SECTION 08311

ACCESS DOORS AND FRAMES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

A. This Section includes the following:
   1. Wall access doors and frames.
   2. Fire-rated wall access doors and frames.
   3. Ceiling access doors and frames.

B. Related Sections include the following:
   1. Division 4 Section "Unit Masonry Assemblies" for anchoring and grouting access door frames set in masonry construction.
   2. Division 7 Section "Roof Accessories" for roof hatches.
   3. Division 15 Section "Duct Accessories" for heating and air-conditioning duct access doors.

1.03 SUBMITTALS

A. General: Submit in accordance with Section 01300.

B. Product Data: For each type of door and frame indicated. Include construction details relative to materials, individual components and profiles, finishes, and fire ratings (if required) for access doors and frames.

1.04 QUALITY ASSURANCE

A. Source Limitations: Obtain doors and frames through one source from a single manufacturer.

B. Fire-Rated Access Doors and Frames: Units complying with NFPA 80 that are identical to access door and frame assemblies tested for fire-test-response characteristics per the following test method and that are labeled and listed by UL, ITS, or another testing and inspecting agency acceptable to authorities having jurisdiction:
   1. NFPA 252 for vertical access doors.
   2. ASTM E 119 for horizontal access doors and frames.

C. Size Variations: Obtain Architect's acceptance of manufacturer's standard-size units, which may vary slightly from sizes indicated.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles.

2.02 MATERIALS

A. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.

B. Hot-Rolled Steel Sheets: ASTM A 569/A 569M, Commercial Steel (CS), Type B; free of scale, pitting, and surface defects; pickled and oiled; with minimum thickness indicated representing specified nominal thickness according to ASTM A 568/A 568M.

C. Cold-Rolled Steel Sheets: ASTM A 366/A 366M, Commercial Steel (CS), or ASTM A 620/A 620M, Drawing Steel (DS), Type B; stretcher-leveled standard of flatness; with minimum thickness indicated representing specified nominal thickness according to ASTM A 568/A 568M. Electrolytic zinc-coated steel sheet, complying with ASTM A 591/A 591M, Class C coating, may be substituted at fabricator's option.

D. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B, with A60 zinc-iron-alloy (galvannealed) coating or G60 mill-phosphatized zinc coating; stretcher-leveled standard of flatness; with minimum thickness indicated representing specified thickness according to ASTM A 924/A 924M.

E. Drywall Beads: Edge trim formed from 0.0299-inch zinc-coated steel sheet formed to receive joint compound and in size to suit thickness of gypsum board.

2.03 PAINT

A. Shop Primer for Ferrous Metal: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with performance requirements in FS TT-P-664; selected for good resistance to normal atmospheric corrosion, compatibility with finish paint systems indicated, and capability to provide a sound foundation for field-applied topcoats despite prolonged exposure.

B. Shop Primer for Metallic-Coated Steel: Organic zinc-rich primer complying with SSPC-Paint 20 and compatible with topcoat.

C. Galvanizing Repair Paint: High-zinc-dust-content paint for regalvanizing welds in steel, complying with SSPC-Paint 20.

2.04 ACCESS DOORS AND FRAMES

A. Fire-Rated Access Doors and Frames for Masonry Walls: Flush, insulated units with exposed trim fabricated from steel sheet. Units in locker room areas shall be fabricated from metallic coated steel sheet.
   1. Locations: Masonry wall surfaces.
   2. Fire-Resistance Rating: Three-fourths or one and one-half hours; determined by construction rating access panel is mounted in.
   3. Temperature Rise Rating: 250 deg F at the end of 30 minutes.
   4. Door: Flush panel with a core of mineral-fiber insulation enclosed in sheet metal with a minimum thickness of 0.036 inch (20 gage).
   5. Frame: Minimum 0.060-inch- thick (16 gage) sheet metal with 1-inch- wide, surface-mounted trim.
   6. Hinges: Concealed pin type or continuous piano hinge.
   7. Automatic Closer: Spring type.
   8. Latch: Self-latching bolt operated by flush screwdriver with interior release.
   9. Lock: Key-operated cylinder lock with interior release in locations accessible by the public.
   10. Products:
      a. J. L. Industries, Inc.; FD.
      b. Karp Associates, Inc.; KRP-150 FR.
      c. The Williams Brothers Corporation of America; WB-FR Standard.

B. Fire-Rated Access Doors and Trimless Frames for Drywall: Flush, insulated units fabricated from steel sheet. Units in locker room areas shall be fabricated from metallic coated steel sheet.
   1. Locations: Gypsum board wall and ceiling surfaces.
   2. Fire-Resistance Rating: Three-fourths or one and one-half hours; determined by construction rating access panel is mounted in.
   3. Temperature Rise Rating: 250 deg F at the end of 30 minutes.
   4. Door: Flush panel with a core of mineral-fiber insulation enclosed in sheet metal with a minimum thickness of 0.036 inch (20 gage).
   5. Frame: Minimum 0.060-inch- (16 gage) thick sheet metal with drywall bead.
   6. Hinges: Concealed pin type or continuous piano hinge.
   7. Automatic Closer: Spring type.
   8. Latch: Self-latching bolt operated by flush screwdriver with interior release.
   9. Lock: Key-operated cylinder lock with interior release in locations accessible by the public.
   10. Products:
      a. J. L. Industries, Inc.; FDWB.
      b. Karp Associates, Inc.; KRP-350 FR.
      c. The Williams Brothers Corporation of America; WB-FR Standard for drywall.

