SECTION 08 31 13 ACCESS DOORS AND FRAMES

SPEC WRITER NOTE: Delete text between
// // not applicable to project. Edit
remaining text to suit project.

PART 1 - GENERAL

1.1 SUMMARY

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

1.2 RELATED WORK

SPEC WRITER NOTE: Update and retain references only when specified elsewhere in this section.

- A. Section 05 50 00, METAL FABRICATIONS: Wire Mesh and Screen Access Doors.
- B. Section 08 71 00, DOOR HARDWARE: Lock Cylinders.
- C. Section 09 91 00, PAINTING: Field Painting.
- D. Section 09 06 00, SCHEDULE FOR FINISHES: Finish Color.
- E. Section 21 13 13, WET-PIPE SPRINKLER SYSTEMS: Access Doors for Control or Drain Valves.
- F. Section 21 12 16, DRY-PIPE SPRINKLER SYSTEMS: Access Doors for Control or Drain Valves.
- G. Section 22 40 00, PLUMBING FIXTURES: Access Doors for Plumbing Valves.
- H. Section 23 31 00, HVAC DUCTS AND CASINGS: Locations of Access Doors for Ductwork Cleanouts.

1.3 APPLICABLE PUBLICATIONS

- A. Comply with references to extent specified in this section.
- B. American Welding Society (AWS): D1.3/D1.3M-2018.....Structural Welding Code - Sheet Steel (6th Edition.
- C. ASTM International (ASTM):
 - A653/A653M-20.....Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Sip Process.
 - A1008/A1008M-18.....Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable.

A666-15.....Annealed or Cold-Worked Austenitic Stainless Steel sheet, Strip, Plate, and Flat Bar.

E119-20.....Fire Test of Building Construction and Materials.

- D. National Fire Protection Association (NFPA): 80-2019 Edition.....Fire Doors and Other Opening Protectives. 252-2017 Edition.....Fire Tests of Door Assemblies.
- E. National Association of Architectural Metal Manufacturers (NAAMM): AMP 500-06.....Metal Finishes Manual.
- F. UL LLC (UL):

Listed......Online Certifications Directory.

10B-08 (Edition 10)....Standard for Fire Tests of Door Assemblies.

263-11 (Edition 14)....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, and fabrication and installation details.
- C. Manufacturer's Literature and Data:
 - 1. Description of each product.
 - 2. Installation instructions.
- D. Sustainable Construction Submittals:

SPEC WRITER NOTE: Retain sustainable construction submittals appropriate to product.

 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

SPEC WRITER NOTE: Always retain construction warranty. FAR includes Contractor's one year labor and material warranty.

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

SPEC WRITER NOTE:

- Use stainless steel access doors and panels in wet areas and ceramic tile surfaces.
- 2. Use primed steel doors in other areas.
- 3. Use galvanized steel access doors to resist corrosion. PRODUCTS

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Steel Sheet: ASTM A1008/A1008M.
- B. Galvanized Steel: ASTM A653/A653M.
- C. Stainless Steel: ASTM A666; Type 302 or Type 304.

2.2 PRODUCTS - GENERAL

- A. Basis of Design: Section 09 06 00, SCHEDULE FOR FINISHES.
- B. Provide each product from one manufacturer.
- C. Sustainable Construction Requirements:

SPEC WRITER NOTE:

- Specify products containing greatest recycled content practicable to maximize material recovery. See EPA Comprehensive Procurement Guidelines (CPG) for guidance about individual products and available recycled content. Section 01 81 13 sets overall project recycled content requirements.
- Steel recycled content depends upon furnace type. AISC reports industry wide 32 percent for basic oxygen furnace and 93 percent for electric arc furnace.

 Steel Access Doors Recycled Content: 30 percent total recycled content, minimum.

> SPEC WRITER NOTE: Specialty Steel Industry of North America (SSINA) reports average 75 - 85 percent recycled content for stainless steel.

 Stainless Steel Access Doors Recycled Content: 70 percent total recycled content, minimum.

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. // 1 hour fire-rated // 1-1/2 hour fire-rated, // with maximum temperature rise of 120 degrees C (216 degrees F) //.
- C. Door Panel: Minimum 0.9 mm (0.0359 inch) thick // steel // stainless 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.
 - 1. Frame Flange: Provide at units installed in concrete, masonry, or gypsum board.
 - 2. Exposed Joints in Flange: Weld and grind smooth.
 - 3. // Provide expanded galvanized metal lath perimeter wings when installed in plaster, except veneer plaster. //
- E. Provide automatic closing device.
- F. Hinge: Continuous // steel // stainless 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 // 1.5 mm (0.06 inch) thick
 stainless steel // sheet.

- 2. Reinforce to maintain flat surface.
- B. Frame:
 - 1.5 mm (0.06 inch) thick // steel // stainless steel // sheet, depth and configuration to suit material and construction type where installed.
 - 2. Frame Flange: Provide at units installed in concrete, masonry, and gypsum board.
 - 3. Exposed Joints in Flange: Weld and grind smooth.
 - 4. // Provide expanded galvanized metal lath perimeter wings when installed in plaster, except veneer plaster. //
- 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. // Tamper proof screws (spanner head locks) for access panels in Behavioral Health Areas. //

SPEC WRITER NOTE: Use for adhesive applied acoustical tile or special plaster. Do not use for gypsum board or veneer plaster.

2.5 ACCESS DOOR, RECESSED PANEL, NON-RATED

- A. Door Panel:
 - 1. 1.2 mm (0.05 inch) thick // steel // stainless steel // sheet to form a 25 mm (1 inch) deep recessed pan to accommodate installation of acoustical units and other materials where shown in walls and ceiling.
 - 2. Reinforce to prevent sagging.
- B. Frame:
 - 1. 1.5 mm (0.06 inch) thick steel sheet of depth and configuration to suit installation in suspension system of ceiling or wall framing.
 - 2. Extend sides of frame to protect edge of acoustical units when door panel is in open position.
 - Provide shims, bushings, clips and other devices necessary for installation.
- C. Hinge: Continuous // steel // stainless steel // hinge with stainless steel pin, or concealed hinge.
- D. Lock:
 - 1. Flush screwdriver-operated cam lock.

- 2. Plastic sleeve or stainless steel grommet to protect hole made in acoustical unit for screwdriver access to lock.
- 3. // Tamper proof screws (spanner head locks) for access panels in Behavioral Health Areas. //

2.6 FABRICATION - GENERAL

- A. Size: Minimum 600 mm (24 inches) square door unless otherwise shown
 // or required to suit opening in suspension system of ceiling. //
- 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 in 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.
 - d. Color: Refer to Section 09 06 00, SCHEDULE FOR FINISHES.
- B. Stainless Steel Exposed Surfaces: NAAMM AMP 500; No.06 Metal Finishes.

2.8 ACCESSORIES

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

PART 3 - EXECUTION

3.1 PREPARATION

A. Examine and verify substrate suitability for product installation.

- 1. 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.

SPEC WRITER NOTES:
1. List spaces or rooms where recessed
 panel access doors are installed.
Use only where finish must be continuous.

F. Install recessed panel access doors in the following locations: 1. // Insert Room Names. //

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.

- - E N D - -