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 ceiling access doors and frames.
- B. Related Sections include the following:
 1. Division 15 Sections for heating and air-conditioning duct access doors.

1.03 SUBMITTALS

- A. General: Submit in accordance with Section 01330.
- 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 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, or another testing and inspecting agency acceptable to authorities having jurisdiction:

 NFPA 252 for vertical access doors.
 - C. Size Variations: Obtain Architect's acceptance of manufacturer's standard-size units, which may vary slightly from sizes indicated.

1.05 COORDINATION

A. Verification: Determine specific locations and sizes for access doors needed to gain access to concealed equipment.

PART 2 - PRODUCTS

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

ACCESS DOORS

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. Stainless-Steel Sheet, Strip, Plate, and Flat Bars: ASTM A 666, Type 304; with minimum sheet thickness indicated representing specified thickness according to ASTM A 480/A 480M.
- E. Stainless-Steel Bars and Shapes: ASTM A 276, Type 304.
- F. 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.

2.04 ACCESS DOORS AND FRAMES

- A. Fire-Rated Access Doors and Trimless Frames for Drywall: Flush, insulated units fabricated from steel sheet
 - 1. Locations: Gypsum board 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 thick (16 gage) 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 latch release ring or T-handle with interior release.
 - 9. Lock: Key-operated cylinder lock with interior release in locations accessible by the public.
 - 10. Size: 21-inches x 36-inches.
 - 11. 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.
- B. Flush Access Doors and Trimless Frames: Fabricated from steel sheet, except as noted. Provide stainless steel sheet for units in walls within restrooms, toilet rooms, and janitor's closets and for units adjacent to sinks, water closets, urinals and similar fixtures that could cause fluids to come into contact with access door and frame.
 - 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: Spring-loaded concealed pin type or continuous piano hinge (stainless steel for stainless steel units).
 - 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.; Model KDW.
 - c. The Williams Brothers Corporation of America; WB-DW.
 - d. Provide comparable products where stainless steel units are required.

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. For trimless frames with drywall bead for installation in gypsum board assembly, provide edge trim for gypsum board securely attached to perimeter of frames.
 - 2. Provide mounting holes in frames to attach frames to metal or wood framing in drywall 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 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.

2.08 STAINLESS-STEEL FINISHES

- A. Remove tool and die marks and stretch lines or blend into finish.
- B. Grind and polish surfaces to produce uniform, directionally textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.
- C. Bright, Directional Polish: No. 4 finish.
 - 1. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Advise installers of other work about specific requirements relating to access 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 08311