

DAWSON DOORS

SECTION 08 41 16

BRONZE ENTRANCES AND STOREFRONTS

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PART I - GENERAL

1.01 DESCRIPTION

- A. Work includes all entrance and vestibule doors and frames, “Bronze Swing Door” units consisting of doors, frames, related sidelight and transom areas where applicable thresholds, operating mechanism and finished hardware as shown on drawings or specified.

1.02 RELATED WORK

- A. Section [07 92 00], joint sealants between frames and masonry; at interface of entrance assemblies and other building components.
- B. Section [08 44 00], curtain wall and glazed assemblies; for surrounding framing.
- C. Section [08 71 00], door hardware; other than hardware specified as part of entrance assemblies, cylinders; coordination with security system.
- D. Section [08 81 00], glass glazing; glass types, quality and requirements
- E. Section [05 10 00], structural metal framing
- F. Section [26 00 00], electrical; coordination with security, fire alarm systems.

1.03 QUALITY ASSURANCE:

- A. Manufacturer shall have been regularly engaged in manufacturing swing doors and frames for a period of ten (10) years.
- B. Doors and frames shall be engineered and fabricated by the same manufacturer
- C. The manufacturer must have a quality system registered to the ISO9001:2008 standard.

1.04 SUBMITTALS

- A. Shop drawings shall include elevations 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: Two (2) finish samples (minimum 4” x 6”) shall be submitted per customer specifications indicating texture to be expected in finished work.
 - 1. Material
 - a. Naval brass alloy #464
 - b. Muntz metal bronze alloy #280
 - c. Commercial bronze alloy #220
 - 2. Finishes
 - a. #4 satin
 - b. #6 fine satin

- c. #8 mirror
 - d. Non-directional (angel hair)
 - e. Statuary finish and/or clear lacquer coating shall be furnished and applied by other upon completion of installation.
- C. Maintenance and Cleaning Data: Instructions for general maintenance and repair of surfaces and finishes.

1.05 WARRANTY:

- A. All finished hardware not fabricated by Dawson to carry's manufacturer's standard warranty
- B. Dawson's manufactured material furnished and installed to these specifications shall be warranted against defective materials and workmanship (Custom and Standard Series- ten (10) years; Rugged Series- fifteen (15) years; Designer Series- three (3) years) beginning at completion of installation.
 - 1. Warranty is not intended to cover adjustments made necessary by shifting or settling of building structure.
 - 2. This warranty does not cover the breakdown of protective coatings furnished and applied by others. Material will be crated and protected against damage during shipment to the job site. Dawson will accept no responsibility for discoloration of any type after date of delivery to the job site. This responsibility must rest with whoever has control or supervision of areas where this material is stored or installed.
 - 3. All Labor required for replacement or repair of warranted parts is to be by others.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Materials shall be packed, unloaded, stored and protected to avoid abuse and damage.
- B. Protect finished surfaces with wrapping and/or strippable coating.
- C. When unloading, remove all paper type wrappings that are wet or which could become wet.
- D. Store inside, if possible, in clean well drained area free of dust and corrosive fumes.
- E. Stack vertically or on edge so that water cannot accumulate on or within materials, using wood or plastic shims between components to provide water drainage and air circulation.
- F. Cover materials with tarpaulins or plastic hung on frames to provide air circulation.
- G. When installing protect materials from lime, mortar, run-off from concrete and copper, weld splatter, acids, roofing tar, solvents and abrasive cleaners.

PART II - PRODUCTS

2.01 MANUFACTURER:

- A. Dawson Doors Division/Dawson Metal Company, Inc.
 825 Allen Street, Jamestown, NY 14701
 Phone: (716) 664-3811 Fax: (716) 661-3722
 Website: www.dawsondoors.com
 E-mail: info@dawsondoors.com

2.02 MATERIALS AND FINISHES:

- A. Materials
 - 1. Naval brass alloy #464
 - 2. Muntz metal bronze alloy #280
 - 3. Commercial bronze alloy #220
- B. Finishes
 - 1. #4 satin
 - 2. #6 fine satin
 - 3. #8 mirror

4. Non-directional (angel hair)
5. Statuary finish and/or clear lacquer coating shall be furnished and applied by other upon completion of installation.

