

DIVISION 8 – DOORS AND WINDOWS

SECTION 08111

STANDARD STEEL DOORS AND FRAMES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes the following products manufactured in accordance with SDI Recommended Standards:
 - 1. Frames: Pressed steel frames for exterior steel door openings of following type:
 - a. Welded unit type.
 - 2. Frames: Pressed steel frames for interior wood door openings of the following type:
 - a. Welded unit type.
 - 2. Provide factory primed doors and frames for exterior steel doors and interior steel frames.

1.03 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
- B. Product data for each type of door and frame specified, including details of construction, materials, dimensions, hardware preparation, core, label compliance, sound ratings, profiles and finishes.
- C. Shop drawings showing fabrication and installation of standard steel doors and frames. Include details of each frame type, elevations of door design types, conditions at openings, details of construction, location and installation requirements of door and frame hardware and reinforcements, and details of joints and connections. Show anchorage and accessory items.
 - 1. Provide schedule of doors and frames using same reference numbers for details and openings as those on contract drawings.
 - 2. Indicate coordinate of glazing frames and stops with glass and glazing requirements.

1.04 QUALITY ASSURANCE

- A. Provide doors and frames complying with steel door Institute “Recommended Specifications Standard Steel Doors and Frames” ANSI/SSDI-100 and as herein specified.
- B. Fire-Rated Door Assemblies (If applicable): Units that comply with NFPA 80 are as identical to door and frame assemblies whose fire resistance characteristics have been determined per ASTM E 152 and which are labeled and listed by UL, Factory Mutual, Warnock Hersey or other testing and Inspecting organization acceptable to authorities having jurisdiction.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver doors and frames cardboard-wrapped or crated to provide protection during transit and job storage. Provide additional protection to prevent damage to finish of factory-finished doors and frames.
- B. Inspect doors and frames upon delivery for damage. Minor damages may be repaired provided refinished items are equal in all respects to new work and acceptable to Architect; otherwise, remove and replace damaged items as directed.

- C. Store doors and frames at building site under cover. Place units on minimum 4-inches high wood blocking. Avoid use of non-vented plastic or canvas shelters which could create humidity chamber. If cardboard wrapper on door becomes wet, remove carton immediately. Provide 1/4-inch spaces between stacked doors to promote air circulation.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering standard steel doors and frames which may be incorporated in the work include; but are not limited to, the following:
 - 1. Amweld Building Products, Inc.
 - 2. Ceco Corp.
 - 3. Copco Door Co.
 - 4. Curries Company
 - 5. Deansteel Manufacturing Co.
 - 6. Fenestra Corp.
 - 7. Kawanee Corp.
 - 8. Mesker Door Co.
 - 9. Pioneer Industries.
 - 10. Premier Products, Inc. (formerly Dittco).
 - 11. Replulic Builders Products.
 - 12. Steelcraft Manufacturing Co.
- B. Hardware (If Applicable): 4 1/2" or 5" heavy weight all in accordance with ANSI A156.7. Lock edge to have standard bevel (1:16) prepared for Gov. series 86, 160/161, or 90 locks in accordance with A NSI A115.
- C. Door Core (If Applicable): Cardboard honeycomb, polyurethane, polystyrene foam, mineral fiberboard, steel channel grid, vertical steel stiffeners as required for exterior application.
- D. End Closure (If Applicable): Channel 0.047 inch thick, flush or as required for a Steel door.

2.02 ACCESSORIES

- A. Louvers: Steel material, primed finish.
- B. Silencers: Except on weather stripped frames, drill stops to receive 3 silencers on strike jambs of single-door frames and 2 silencers on heads of double-door frames.
- C. Removable Stops: Steel channel shape.

2.03 FABRICATION – DOORS (If Applicable)

- A. Fabricate doors with hardware reinforcement welded in place.
- B. Attach appropriate label to each fire rated door.
- C. Configure exterior doors with special profile to receive recessed weather stripping.

2.04 FABRICATION - FRAMES

- A. Fabricate frames as welded unit.
- B. Fabricate frames with hardware reinforcement plates welded in place. Provide mortar guard boxes.

- C. Reinforce frames wider than 48 inches with roll formed steel channels fitted tightly into frame head, flush with top.
- D. Prepare frame for silencers and install.
- E. Attach appropriate label to each fire rated frame.
- F. Fabricate frames to suit wall openings and head member.
- G. Fabricate frames in the profile and sizes indicated on the drawings.

2.05 FINISH

- A. Factory Primed Finish.
- B. Factory Finish: Factory Primed.
- C. Coat inside of frame profile with bituminous coating if required.
- D. Color: Final Color to be painted in the field to be selected by Architect.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install frames in accordance with SDI-100.
- B. Coordinate installation of doors and frames with installation of hardware specified in Section 08710.
- C. Coordinate with stud wall construction for frame anchor placement.
- D. Install roll formed steel reinforcement channels between two abutting frames. Anchor to structure and floor.
- E. Install door louvers plumb and level.
- F. Coordinate installation of glass and glazing (if applicable).

3.02 TOLERANCES

- A. Maximum Diagonal Distortion: 1/16 inch measured with straight edge, corner to corner.

3.03 ADJUST AND CLEAN

- A. Prime Coat Touch-up: Immediately after erection, sand smooth any rusted or damaged areas of prime coat and apply touch-up of compatible air drying primer.
- B. Final Adjustments: Check and readjust operating hardware items, leaving steel doors and frames undamaged and in complete and proper operating condition.

END OF SECTION - 08111