

SECTION 08111
STANDARD STEEL DOORS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Non-rated and fire rated steel doors.

1.2 RELATED SECTIONS

- A. Section 08112 - Standard Steel Frames.
- B. Section 08712 - Door Hardware.
- C. Section 08800 - Glazing: Glass for doors.
- D. Section 09900 - Painting: Field painting of doors.

1.3 REFERENCES

- A. ANSI/SDI-100 - Standard Steel Doors and Frames.
- B. ASTM E152 - Methods of Fire Tests of Door Assemblies.
- C. Door Hardware Institute (DHI) - The Installation of Commercial Steel Doors and Steel Frames, Insulated Steel Doors in Wood Frames and Builder's Hardware.
- D. NFPA 252 - Fire Tests for Door Assemblies.
- E. UL 10B - Fire Tests of Door Assemblies.

1.4 SUBMITTALS

- A. Shop Drawings: Indicate door elevations, internal reinforcement, closure method, and cut-outs for glazing, and finish.
- B. Product Data: Indicate door configurations, location of cut-outs for hardware reinforcement.
- C. Manufacturer's Installation Instructions: Indicate special installation instructions.

1.5 QUALITY ASSURANCE

- A. Conform to requirements of ANSI/SDI-100.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years experience.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products to site as recommended by the manufacturer.

1.8 FIELD MEASUREMENTS

- A. Verify that field measurements are as indicated on shop drawings.

PART 2 - PRODUCTS

2.1 DOOR MANUFACTURERS

- A. Arnweid Building Products
- B. Ceco Corporation
- C. Curries Manufacturing
- D. Mesker Door, Inc.
- E. Republic
- F. Steelcraft Manufacturing Co.
- G. Allied Steel Products

2.2 DOORS

Doors shall be full flush construction, fabricated from cold rolled steel, 16 gauge for exterior and 18 gauge for interior. Doors shall be reinforced, stiffened and insulated with impregnated kraft honeycomb or polystyrene foam core permanently bonded to the inside of each face skin. Both lock and hinge rail edge of the door shall be welded, filled and ground smooth the full height of the door or both lock and hinge rail edge may have an exposed hairline seam. Doors shall have beveled (1/8" in 2") hinge and lock edges. Top and bottom steel reinforcement channels shall be 14 gage and spot welded within the doors. Hinge reinforcements shall be 8 gage for 1-3/4 doors. Lock reinforcements shall be 16 gage and closer reinforcements.

2.3 FABRICATION

- A. Astragals for Double Doors: Steel, see details.
- B. Fabricate doors and transoms with hardware reinforcement welded in place.
- C. Labeling of Fire Doors and Frames:

All door openings in fire resistive walls and partitions requiring a rating shall be protected by assemblies which include doors, frames, hardware, closing devices,

anchorage, sills, etc., installed in accordance with the National Fire Protection Association (NFPA) 80, Standard for "Fire Doors and Fire Windows" and the State Building Code.

To further clarify the basic requirements and/or the correct method of labeling that will be acceptable to the Alabama Building Commission, the labels shall include the following:

1. Accessibility: Each component shall bear a label located so as to be accessible after installation.
 2. Permanence: Each component shall bear a label of a type of material and be so attached that the life of the label and the attachment thereof can reasonably be expected to equal the life of the component to which it is attached. Labels shall be raised or embossed on metal labels or stamped into metal frames. Plastic or paper labels are unacceptable.
 3. Legibility: The label design shall be such that it can be visible and legible at all times and must be clean of any paint or other coverage making the label illegible.
 4. Fire Resistance: All approved labels on doors and on frames shall include thereon the fire resistance rating in hours and/or minutes for which the door or frame is labeled. Labels on frames with transoms or sidelights must identify that the opening assembly includes same.
 5. Other Requirements: The labels or stamps applied to frames must be provided by a manufacturer that has been approved by a laboratory or organization to provide testing and follow-up services for fire-rated opening assemblies.
- D. Configure exterior doors with special profile to receive recessed weatherstripping.

2.4 FINISH

- A. Primer: Baked on coat of rust inhibitive primer.
- B. Field painted by General Contractor.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that opening sizes and tolerances are acceptable.

3.2 INSTALLATION

- A. Install doors in accordance with DHI. Install frames in accordance with SDI-105.

- B. Coordinate installation of glass and glazing.
- C. Coordinate installation of doors with installation of frames specified in Section 08112 and hardware specified in Section 08710.

3.3 ERECTION TOLERANCES

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

3.4 ADJUSTING

- A. Adjust door for smooth and balanced door movement.

END OF SECTION