2.03 SWING DOORS AND FRAMES

A. Doors:

1. Custom series (.09 inch (2 mm) thick)
** Formed in exterior glass stops with removable interior stops mitered to hairline corners/door bodies shall be blanked out from one sheet of metal and shall have no visible seams. NO welding is performed on face of doors. **
2. Standard series (.09 inch (2 mm) thick)
** Applied brake-formed glass stops (no exposed fasteners)/door bodies shall be blanked out from one sheet of metal and shall have no visible seams. NO welding is performed on face of doors. **
Note: Please consult factory for #8 Mirror Polish finish and commercial bronze
3. Rugged series (.125 inch (3 mm) thick)- Heavy Duty
** Fixed flat glazing surface at the exterior side and applied brake-formed glass stops (no exposed fasteners) at the interior side /door bodies shall be blanked out from one sheet of metal and shall have no visible seams. NO welding is performed or permitted on face of doors. **
Note: excluding #8 Mirror Polish finish and commercial bronze
4. Designer series (.09 inch (2 mm) thick)
** Applied brake-formed glass stops/door bodies shall be offset constructed with visible seams. **
 - a. Door thickness: 2 inch (51 mm)
 - b. Door width: [] inch ([] mm).
 - c. Door height: [] feet [] inch ([] mm).
 - d. Stiles: [] inch ([] mm).
 - e. Top rail: [] inch ([] mm).
 - f. Bottom rail: [] inch ([] mm).
 - g. Intermediate vertical and horizontal muntins (for true divided light/multi-light construction):
 - 1) Bar material: [] inch ([] mm).
 - 2) Sheet material: [] inch ([] mm).
 - h. Formed bronze doors shall have a minimum of .09 inch (2 mm) thick “interlocking” structural sub-frame welded within the door body.
 - i. All reinforcing material to be bronze and welded to door body. Aluminum, plastic or other glued-in reinforcements or stiffeners are unacceptable.
 - j. Glass: as specified in section [08 81 00].

B. Frames:

1. Custom series (.09 inch (2 mm) thick)
Fully Welded construction with welds ground smooth and blended to be indistinguishable in finished work (KD-knocked down is not acceptable)/ Finish applied after fabrication to ensure a blemish free surface
2. Designer series (.09 inch (2 mm) thick)
**Offset corner construction (visible seams) factory fabricated and assembled. **
-Fabricate components in accordance with approved drawings. Shop fabricate to greatest extent practicable to minimize field cutting, splicing and fastening. Remove burrs from cut edges.

-Fabricate system with welded connections as indicated on approved shop drawings. Welding shall be in accordance with AWS standards, performed by qualified welders. Do not distort members of deface exposed finish.

-Fabricate and assemble entrances with joints only at intersections of members with uniform hairline connections

- a. Frame face dimension: [] inch ([] mm).
- b. Frame depth: [] inch ([] mm).
- c. Glass stops (at sidelight and transom areas, where applicable):
 - 1) Applied to framing.
 - 2) Flush glazed formed into framing.
- d. Glass: as specified in section [08 81 00].

2.04 HARDWARE AND WEATHER-STRIPPING

A. Swing hardware shall be as specified in section [08 06 70]

1. Standard swing hardware:
 - a. Continuous hinged
 - b. Butt-hinged (min. four (4) per leaf x .018 inch thick)
 - c. Offset pivots
 - d. Center pivots
2. Closers:
 - a. Floor (only available for pivot hardware)
 - b. Surface mounted
 - c. Concealed overhead

B. Power Operation:

1. Overhead surface mount (low energy)
2. Overhead concealed (low energy)
3. In-floor concealed

C. Finish hardware by door manufacturer (except permanent master keyed lock cylinders):

1. Standard locking hardware:
 - a. Adams Rite deadlock (for single door).
 - b. Adams Rite deadlock and flush bolts (for pair of doors).
 - c. Adams Rite dead latch with lever handle or push paddle (for single door).
 - d. Adams Rite dead latch with lever handle or push paddle and flush bolts (for pair of doors).
2. Standard push-pull hardware to be 1 inch (25 mm) diameter offset profile with 12 inch (305 mm) centers in finish as selected from manufacturer's standards.
3. Panic hardware furnished by the door supplier in finish as selected from manufacturers standards:
 - a. Concealed vertical rod type (for pair of doors)
 - b. Rim type (for single door)
 - c. Electric panics
 - 1) Electric strikes
 - 2) Electric latch retraction (*recommended for pairs of doors*)
4. Electromagnetic locking hardware
 - a. Surface mounted
 - b. Concealed
5. Temporary cylinders with keys to be provided for mechanical locking hardware.
6. Permanent master keyed cylinders to be provided by others as specified in separate section.

