

**BRONZE CLAD STEEL DOORS AND FRAMES  
SECTION 081140**

**PART I GENERAL**

**1.01 SUMMARY:**

- A. Description: Work includes Bronze Clad Interior and Exterior Steel Doors and Frames, related Sidelites and Transoms where applicable.
- B. Related work not included in this section:
  - 1. Finish Hardware including Lock cylinders and Thresholds.
  - 2. Glass and glazing.
  - 3. Lock cylinders
  - 4. Caulking between frames and masonry
  - 5. Structural members

**1.02 QUALITY ASSURANCE:**

- A. Applicable standards of the following as referenced herein:
  - 1. AAMA, American Architectural Manufacturers Association.
  - 2. ASTM, American Society for Testing and Materials.
  - 3. ADA, Americans with Disabilities Act.
  - 4. CDA, Copper Development Association.
  - 5. NAAMM/HMMA, National Association of Architectural Metals Manufacturers
- B. Quality is based on the Bronze Clad Steel Doors and Frames manufactured by **StileLine™** a division of Stiles Custom Metal, Inc., ([www.StileLine.com](http://www.StileLine.com))
- C. Manufacturer shall have been regularly engaged in manufacturing bronze doors and frames for a period of ten years. Door and frame shall be fabricated by a single manufacturer. The manufacturer must have an effective quality control system in place.
- D. Allowable Tolerances as stated in NAAMM/HMMA Technical Manual.

**1.03 SUBMITTALS:**

- A. Shop drawings: Indicate in elevation with sections and details to 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. Finish samples: Submit two (minimum 5" x 7") samples indicating texture and color and to be expected of finished work.
- C. Maintenance data: Give instructions for general maintenance and repair of surfaces and finishes.

**1.04 WARRANTY:**

- A. Warrant Bronze Doors, Frame and Window assemblies against defect in materials and workmanship for three years beginning thirty days after shipment when handled, stored, and installed in accordance with manufactures instruction and NAAMM/HMMA Technical Manual. Adjustments made necessary by shifting or settling of building structure shall not be covered by warranty. Clear coat manufacturers warranty applies.

**PART II PRODUCTS**

**2.01 DOORS:**

- A. Acceptable products: **StileLine™** a division of Stiles Custom Metal, Inc., Authentic Bronze Doors and Frames ([www.StileLine.com](http://www.StileLine.com)).
- B. Bronze Cladding Material: CDA Alloy 464 Naval Brass, minimum 0.045" thick.
- C. Finish : [choose one]
  - 1. Texture: (choose one) [#4 satin], [#8 polished], [non-directional] [angel hair] [random swirl].
  - 2. Color: (choose one) [Natural] [Medium bronze] [Oil rubbed bronze] [Dark statuary bronze].
  - 3. Clear protective lacquer coating: (choose one) [No clear coat required] [Satin], [Semi gloss] [High gloss].

- D. Design of stile and rail profiles: As indicated on drawings. Door thickness (choose one) [1-3/4"] or [2"]. Code may stipulate bottom rail height.
- E. Door Construction:
1. Base steel doors minimum 0.056" thickness and shall be unitized construction with continuous forms reinforcement stiffening channels welded into door body consistent with Stiles steel door construction.  
Assemble with bolt, screw or tie rod connections are not acceptable.
  2. Bronze Cladding: Minimum 0.045" thick. Cladding shall be blanked out from one sheet of metal. No welding shall be permitted. Exposed seams on door faces are not acceptable. Prior to cladding base door shall have a permanent coating applied which will prevent galvanic reaction. Cladding shall be applied to door with a tested, permanent, life time compression adhesive.
  3. Door edge construction (Choose one) [Stiles replaceable Air-Tek integral weather-strip] [Hairline seam]. Adhesive or screw applied weather strip shall not be accepted.
  4. Cladding over aluminum, steel or wood construction shall not be accepted.
- F. Glass Lite Kits: (Choose one)
- [Molding type lite kit with mitered corners welded, finished smooth and re-grained to match. Molding on exterior side of door to be permanently attached. Interior removable molding shall be attached with #8 oval head sheet metal screws of matching material].
  - [Internal channel type, flush glass moldings, securely welded to the inside face of the door skin. Removable glass channel stops shall be butted at corner joints, secured to the door with concealed, #8, sheet metal screws. Exposed fasteners shall not be accepted].

## 2.02 FRAMES:

- A. Construction:
1. Material shall be minimum 0.08" thick with the same texture and finish as doors.
  2. Fabricate components in accordance with approved shop drawings. Frames shall be fully welded construction with welds ground smooth and blended to be indistinguishable in finished work. Finish to matching entrance doors.
- B. Exposed fasteners shall be countersunk and match framing color.
- C. Exterior Door frames shall have Stiles replaceable "Seal-Tek" integral weather-strip at vertical jambs and head. Adhesive applied weather strip shall not be accepted.
- D. Hardware: Manufacturer shall prepare and reinforce for mortised templated hardware per manufacturer templates and in accordance with NAAMM/HMMA.

## PART III EXECUTION

**3.01 CLEARANCES AND TOLERANCES** shall be in compliance with NAAMM / HMMA standards.

### 3.02 SITE STORAGE AND PROTECTION OF MATERIALS

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

### 3.03 INSTALLATION:

- A. Framing systems shall be installed per **StileLine™** instructions and NAAMM / HMMA 840. Install frames without use of exposed fasteners, except where indicated on shop drawings.
- B. Door Installation: Install doors and hardware in accordance with manufacturer's product data. Adjust hardware for proper operation.

### 3.04 CLEANING:

- A. Clean doors and frames in accordance with manufacturer's special instructions.

### 3.05 MAINTENANCE:

- A. Instruct the Owner's Maintenance Personnel regarding the operation and maintenance of these doors.

END OF SECTION