

SECTION 08110

STEEL DOORS AND FRAMES

PART 1 - DESIGN DIRECTIVES

1.1 PROJECT INCLUDES

- A. Steel Doors and Frames:
 - 1. Interior steel doors and frames.
 - 2. Exterior steel doors and frames.
 - 3. Remodeling existing steel doors and frames.

1.2 QUALITY ASSURANCE

- A. Steel Door Institute Standards:
 - 1. ANSI A250.3-1999, Test Procedure and Acceptance Criteria for Factory Applied Finish Painted Steel Surfaces for Steel Doors and Frames.
 - 2. ANSI A250.4-2001, Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors and Hardware Reinforcing.
 - 3. ANSI A250.6-1997, Hardware on Standard Steel Doors.
 - 4. ANSI A250.8-1998 (formally Steel Door Institute SDI-100), Recommended Specifications for Standard Steel Doors and Frames.
 - 5. ANSI A250.10-1998, Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.
- B. Performance Standards:
 - 1. Fire-Rated Assemblies: UL or FM listed assemblies.
 - 2. Thermal-Rated Assemblies at Exterior: ASTM C 236 or ASTM C 976.
 - 3. Sound-Rated Assemblies at Mechanical Rooms: ASTM E 90, and ASTM E 413.
 - 4. Exterior doors shall meet or exceed the building design wind loads.

1.3 DESIGN CRITERIA

- A. At the Schematic Design phase all doors will be reviewed with FOM, PDC, and the design architect for conformance with the DC user group and project requirements.
- B. All corridor and stairway doors shall be equipped with vision panels. All other doors shall be reviewed with user group for vision panel needs.
- C. Fixed or removable mullions shall be used at exterior double doors.
- D. Detail double wood studding at all door frames for rigidity.
- E. Detail adequate blocking at all doors to accommodate trim.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Interior Steel Doors: Provide doors complying with requirements indicated below by referencing ANSI 250.8 for level and model and ANSI A250.4 for physical-endurance level:
 - 1. Door thickness shall be a full 1 3/4" thick.

2. Accessories: Sightproof stationary louvers and glazing stops.
 3. Finish: Factory primed and field painted.
- B. Exterior Steel Doors: Provide doors complying with requirements indicated below by referencing ANSI A250.8 for level and model and ANSI A250.4 for physical-endurance level:
1. Door thickness shall be a full 1 3/4" thick.
 2. Accessories: Sightproof stationary louvers and glazing stops.
 3. Finish: Factory primed and field painted.
- C. Steel Frames: Provide steel frames for doors, transoms, sidelights, borrowed lights, and other openings that comply with ANSI A250.8.
1. Accessories: Door silencers and plaster guards.
 2. Door Preparation: Frames shall be prepared for the type of hardware and accessories to be installed. Refer to DC Standards DOOR HARDWARE for hinge style and quantity.
 3. Finish: Factory primed and field painted.

PART 3 - EXECUTION

3.1 QUALITY ASSURANCE

- A. Install all doors in accordance with the following standard(s):
1. ANSI A250.11, Recommended Erection Instructions for Steel Frames.
 2. Hollow Metal Manufacturers Assoc. HMMA 840-99, Installation and Storage of Hollow Metal Doors and Frames.

3.2 OWNER INSPECTION

- A. The installation of the first 6 door frames shall be inspected for rigidity, square, and plumb and approved by FOM representatives prior to proceeding with the balance of the project.
- B. The installation of the first 6 doors shall be reviewed and approved by a representative of FOM before proceeding with the balance of the project.
- C. Final acceptance of all automatic fire doors are subject to an acceptable test of automatic operation.

END OF SECTION 08110