SECTION 08 31 13 ACCESS DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Access doors and panels installed in walls and ceilings.

1.2 RELATED REQUIREMENTS

- A. Lock Cylinders: Section 08 71 00, DOOR HARDWARE.
- B. Field Painting: Section 09 91 00, PAINTING.
- C. Access Doors for Control or Drain Valves: Section 21 10 00, WATER-BASED FIRE-SUPPRESSION SYSTEMS.
- D. Access Doors for Plumbing Valves: Section 21 40 00, PLUMBING FIXTURES.
- E. Locations of Access Doors for Ductwork Cleanouts: Section 23 31 00, HVAC DUCTS AND CASINGS.

1.3 APPLICABLE PUBLICATIONS

- A. Comply with references to the extent specified in this section.
- B. American Welding Society (AWS):
 - 1. D1.3/D1.3M-08 Structural Welding Code Sheet Steel.
- C. ASTM International (ASTM):
 - A653/A653M-15 Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Sip Process.
 - A1008/A1008M-15 Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Baked Hardenable.
 - A666-15 Annealed or Cold-Worked Austenitic Stainless-Steel sheet, Strip, Plate, and Flat Bar.
 - 4. E119-15 Fire Test of Building Construction and Materials.
- D. National Fire Protection Association (NFPA):
 - 1. 80-16 Fire Doors and Other Opening Protectives.
 - 2. 251-12 Fire Tests of Door Assemblies.
- E. National Association of Architectural Metal Manufacturers (NAAMM):
 - 1. AMP 500-06 Metal Finishes Manual.
- F. UL LLC (UL):
 - 1. Listed Online Certifications Directory.
 - 2. 10B-08 Standard for Fire Tests of Door Assemblies.
 - 3. 263-11 Fire Tests of Building Construction and Materials.

1.4 SUBMITTALS

- A. Submittal Procedures: Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Submittal Drawings:
 - 1. Show size, configuration, fabrication, and installation details.
- C. Manufacturer's Literature and Data:
 - 1. Description of each product.
 - 2. Installation instructions.
- D. Sustainable Construction Submittals:
 - Recycled Content: Identify post-consumer and pre-consumer recycled content percentage by weight.

1.5 DELIVERY

- A. Deliver products in manufacturer's original sealed packaging.
- B. Mark packaging, legibly. Indicate manufacturer's name or brand, type, color, production run number, and manufacture date.
- C. Before installation, return or dispose of products within distorted, damaged, or opened packaging.

1.6 STORAGE AND HANDLING

- A. Store products indoors in dry, weathertight facility.
- B. Protect products from damage during handling and construction operations.

1.7 FIELD CONDITIONS

- A. Field Measurements: Verify field conditions affecting access door fabrication and installation. Show field measurements on Submittal Drawings.
 - Coordinate field measurement and fabrication schedule to avoid delay.

1.8 WARRANTY

A. Construction Warranty: FAR clause 52.246-21, "Warranty of Construction."

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Steel Sheet: ASTM A1008/A1008M.
- B. Galvanized Steel: ASTM A 653/A 653M.
- C. Stainless Steel: ASTM A666; Type 302 or Type 304.

2.2 PRODUCTS - GENERAL

A. Provide each product from one manufacturer.

2.3 ACCESS DOORS, FIRE-RATED.

- A. Door Construction:
 - 1. Ceiling Access Door Construction: ASTM E119 or UL 263.
 - 2. Wall Access Doors: NFPA 252 or UL 10B.
- B. Label: Class B opening according to UL 10B or test by another nationally recognized laboratory..
- C. Door Panel: Minimum 0.9 mm (0.0359 inch) thick steel sheet, with mineral-fiber insulation core, insulated sandwich type construction.
- D. Frame: Minimum 1.5 mm (0.0598 inch) thick steel sheet, depth, and configuration to suit material and construction type where installed.
 - Frame Flange: Provide for units installed in concrete, masonry, or gypsum board.
 - 2. Exposed Joints in Flange: Weld and grind smoothly.
- E. Provide automatic closing device.
- F. Hinge: Continuous steel hinge with stainless steel pin.
- G. Lock: Self-latching, mortise type with provision for fitting flush a standard screw-in type lock cylinder.
 - 1. Lock cylinder specified in Section 08 71 00, DOOR HARDWARE.
 - 2. Latch release device operable from inside of door.
- H. Anchors for Fire-Rated Access Doors: Comply with requirements of applicable fire test.

