SECTION 08 11 23
TAJIMA MONUMENTAL FORMED BRONZE DOORS AND ENTRANCES

PART 1 - GENERAL

1.01 Section Includes
A. Work shall include interior and exterior entrance doors and frames, sidelites and transoms where applicable, thresholds, and hardware as shown on the architectural drawings.

1.02 Related Requirements
A. Division 01- LEED Documentation
B. Section 05 00 00- Metal Fabrications
C. Section 07 90 00- Joint Protection (perimeter caulking and sealing)
D. Section 08 80 00- Glass and Glazing
E. Section 08 71 00- Door Hardware (lock cylinders)

1.03 Submittals
A. Submit shop drawings including elevations and plans, detail sections showing glass and metal thicknesses, typical joint details, field connections, anchorage, fasteners, door and frame reinforcements, material types and finishes.
B. Samples: Two 4 inch x 6 inch (102 x 152 mm) material sample indicating color and texture to be submitted.

1.04 Quality Assurance
A. Field Measurements: Verify actual dimensions by field measurement before fabrication; show recorded measurements on shop drawings.
B. Doors, Entrances, and Framing Systems Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with continuous experience of 10 years.
C. Installer Qualifications: Experienced in performing work of the type specified in this section.
   1. With minimum 5 years of documented experience in installation of doors and entrances similar to the work of this Section.
   2. Approved by the Doors and Entrances manufacturer.
D. Provide doors and entrances from a single source. Sub-contracting of doors and entrances is not acceptable.
E. Doors and Entrances are to be fabricated in an ISO 9001:2008 plant to ISO international Standards following strict Operating and Quality procedures as outlined in the ISO 9001:2008 Quality.
F. **Welding Qualifications:** Any welding performed either in the fabrication of the doors and entrances must follow AWS welding standards.

1.05 **Delivery, Storage, and Handling**

A. Deliver products in manufacturer’s original, unopened, undamaged containers with identification labels intact.

1. Exercise care in unloading, storing, and installing doors and entrances to prevent bending, warping, twisting, and surface damage.

B. Store products protected from exposure to harmful weather conditions and at temperature conditions recommended by manufacturer.

1.06 **Warranty**

A. Submit a written warranty for a period of 5 years from the date of substantial completion against defective materials, which result in the premature failure of the doors and entrances or factory applied finish.

B. This warranty is not intended to cover adjustments made necessary by the shifting or settling of the building structure.

**PART 2 - PRODUCTS**

2.01 **Acceptable Manufacturers**

A. Basis of design: Based upon Monumental Formed Bronze Doors and Entrances as manufactured by:

   **Tajima Corporation USA (CRL)**
   Tel: (800) 421-6144 Fax: (866) 921-0532
   Email: archmetals@crlaurence.com
   www.crl-arch.com

B. Substitutions:

1. Other manufacturers that meet or exceed specifications must submit test reports and proposal details at least 10 working days prior to bid date for consideration.

2. Substitute products not pre-approved by the Architect via Addendum will not be considered.
2.02 Materials

A. Material:
Bronze Door shall be composed of: Alloy # 464 Naval Brass.
Finish: #4 satin, #8 mirror, or non directional graining, medium or dark statuary, lacquered.
Reinforcement: Stainless steel 16 gauge minimum.
Frames: 11, 14 or 16 gauge

B. Fasteners: Steel or stainless steel anchors

C. Stile and Rail profiles are seamless face as shown on drawings. Bottom rail height may be stipulated by Code.

D. Doors:
1. Bronze doors shall be formed from a minimum of .06 inch (1.5 mm) thick material.
2. Formed bronze doors shall have .06 inch (1.5 mm) thick stainless steel reinforcement.
3. Joint between stiles and rails shall be butt. Where welding on joint is necessary, surfaces will be grinded smooth.
4. Finish is to be applied to the door after fabrication.
5. Door thickness shall be 1-3/4 inch to 2 inch (44.5 to 51 mm).
6. Top Rail: 3-1/2 inch (88.9 mm) high or higher preferred; 2-3/4 inch (69.9 mm) minimum.
7. Bottom Rail: 6 inch (152 mm) minimum.
8. All reinforcing material to be welded to door body.

E. Frames:
1. Bronze frames shall be formed from a minimum of .06 inch (1.5 mm) thick material with minimum 16 gauge stainless steel reinforcement.
2. Minimum face dimension of frame to be 1-5/8 inch (41.3 mm).
3. Minimum depth of frame to be 1/2 inch (12.7 mm).
4. Consult factory for dimensions less than those above.
5. Frames shall be erected without the use of exposed screws where feasible.
6. The finish is to be applied to the frame after fabrication to ensure a blemish-free finish.

F. Weatherstrip:
1. Shall be manufacturer’s standard polypropylene pile or as specified on the drawings.
2. Shall occur:
   a. Vertically at meeting stiles on pairs of doors.
   b. At Top and Bottom Rails.
   c. At Door Stops at both hinge and strike jambs.

G. Thresholds:
   1. Shall be furnished if specified.

H. Finish Hardware:
   1. Hardware shall be as specified in Finish Hardware Section 08 71 00.

2.03 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 as indicated on approved shop drawings. Any welding shall be in accordance with AWS standards, performed by qualified welders. Do not distort members or deface exposed finish. Grind exposed welds smooth.
   C. 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.
   D. Prior to leaving factory, all doors and frames shall be assembled and “hung”. All necessary adjustments shall be made to provide proper perimeter clearance between door and frame and all coordination between door, frame, and finish hardware shall be tested.

PART 3 - EXECUTION

3.01 Inspection
   A. Openings shall conform to details and dimensions shown on the approved shop drawings.
   B. The General Contractor prior to installation must correct conditions that may adversely affect the door installation.

3.02 Installation
   A. All materials shall be installed by factory trained erectors in strict accordance with installation data provided by factory and these specifications.
   B. All doors shall be adjusted after glazing contractor completes his work and install doors in strict accordance with the approved shop drawings and all local, state, and national laws and building codes.
C. Set doors plumb, level, and true to line without warp or rack of frames.
D. Anchor doors securely to surrounding construction with approved fasteners.
E. The exterior joints between the frames, trims, and mullions shall be properly sealed watertight with an approved sealant and be neatly pointed.
F. Any abraded surface of the door and frame finish shall be cleaned and touched up with air dry paint furnished by the door manufacturer in a color to match the factory applied finish.

3.03 Cleaning

A. The General Contractor shall be responsible for protecting the doors, frames, and related materials during storage on the job and during and after installation.
B. Installer shall leave the doors and frames surfaces clean after installation, exercising care to avoid damage to protective coatings and finishes.
C. Any protection necessary due to the cleaning of materials adjacent to the doors and frames shall be the responsibility of the General Contractor.

END OF SECTION