAL-FRAMED CLAD ENTRANCES

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Metal Framed Clad Entrances.

##### 1.2 RELATED SECTIONS

- A. Section 08410 - Metal-Framed Storefronts.
- B. Section 08710 - Door Hardware.
- C. Section 08800 - Glazing.

##### 1.3 REFERENCES

- A. ASTM A 666 - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
- B. ASTM B 455 - Standard Specification for Copper-Zinc-Lead (Leaded Brass) Extruded Shapes.
- C. NAAMM Metal Finishes Manual; National Association of Architectural Metal Manufacturers.

##### 1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Fabricator's descriptive literature for specified components.
- C. Shop Drawings: Dimensioned drawings as follows:
  - 1. Plans: Indicate layout of entrance assemblies.
  - 2. Elevations:
    - a. Appearance of entrance layouts; include locations of visible seams in metal cladding.
    - b. Locations and identification of manufacturer-supplied door hardware.
    - c. Locations and sizes of cut-outs and drilled holes for other door hardware.
  - 3. Details:
    - a. Interface with adjacent construction; include requirements for support and bracing at openings.
    - b. Cross-section profiles of metal members, including mullions, perimeter framing, and door

- stiles and rails; include cladding details and seam locations.
- c. Installation details.
- d. Appearance of fabricator-supplied door hardware.
- 4. Schedule: Listing of each type component in entrance assemblies, cross-referenced to shop drawing plans, elevations, and details.
- D. Selection Samples: Two sets, representing fabricator's full range of available metal materials and finishes.
- E. Verification Samples: Two samples, minimum size 2 inches (50 mm) by 3 inches (76 mm), representing actual material and finish of sight-exposed metal.
- F. Quality Assurance Submittals: Contractor's certification that installer of entrance assemblies meets specified qualifications.
- G. Closeout Submittals: Operation and maintenance data for fabricator-supplied operating hardware.

#### 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum three (3) years installing entrance assemblies similar to that specified in this section.
- B. Pre-Installation Meetings:
  - 1. Convene at job site seven (7) calendar days prior to scheduled beginning of construction activities of this section to review requirements of this section.
  - 2. Require attendance by representatives of the following:
    - a. Installer of this section.
    - b. Other entities directly affecting, or affected by, construction activities of this section.
  - 3. Notify Architect four (4) calendar days in advance of scheduled meeting date.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products of this section in fabricator's unopened packaging until installation.

#### 1.7 PROJECT CONDITIONS

- A. Field Measurements: When construction activities permit, take field measurements at locations to receive products of this section; note discrepancies on submitted shop drawings.

## 1.8 SCHEDULING

- A. Ensure that metal components to be clad, and templates for door hardware not supplied by fabricator, are available to fabricator of this section to allow construction activities to proceed in accordance with construction progress schedule.

## PART 2 PRODUCTS

### 2.1 COMPONENTS

- A. Stile and Rail Aluminum-Framed Glass Entrances: Specified in Section 08410; sizes indicated on drawings.
- B. Stile and Rail Aluminum-Framed Glass Entrances: Types and dimensions indicated on drawings.
- C. Stile and Rail Aluminum-Framed Glass Entrances:
  - 1. Door size: \_\_\_ feet \_\_\_ inches (\_\_\_ mm) width by \_\_\_ feet \_\_\_ inches (\_\_\_ mm) height by \_\_\_ inch (\_\_\_ mm) thickness.
  - 2. Stile dimension: \_\_\_ inches (\_\_\_ mm).
  - 3. Top rail dimension: \_\_\_ inches (\_\_\_ mm).
  - 4. Center rail dimension: \_\_\_ inches (\_\_\_ mm).
  - 5. Bottom rail dimension: \_\_\_ inches (\_\_\_ mm).
  - 6. Glazing provisions: Flush stops, interior glazed.
  - 7. Glazing provisions: Flush stops, exterior glazed.
- D. Mullions: Specified in Section 08410; sizes and configurations indicated on drawings.
- E. Mullions: Types, configurations, and dimensions indicated on drawings.
- F. Mullions:
  - 1. Configurations: Indicated on drawings
  - 2. Cross-sectional dimensions: \_\_\_ inches (\_\_\_ mm) width by \_\_\_ inches (\_\_\_ mm) depth.
  - 3. Glazing provisions: Flush stops, interior glazed.
  - 4. Glazing provisions: Flush stops, exterior glazed.
- G. Glazing: Specified in Section 08410, and as follows:
  - 1. Doors: \_\_\_ inch (\_\_\_ mm) overall thickness.

