

SECTION 08 11 13
HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies steel doors, steel frames and related components.
- B. Terms relating to steel doors and frames as defined in ANSI A123.1 and as specified.

1.2 RELATED WORK

- A. Counter doors: Section 08 33 13, COILING COUNTER DOORS.
- B. Dental Pass Window: Section 08 56 19, PASS WINDOW.
- C. Door Hardware: Section 08 71 00, DOOR HARDWARE.
- D. Glazing: Section 08 80 00, GLAZING.

1.3 TESTING

An independent testing laboratory shall perform testing.

1.4 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

1.5 SHIPMENT

- A. Prior to shipment label each door and frame to show location, size, door swing and other pertinent information.
- B. Fasten temporary steel spreaders across the bottom of each door frame.

1.6 STORAGE AND HANDLING

- A. Store doors and frames at the site under cover.
- B. Protect from rust and damage during storage and erection until completion.

1.7 APPLICABLE PUBLICATIONS

- A. Publications listed below form a part of this specification to the extent referenced. Publications are referenced in the text by the basic designation only.
- B. Federal Specifications (Fed. Spec.):
L-S-125B.....Screening, Insect, Nonmetallic
- C. Door and Hardware Institute (DHI):
A115 Series.....Steel Door and Frame Preparation for Hardware,
Series A115.1 through A115.17 (Dates Vary)
- D. Steel Door Institute (SDI):
113-01.....Thermal Transmittance of Steel Door and Frame
Assemblies
128-1997.....Acoustical Performance for Steel Door and Frame
Assemblies
A250.8-03.....Standard Steel Doors and Frames

E. American Society for Testing and Materials (ASTM):

A167-99(R2004).....Stainless and Heat-Resisting Chromium-Nickel
Steel Plate, Sheet, and Strip
A568/568-M-07.....Steel, Sheet, Carbon, and High-Strength, Low-
alloy, Hot-Rolled and Cold-Rolled
A1008-08.....Steel, sheet, Cold-Rolled, Carbon, Structural,
High Strength Low Alloy and High Strength Low
Alloy with Improved Formability
B209/209M-07.....Aluminum and Aluminum-Alloy Sheet and Plate
B221/221M-08.....Aluminum and Aluminum-Alloy Extruded Bars,
Rods, Wire, Profiles and Tubes
D1621-04.....Compressive Properties of Rigid Cellular
Plastics
D3656-07.....Insect Screening and Louver Cloth Woven from
Vinyl Coated Glass Yarns
E90-04.....Laboratory Measurement of Airborne Sound
Transmission Loss of Building Partitions

F. The National Association Architectural Metal Manufactures (NAAMM):
Metal Finishes Manual (1988 Edition)

G. National Fire Protection Association (NFPA):
80-09.....Fire Doors and Fire Windows

H. Underwriters Laboratories, Inc. (UL):
Fire Resistance Directory

I. Intertek Testing Services (ITS):
Certifications Listings...Latest Edition

J. Factory Mutual System (FM):
Approval Guide

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Sheet Steel: ASTM A1008, cold-rolled for panels (face sheets) of doors.
- B. Anchors, Fastenings and Accessories: Fastenings anchors, clips
connecting members and sleeves from zinc coated steel.
- C. Prime Paint: Paint that meets or exceeds the requirements of A250.8.

2.2 FABRICATION GENERAL

A. GENERAL:

- 1. Follow SDI A250.8 for fabrication of standard steel doors, except as
specified otherwise. Doors to receive hardware specified in Section

- 08 71 00, DOOR HARDWARE. Tolerances as per SDI A250.8. Thickness, 44 mm (1-3/4 inches), unless otherwise shown.
2. When vertical steel stiffeners are used for core construction, fill spaces between stiffeners with mineral fiber insulation.
- B. Heavy Duty Doors: SDI A250.8, Level 2, Model 2 of size and design shown. Core construction types a, d, or f, for interior doors.

2.3 METAL FRAMES

- A. General:
1. SDI A250.8, 1.3 mm (0.053 inch) thick sheet steel, types and styles as shown or scheduled.
 2. Knocked-down frames are not acceptable.
- B. Terminated Stops: SDI A250.8.
- C. Frame Anchors:
1. Jamb anchors:
 - a. Locate anchors on jambs near top and bottom of each frame, and at intermediate points not over 600 mm (24 inches) apart, except for fire rated frames space anchors as required by labeling authority.
 - b. Form jamb anchors of not less than 1 mm (0.042 inch) thick steel unless otherwise specified.
 - c. Anchors for stud partitions: Either weld to frame or use lock-in snap-in type. Provide tabs for securing anchor to the sides of the studs.
 - d. Modify frame anchors to fit special frame and wall construction and provide special anchors where shown or required.
- D. Glazed Openings:
- a. Integral stop on exterior, corridor, or secure side of door.
 - b. Design rabbet width and depth to receive glazing material or panel shown or specified.

2.4 SHOP PAINTING

SDI A250.8.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Plumb, align and brace frames securely until permanent anchors are set.
1. Use triangular bracing near each corner on both sides of frames with temporary wood spreaders at midpoint.
 2. Use wood spreaders at bottom of frame if the shipping spreader is removed.
 3. Protect frame from accidental abuse.

4. Where construction will permit concealment, leave the shipping spreaders in place after installation, otherwise remove the spreaders after the frames are set and anchored.
5. Remove wood spreaders and braces only after the walls are built and jamb anchors are secured.

B. Jamb Anchors:

1. Secure anchors to sides of studs with two fasteners through anchor tabs. Use steel drill screws to steel studs.

3.2 INSTALLATION OF DOORS AND APPLICATION OF HARDWARE

Install doors and hardware as specified in Sections Section 08 11 13, HOLLOW METAL DOORS AND FRAMES, Section 08 71 00, DOOR HARDWARE .

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