

DIVISION 8 - DOORS & WINDOWS
SECTION 08 11 13 - HOLLOW METAL DOORS
PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Hollow metal doors and frames.

1.2 REFERENCES

- A. ANSI/SDI-100 - Standard Steel Doors and Frames.
- B. ASTM A525 - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
- C. ASTM E152 - Methods of Fire Tests of Door Assemblies.
- D. CS24L – Commercial Standard, latest edition for Doors & Frames.
- E. Door Hardware Institute (DHI) – The Installation of Commercial Steel Doors and Steel Frames, Insulated Steel Doors in Wood Frames and Builder's Hardware.
- F. NFPA 80 - Fire Doors and Windows.
- G. NFPA 252 - Fire Tests for Door Assemblies.
- H. UL 10B - Fire Tests of Door Assemblies.

1.3 SUBMITTALS

- A. Hollow metal door/frame schedule.

1.4 WARRANTY

- A. In accordance with the General Conditions of the Construction Contract.

PART 2 PRODUCTS

2.1 GENERAL

- A. All work shall comply with the American National Standards Institute's recommended specifications; as sponsored by the Steel Door Institute.
 - 1. All pertinent ANSI, SDI, UL, ASTM and NFPA requirements, noted therein, shall apply.
- B. This specification is intended in no way to prohibit the use of knock-down frames, unless otherwise noted. Welded frames, with masonry headers, are only required where installation is adjacent to masonry construction.

2.2 DOORS

- A. Unless specifically noted or required otherwise; doors shall be heavy-duty, 1-3/4" thick, swing type, flush with provisions, if scheduled, for glazing and/or louvers.
- B. Door leaves up to 3'-0" in width and 8'-0" in height shall have 18-gauge minimum face sheets. Greater dimensions shall have minimum 16-gauge face sheets.
- C. Door leaves shall have flush end closures.
- D. Provide concealed reinforcement for hardware. Doors shall be mortised, drilled and tapped at the factory to receive mortise-type hardware. Location of hardware shall be as standard for the manufacturer.

- E. Uninsulated doors shall have honeycomb core laminated under pressure to face sheets. Insulated doors shall have polyurethane core laminated under pressure to face sheets.

2.3 FRAMES

- A. Single doors shall have 16-gauge minimum frame and double-doors shall have 14-gauge minimum frame.
- B. Frames shall be mortised, reinforced, drilled and tapped at the factory for the installation of hardware. Location of hardware shall be as standard for the manufacturer.
- C. Each door opening shall be prepared for single-stud door silencers; three for single-doors, two for double doors.
- D. When welded frames are furnished:
 - 1. Corner miters shall be ground flush to a seamless appearance.
 - 2. Wall anchors shall be located within 6" of the top and bottom of each jamb, immediately above or below each hinge reinforcement on the hinge jamb and directly opposite on the strike jamb. Intermediate anchors shall not exceed 24" spacing.
 - 3. They shall be shipped with spreader bracing.
- E. Where required, provide concealed metal reinforcement for lintels.
- F. Paired doors shall be fitted with astragal strips, where called for or where appropriate.

2.4 FINISHES

- A. Doors and frames at all exterior locations shall be galvanized.
- B. All doors and frames shall have a baked-on prime coat finish, unless stainless steel is scheduled.
- C. If scheduled to be stainless steel; material shall be Type 304 stainless steel with No. 4 finish and all reinforcements and anchors shall be stainless steel.

2.5 FIRE-RATING

- A. If scheduled to be fire-rated, doors and frames shall carry FM label, in addition to any other testing agency labels required by the local authority.

PART 3 EXECUTION

3.1 INSTALLATION

- A. All units shall be set plumb, level and properly aligned.
- B. During installation, care shall be exercised to protect item finishes, and to prevent damage to adjacent finishes.
- C. Doors and hardware shall be tested, and adjusted as required, for smooth and proper operation, latching, and locking.
- D. Frames at all exterior locations and adjacent to interior refrigerated areas shall be drilled and filled solid with SUFI (spray-urethane foam insulation) following installation. Drill hole shall be patched, sanded smooth and touch-up painted.
- E. All frames shall be caulked, full-perimeter, on both sides to adjacent surfaces.

3.2 TOLERANCES

- A. Maximum allowable variation from plumb, level, and alignment per SDI.

3.3 FINISH

- A. After installation, areas where prime coat or galvanizing has been damaged shall be touched-up.

3.4 CLEANUP

- A. All work shall be left clean and undamaged, ready for finish.

END OF SECTION