2. Sidelites: \_\_ inch (\_\_ mm) overall thickness.
- H. Glazing: Specified in Section 08800, and as follows:
1. Doors: \_\_ inch (\_\_ mm) overall thickness.
  2. Sidelites: \_\_ inch (\_\_ mm) overall thickness.
- I. Cladding:
1. Material: Stainless steel conforming to ASTM A 666, Type 304; \_\_ inch (\_\_ mm) minimum thickness.
  2. Finish: Number 4, satin polish.
  3. Finish: Number 8, mirror polish.
  4. Finish: NAAMM designation \_\_\_\_\_.
- J. Cladding:
1. Material: Brass conforming to ASTM B 455, UNS C28000; \_\_ inch (\_\_ mm) minimum thickness.
  2. Finish: Number 4, satin polish.
  3. Finish: Number 8, mirror polish.
  4. Finish: Satin oxidized oil rubbed finish.
  5. Finish: clear baked enamel finish .
  6. Finish: NAAMM designation \_\_\_\_\_.
- K. Door Hardware: Specified in Section 08710.
- L. Door Hardware:
1. Supplied by fabricator as follows:
    - a. Hinges: \_\_\_\_\_.
    - b. Closers: \_\_\_\_\_.
    - c. Push/pulls: \_\_\_\_\_.
    - d. Locksets: \_\_\_\_\_.
    - e. Exit devices: \_\_\_\_\_.
  2. Finish of sight-exposed metals: Matching finish of fittings.
  3. All other door hardware: Specified in Section 08710.

## 2.2 FABRICATION

- A. Acceptable Fabricator: ACI Distribution, located at one of the following addresses:
1. West of Rocky Mountains: 9010 S. Norwalk Boulevard, Santa Fe Springs CA 90670; ASD. Tel. (800) 285-3677 or (562) 908-8893, Fax. (562) 695-8496.
  2. East of Rocky Mountains: 129000 Nicholson Road, Farmers Branch TX 75234; ASD. Tel. (800) 284-4527 or (972) 484-3691, Fax. (972) 247-6457.
- B. Requests for substitution will be considered in accordance with provisions of Section 01600.

- C. Substitutions: Not permitted.
- D. Shop Assembly:
  - 1. Clad aluminum components with specified cladding materials, forming flat surfaces and edges of cladding materials to fit tight to aluminum surfaces.
  - 2. Locate seams in cladding materials in accordance with shop drawings, forming straight hairline-width butt joints.
  - 3. Permanently laminate cladding materials to aluminum surfaces; visible fastening devices not permitted.
  - 4. Prepare clad components for specified hardware.
  - 5. Finish surfaces of cladding materials to specified finish; apply strippable protective materials to finished surfaces.
  - 6. Assemble components to extent practical, considering shipping limitations.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that openings to receive entrance assemblies are of correct size and are prepared correctly, in accordance with shop drawings.
- B. Installer's Examination:
  - 1. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
  - 2. Transmit two copies of installer's report to Architect within 24 hours of receipt.
  - 3. Beginning construction activities of this section before unacceptable conditions have been corrected is prohibited.
  - 4. Beginning construction activities of this section indicates installer's acceptance of conditions.

### 3.2 INSTALLATION

- A. Install entrance assembly components in accordance with shop drawings.
- B. Remove strippable protective materials from metal surfaces only to extent required for installation of assembly, and to receive glazing and door hardware.

- C. Install glazing in accordance with installation requirements of Section 08800, and shop drawings.
- D. Installation of glazing is specified in Section 08800.
- E. Installation of door hardware is specified in Section 08710.
- F. Install fabricator-supplied door hardware in accordance with installation requirements of Section 08710, shop drawings, and door hardware manufacturers' instructions.
- G. Installation of other door hardware is specified in Section 08710.
- H. Site Tolerances:
  - 1. Variation from level, horizontal components and sight lines: 1/8 inch in 10 feet (3 mm in 3 m), non-cumulative.
  - 2. Variation from plumb, vertical components and sight lines: 1/8 inch in 10 feet (3 mm in 3 m), non-cumulative.
  - 3. Variation from plane, installed assembly: Maximum 1/16 inch (1.5 mm)

### 3.3 ADJUSTING

- A. Adjust entrance doors to swing correctly, without binding to frame, sill, or adjacent doors.
- B. Adjust door hardware to operate correctly.

### 3.4 CLEANING

- A. Immediately prior to Substantial Completion, remove strippable protective materials from metal surfaces; clean metal surfaces free of adhesive residue and other foreign substances, using cleaning materials and methods recommended by fabricator of this section.

### 3.5 PROTECTION

- A. Protect finished installation from damage by subsequent construction activities until Substantial Completion.
- B. Repair components damaged by subsequent construction activities in accordance with fabricator's recommendations; replace damaged components that cannot be repaired to Architect's acceptance.

END OF SECTION