2.4 ACCESS DOORS, FLUSH PANEL, NON-RATED.

- A. Door Panel:
 - 1. 1.9 mm (0.07 inch) thick steel sheet.
 - 2. Reinforce to maintain flat surface.
- B. Frame:
 - 1.5 mm (0.06 inch) thick steel sheet, depth, and configuration to suit material and construction type where installed.
 - Frame Flange: Provide units installed in concrete, masonry, and gypsum board.
 - 3. Exposed Joints in Flange: Weld and grind smoothly.
- C. Hinge:
 - 1. Concealed spring hinge, 175 degrees of opening.
 - 2. Removable hinge pin to allow removal of door panel from frame.
- D. Lock:

1. Flush, screwdriver-operated cam lock.

2.5 ACCESS DOOR, RECESSED PANEL, NON-RATED - NOT USED

2.6 FABRICATION - GENERAL

- A. Size: Minimum 600 mm (24 inches) square door unless otherwise shown.
- B. Component Fabrication: Straight, square, flat and in same plane where required.
 - Exposed Edges: Slightly rounded, without burrs, snags, and sharp edges.
 - 2. Exposed Welds: Continuous, ground smooth.
 - 3. Welding: AWS D1.3/D1.3M.
- C. Locks and Non-Continuous Hinges: Provide numbers required to maintain alignment of door panel with frame. For fire-rated doors, provide hinges and locks as required by fire test.
- D. Anchoring: Make provisions in frame for anchoring to adjacent construction. Provide anchors in size, number, and location on four sides to secure access door to substrate. Provide anchors as required by fire test.

2.7 FINISHES

- A. Steel Paint Finish:
 - Powder-Coat Finish: Manufacturer's standard two-coat finish system consisting of the following:
 - a. One coat primer.
 - b. One coat thermosetting topcoat.
 - c. Dry-film Thickness: 0.05 mm (2 mils) minimum.

2.8 ACCESSORIES

- A. Fasteners: Type and size recommended by access door manufacturer, to suit application.
 - 1. Other Access Doors: Galvanized steel fasteners.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Examine and verify substrate suitability for product installation.
 - Verify access door locations and sizes provide required maintenance access to installed building services components.
- B. Protect existing construction and completed work from damage.

3.2 INSTALLATION - GENERAL

- A. Install products according to manufacturer's instructions and approved submittal drawings.
 - When manufacturer's instructions deviate from specifications, submit proposed resolution for Contracting Officer's Representative consideration.
- B. Install access doors and panels permitting access to service valves, traps, dampers, cleanouts, and other mechanical, electrical and conveyor control items concealed in walls and partitions and concealed above gypsum board and plaster ceilings.
- C. Install fire rated access door according to NFPA 80.
- D. Install fire-rated doors in fire-rated partitions and ceilings.
- E. Install flush access panels in partitions and in gypsum board and plaster ceilings.

3.3 ACCESS DOOR AND FRAME INSTALLATION

- A. Wall Installations: Install access doors in openings with sides vertical.
- B. Ceiling Installations: Install access doors parallel to ceiling suspension grid or room partitions.
- C. Frames without Flanges: Install frame flush with surrounding finish surfaces.
- D. Frames with Flanges: Overlap opening, with face uniformly spaced from finish surface.
- E. Recessed Panel Access Doors: Install with face of surrounding materials flush with door panel installed finish.
- F. Secure frames to adjacent construction with fasteners.
- G. Install type, size, and quantity of anchoring device suitable for material surrounding opening to maintain alignment, and resist displacement, during normal use of access door.
- H. Field Painting Primed Access Doors: Comply with the requirements of Section 09 91 00, PAINTING.

3.4 ADJUSTMENT

- A. Adjust hardware so door panel opens freely.
- B. Adjust door when closed so door panel is centered in frame.

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