

SECTION 08 11 13 - HOLLOW METAL DOORS AND FRAMES

[Note to PSC: This standard does not represent a complete specification. Requirements of this standard are to be incorporated into the Architects specification for bidding.]

PART I - GENERAL

1.1 REFERENCES

- A. ANSI 250.4 or SDI 131-10
 - 1. ANSI/SDI A250.8-2003 Recommended Specifications for Standard Steel Doors and Frames specifies the minimum number of cycles for doors.
 - a. 16 & 14 ga doors – 1,000,000 cycles (Level A)
 - 2. SDI 105 Recommended Erection Instructions for Steel Frames
 - 3. SDI 111 Recommended Details and Guidelines for Standard Steel Doors and Frames & Accessories.

PART 2 - PRODUCTS

2.1 STEEL DOORS AND FRAMES

- A. Acceptable Manufacturers
 - 1. Curries
 - 2. Pioneer
 - 3. Republic
 - 4. Steelcraft
- B. Metal Doors: All metal doors shall, at a minimum, conform to ANSI 250.8 – SDI 100 Level 3 Extra Heavy Duty Commercial and Institutional standards.
 - 1. Face sheets are to be made of commercial quality 16 gauge cold rolled steel compliant with ASTM A1008.
 - 2. Doors shall have seamless, welded edge construction. Doors shall have full height mechanically interlocked edges. At a minimum, edge seams are to be intermittently welded using 1” long welds, then seam filled with structural adhesive, and dressed smooth. Continuous welding is preferred.
 - 3. Edges may be square or beveled.
 - 4. Cores shall be continuously bonded to face sheets. Standard honeycomb cores are acceptable for most interior applications. Steel stiffened cores shall be provided for doors where heavier service is anticipated.
 - 5. All doors shall have factory applied rust inhibitive primer.
 - 6. Top and bottom edges shall be reinforced with 14 ga galvanized channels welded to both panels.
 - 7. All doors shall have minimum 14ga closer reinforcement regardless of whether closers are specified for the specific opening.
 - 8. Architect to specify fire rated construction, tornado resistant construction, steel stiffened cores, or sound deadened doors as appropriate for the project use
- C. Doors for Exterior and/or wet locations:
 - 1. Exterior doors shall meet all minimum construction requirements as interior doors. Additional features of exterior doors:
 - (a) Face sheets shall be commercial quality, 16 ga galvanized steel.

- (b) Tops of exterior doors are to be provided with additional steel caps to prevent moisture intrusion into the core. Caps may not be recessed. Attachment of cap shall be sealed prior to painting.
- (c) Cores shall be polystyrene or polyurethane continuously bonded to face sheets.

D. Doors for light duty, Interior Locations:

- 1. SDI level 2. Doors that are expected to receive infrequent or light use may be specified as Level 2 Heavy Duty. Architect is to discuss with Facilities and services before specifying level 2 doors. Level 2 doors shall not be specified without concurrence of UI technical representative.

E. Metal Frames –

1. Frames for Exterior and/or wet locations:

- a. SDI level 4. 14 ga Hot dipped galvanized steel conforming to ASTM A 653.
- b. Frames to be constructed with closed and tight mitered seams. Weld seams and full web of frame, corner or intersection. Grind and dress smooth weld area. Apply a zinc rich primer over the grinding area, and finish with a matching prime paint.
- c. No knock-down hollow metal frames will be allowed.
- d. Reinforce frame to accept closer, regardless of whether a closer is specified or not.

2. Frames for Interior Locations:

- a. SDI level 3. 16 gauge minimum cold rolled or galvanized steel ASTM A653.
- b. Frames to be constructed with closed and tight face miter seams. Weld face miter seams. Grind and dress smooth weld area, finish with a matching prime paint.
- c. No knock-down hollow metal frames will be allowed.
- d. Reinforce frame to accept closer, whether a closer is specified or not.

- F. Architect to specify reinforcement for hardware for both doors and frames as appropriate. Architect to specify preparation for electrified devices as appropriate.

2.2 DOORS AND FRAMES IN ELEVATOR MACHINE ROOMS

- A. Doors and frames in elevator machine rooms shall meet all requirements listed in this Section, and in addition shall have the following characteristics:

- 1. 42" wide door
- 2. Door swings out of the space
- 3. Heavy-duty closer (see *Section 08 71 00*)
- 4. Storeroom Function Lockset (see *Section 08 71 00*)
- 5. Fire rated in accordance with Code

PART 3 - EXECUTION

3.1 STEEL DOORS AND FRAMES

- A. Frames in Masonry Walls: Door frames in masonry walls shall be back-primed with bituminous coating and grouted solid. Provide a minimum of three anchors per jamb.
- B. Frames in Stud Walls: Door frames in stud walls shall have a minimum of three anchors on each side, attached to double studs that extend full height of wall. Door frames shall be securely anchored to the floor.
- C. Install all door and frames in accordance with ANSI/SDI A250.8-2003 (R2008)

END OF SECTION 08 11 13

This section of the *U of I Facilities Standards* establishes minimum requirements only. It should not be used as a complete specification.