C. Flush Access Doors and Frames with Exposed Trim for Masonry Walls: Fabricated from steel sheet. Units in locker room areas shall be fabricated from metallic coated steel sheet.
   1. Locations: Masonry wall surfaces.
   2. Door: Minimum 0.070-inch- thick (14 gage) sheet metal, set flush with exposed face flange of frame.
   3. Frame: Minimum 0.060-inch- thick (16 gage) sheet metal with 1-inch wide, surface-mounted trim.
   4. Hinges: Spring-loaded concealed pin type or continuous piano hinge.
   5. Latch: Screwdriver-operated cam latch.
   6. Lock: Key-operated cylinder lock, in locations accessible by the public.
   7. Products:
      a. J. L. Industries, Inc.; Model TM.
      b. Karp Associates, Inc.; DSC-214M.
      c. The Williams Brothers Corporation of America; WB-GPS.

D. Flush Access Doors and Trimless Frames: Fabricated from steel sheet. Units in locker room areas shall be fabricated from metallic coated steel sheet.
   1. Locations: Gypsum board wall and ceiling surfaces.
   2. Door: Minimum 0.070-inch- thick (14 gage) sheet metal, set flush with surrounding finish surfaces.
   3. Frame: Minimum 0.060-inch- thick (16 gage) sheet metal with drywall bead.
   4. Hinges: Continuous piano hinge.
   5. Latch: Screwdriver- operated cam latch.
   6. Lock: Key-operated cylinder lock, in locations accessible by the public.
   7. Products:
      a. J. L. Industries, Inc.; Model WB .
      b. Karp Associates, Inc.; KDW .
      c. The Williams Brothers Corporation of America; WB-DW.

2.05 FABRICATION

A. General: Provide access door assemblies manufactured as integral units ready for installation.

B. Metal Surfaces: For metal surfaces exposed to view in the completed Work, provide materials with smooth, flat surfaces without blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.

C. Steel Doors and Frames: Grind exposed welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of type required to secure access panels to types of supports indicated.
   1. Exposed Flanges: Nominal 1 to 1-1/2 inches wide around perimeter of frame.

2. For trimless frames with drywall bead for installation in gypsum board assembly, provide edge trim for gypsum board securely attached to perimeter of frames.
3. Provide mounting holes in frames to attach frames to metal framing in drywall construction. Furnish adjustable metal masonry anchors for frames installed in masonry construction.

D. Latching Mechanisms: Furnish number required to hold doors in flush, smooth plane when closed.
1. For cylinder lock, furnish two keys per lock and key all locks alike.

2.06 FINISHES, GENERAL

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Finish metal fabrications after assembly.

2.07 METALLIC-COATED STEEL FINISHES

A. Galvanizing of Steel Shapes and Plates: Hot-dip galvanize items indicated to comply with applicable standard listed below:
1. ASTM A 153/A 153M, for galvanizing steel and iron hardware.

B. Surface Preparation: Clean surfaces with nonpetroleum solvent so surfaces are free of oil and other contaminants. For galvanized surfaces, apply, after cleaning, a conversion coating suited to the organic coating to be applied over it. For metallic-coated surfaces, clean welds, mechanical connections, and abraded areas, and apply galvanizing repair paint specified below to comply with ASTM A 780.
1. Galvanizing Repair Paint: High-zinc-dust-content paint for regalvanizing welds in steel, complying with SSPC-Paint 20.

C. Factory Priming for Field-Painted Finish: Apply shop primer immediately after cleaning and pretreating.

2.08 STEEL FINISHES

A. Surface Preparation: Prepare uncoated ferrous-metal surfaces to comply with minimum requirements indicated below for SSPC surface-preparation specifications and environmental exposure conditions of installed metal fabrications:
1. Interiors (SSPC Zone 1A): SSPC-SP 3, "Power Tool Cleaning."

B. Apply shop primer to uncoated surfaces of metal fabrications. Comply with SSPC-PA 1, "Paint Application Specification No. 1," for shop painting.

PART 3 - EXECUTION

3.01 PREPARATION

A. Advise installers of other work about specific requirements relating to access door and floor door installation, including sizes of openings to receive access door and frame, as well as locations of supports, inserts, and anchoring devices.

3.02 INSTALLATION

A. Comply with manufacturer's written instructions for installing access doors and frames.

B. Set frames accurately in position and attach securely to supports with plane of face panels aligned with adjacent finish surfaces.

C. Install access doors with trimless frames flush with adjacent finish surfaces or recessed to receive finish material.

3.03 ADJUSTING AND CLEANING

A. Adjust doors and hardware after installation for proper operation.

B. Remove and replace doors and frames that are warped, bowed, or otherwise damaged.

END OF SECTION