

# DAWSON DOORS

## SECTION 08431

### CUSTOM SERIES STAINLESS STEEL DOORS AND ENTRANCES

#### PART I GENERAL

##### 1.01 SUMMARY:

###### A. Description

1. Work includes interior and exterior entrance and vestibule doors and frames, related sidelites and transoms where applicable, thresholds, and finished hardware as shown on drawings or specified.
2. Related work not included in this section:
  - a. Glass and glazing.
  - b. Lock cylinders
  - c. Caulking between frames and masonry
  - d. Structural members

##### 1.02 SUBMITTALS:

- A. Shop drawings: Indicate in elevation with sections and details at full scale. Include glass and metal thicknesses, joining details, field connections, anchorage, concealed and exposed fastening methods, door and framing reinforcement, and metal finishes. Indicate compliance with specified design criteria.
- B. Visual samples: Submit two (minimum 4" x 6") samples indicating texture to be expected in finished work.
- C. Maintenance data: Give instructions for general maintenance and repair of surfaces and finishes.

##### 1.03 QUALITY ASSURANCE:

###### A. Manufacturer:

1. Manufacturer shall have been regularly engaged in manufacturing stainless steel doors and frames for a period of ten years.
2. Door and frame shall be fabricated by a single manufacturer.
3. The manufacturer must have a quality system registration to the ISO9002 standard.

###### B. Applicable standards of the following as referenced herein:

1. American Architectural Manufacturers Association (AAMA)
2. American Iron and Steel Institute (AISI)
3. American Society for Testing and Materials (ASTM)
4. American Welding Society (AWS)

5. Steel Structures Painting Council (SSPC)

6. Americans with Disabilities Act (ADA)

###### C. Allowable Tolerances:

1. Maximum variation from plumb, level or designated position: 1/8" in 12' = 0", not to exceed 1/4" in a total run.

##### 1.04 PROJECT/SITE CONDITIONS:

- A. Protection: Protect metal surfaces from contact with lime, mortar, cement, acids, and other harmful surfaces and from careless handling, storage or machining.
- B. Deliver and store materials to prevent damaging and marring finishes.

##### 1.05 WARRANTY:

- A. Warrant entrances and framing systems against defective materials and workmanship for three years beginning thirty days after shipment from Dawson's factory. Adjustments made necessary by shifting or settling of building structure shall not be covered by warranty.

#### PART II PRODUCTS

##### 2.01 ENTRANCES:

- A. Acceptable product: Dawson Doors Division/Dawson Metal Company, Inc. **Custom Series Doors and Frames**
- B. Materials: AISI Type 304 or 316 stainless steel, #4 or #6 satin, #8 polished, or non-directional finish (choose one).
  1. Frames: 14 or 16 gauge
  2. Doors: 14 or 16 gauge
  3. Specify Type 316 for Natatoriums
- C. Fasteners: Stainless steel fasteners associated with door construction shall be concealed type.
- D. Stile and rail profiles as indicated on drawings
  1. Code may stipulate bottom rail height
- E. Door Design:
  1. Vertical stiles: Minimum 2" wide; maximum as required.
  2. Top rail: Minimum 3-1/2" high; maximum as required
  3. Bottom rail: Minimum 4" high; maximum as required
  4. Door thickness: Nominal 1-3/4" or 2"; for other thicknesses, consult factory.

welds smooth; blend and refinish exposed surfaces to match adjacent finish.

- F. Door Construction: Provide continuous channel frame welded into door body. Three tier metal thickness welded into door body as required for all hardware reinforcement.
  - 1. Stile and rail doors shall be blanked out from one sheet of metal. No face welding.
  - 2. Reinforce flush doors with high impact polystyrene honeycomb core.
  - 3. Cladding over aluminum or steel constructed doors will not be allowed.
- G. Glazing: Removable glass stop or pocket glazed using wet glazing sealant by others.
- H. Weatherstripping: Manufacturer’s standard integral wool pile type, replaceable at stiles and rails.

- C. Fabricate and assemble entrances with welded joints, grind smooth, blend and refinish to match adjacent finish.
- D. Factory preparation per manufacturer templates for finish hardware. Mortise and reinforce frames and door stiles and rails to receive finish hardware in accordance with approved shop drawings.

**2.02 FINISH HARDWARE:**

- A. Hardware shall be as specified in Finish Hardware Section

**2.03 FRAMING:**

- A. Framing Characteristics:
  - 1. Member size: as indicated on drawings.
  - 2. System Construction: Brakeformed tubular sections, fully welded construction with welds ground smooth and blended to be indistinguishable in finished work.
  - 3. Finish: Matching entrances.
- B. Fasteners shall be stainless steel. Exposed fasteners shall be countersunk and shall match entrances and framing in color.

**2.04 FABRICATION:**

- A. Fabricate components in accordance with approved shop drawings. Shop fabricate to greatest extent practicable to minimize field cutting, splicing and fastening. Remove burrs from cut edges.
- B. Fabricate system with welded, bolted, or screwed connections as indicated on approved shop drawings. Welding shall be in accordance with AWS standards, performed by qualified welders. Do not distort members or deface exposed finish. Grind exposed

**PART III EXECUTION**

**3.01 INSTALLATION:**

- A. Install entrances and framing system in accordance with approved shop drawings, plumb, level and true to line, within specified tolerances. Install frames without use of exposed fasteners, except where indicated on shop drawings.
- B. Before anchoring to structure, shim and brace work plumb, level and in designated location.
- C. Door Installation:
  - 1. Caulk perimeter of thresholds using exterior sealant.
  - 2. Install doors and hardware in accordance with manufacturer’s product data. Adjust hardware for proper operation.
  - 3. Adjust door closers for smooth operation throughout swing.

**3.02 CLEANING:**

- A. Cleaning: Remove stains or materials having adverse effect on components and finishes as work progresses. Remove excess glazing and sealant compounds.
- B. Final cleaning: Just prior to Date of Substantial Completion, clean entire entrance assembly, including interior and exterior metal and glass. Comply with door manufacturer’s product data for cleaning. Flush with clean water.