- D. Thresholds (can be furnished upon request):
1. Series #100 (flat)
 - a. Material:
 - 1) Naval brass alloy #464
 - 2) Muntz metal alloy #280
 - b. Height: available in ¼ inch (6 mm) or ½ inch (13 mm)
[] inch ([] mm)
 - c. Width: [] inch ([] mm)
 - d. Finish upon request
 2. Series #200 (half-saddle)
 - a. Material:
 - 1) Naval brass alloy #464
 - 2) Muntz metal alloy #280
 - b. Height: available in ½ inch (13 mm)
 - c. Width: [] inch ([] mm)
 - d. Finish upon request
 3. Series #300 (ramp)
 - a. Material:
 - 1) Naval brass alloy #464
 - 2) Muntz metal alloy #280
 - b. Height: available in ½ inch (13 mm)
 - c. Width: [] inch ([] mm)
 - d. Finish upon request
 4. Type #1 (for center hung floor closers/bottom pivots; ends not mitered)
 - a. Material:
 - 1) Naval brass alloy #464
 - 2) Muntz metal alloy #280
 - b. Height: [] inch ([] mm)
 - c. Width: [] inch ([] mm)
 - d. Finish upon request
 5. Type #4 (for center hung floor closers/bottom pivots, both ends mitered)
 - a. Material:
 - 1) Naval brass alloy #464
 - 2) Muntz metal alloy #280
 - b. Height: [] inch ([] mm)
 - c. Width: [] inch ([] mm)
 - d. Finish upon request
 6. Type #3 (for offset hung floor closers/bottom pivots, both ends mitered & returned)
 - a. Material:
 - 1) Naval brass alloy #464
 - 2) Muntz metal alloy #280
 - b. Height: [] inch ([] mm)
 - c. Width: [] inch ([] mm)
 - d. Finish upon request

7. Type #5 (for offset hung floor closers/bottom pivots, both ends mitered & returned)
 - a. Material:
 - 1) Naval brass alloy #464
 - 2) Muntz metal alloy #280
 - b. Height: [] inch ([] mm)
 - c. Width: [] inch ([] mm)
 - d. Finish upon request
8. Provide at all doors unless otherwise detailed.
9. Provide woodscrew and rawl plug type fastenings approximately 15 inches (381 mm) on center.
10. Thresholds shall be set on the finished floor and adequately caulked against water seepage.

E. Weather-strip:

1. Shall be manufacturer's standard polypropylene pile.
2. Shall occur:
 - a. Vertically at meeting and hinge stiles (adjustable).
 - b. Concealed at door top and bottom rails (adjustable).

2.05 SHOP INSPECTION

- A. Prior to leaving factory, all doors and immediate framing shall be inspected per ISO9001:2008 standards and documents.

PART III – EXECUTION

3.01 EXAMINATION

- A. The installer/erector shall examine substrates, supports and conditions under which this work is to be performed and notify contractor, in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with work until unsatisfactory conditions are corrected.
- B. The floor material shall be solid (not susceptible to either deterioration or heaving), smooth and level and the adjacent work in its proper place prior to the installation of the door and frame system.
- C. Coordination dimensions, tolerances and method of attachment with other work.
- D. Verify electric power is available and of correct characteristics, if required.

3.02 INSTALLATION/ERECTION

- A. Install entrances and framing system in accordance with approved shop drawings, plumb, level and true to line, with 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. Caulk perimeter of threshold using exterior sealant.
- D. Install doors and hardware in accordance with manufacturer's product data. Adjust hardware for proper operation.
- E. Adjust door closer for smooth operation throughout swing.
- F. All materials shall be installed by factory-trained erectors in strict accordance with installation data provided by factory and these specifications.
- G. All doors shall be adjusted after glazing contractor completes his work and readjusted when necessary prior to owner's acquisition of the building.

3.03 CLEANING

- A. Remove stains or material having adverse effect on components and finishes as work progresses.
- B. 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.
- C. It is strongly recommended the oxidized finish and/or lacquer coating shall be applied by a professional finisher after job is erected and that finisher is contacted to perform regular maintenance and refinishing of your product.

3.04 PROTECTION

- A. Protect metal surfaces from contact with lime, mortar, cement, acids and other harmful elements and from careless handling, storage or machining.