State Project No. 737-92-0035 Federal Aid Project No. ITS-3602 (521) STB 21027.00

SECTION 08310

ACCESS DOORS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- Access doors, in finished spaces subject to the public eye, where necessary for access (whether shown on Drawings or not) to valves, dampers, cleanouts and similar items concealed in floors, walls and ceilings.
- 2. Fire-rated access doors in fire-rated walls, partitions and ceilings.
- Finishes shall be flush with and match adjacent finishes; tile walls shall have flush stainless steel finish.

B. Related Sections include:

- Section 04200 Unit Masonry: Building-in of anchors and grouting of frames set in masonry construction.
- 2. Section 07720 Roof Accessories: Roof hatches.
- 3. Section 07840 Firestopping.
- 4. Section 09250 Gypsum Board Assemblies.
- 5. Section 09265 Gypsum Board Shaft Wall.
- 6. Section 09910 Painting.
- 7. DIVISION 15 MECHANICAL: Access doors in unfinished spaces or spaces hidden from public view.
- DIVISION 16 ELECTRICAL.

1.2 SUBMITTALS

- A. Product Data: Submit Manufacturer's technical data and specifications for each type of access door assembly, including setting drawings, templates, and instruction and directions for installation.
- **B.** Shop Drawings: Submit complete schedule, including types, locations, sizes, wall and ceiling construction details, finishes, latching or locking provisions, and other data pertinent to installation. Include drawings showing fabrication and installation of customized access doors and frames, including details of each frame type, elevations of door design types, anchorage and accessory items.

1.3 QUALITY ASSURANCE

A. Fire-Resistance Ratings: Wherever a fire-resistance classification is indicated, provide access door assembly with panel door, frame, hinge, and latch from manufacturer listed in Underwriters Laboratories, Inc's. "Building Materials Directory" for rating shown. Provide UL label on each fire-rated access doors.

1.4 PROJECT CONDITIONS

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- **A. Size Variations:** Obtain Architect's acceptance of manufacturer's standard size units which vary from sizes indicated.
- **B.** Coordination: Furnish inserts and anchorage devices that must be built into other work for installation of access doors. Coordinate delivery with other Work to avoid delay.
- **C. Verification:** Obtain specific locations and sizes for required access doors from installers of concealed equipment requiring access, and indicate on submittal schedule.
- **D.** Special-Size Access Doors: Use where required; indicate on submittal schedule.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Approved Manufacturers: Provide access doors by one of the following:
 - 1. Cesco Products.
 - 2. J. L. Industries.
 - 3. Karp Associates, Inc.
 - 4. Milcor, Inc.
 - 5. Nystrom, Inc.
 - 6. Acudor Products Inc.
 - 7. Babcock-Davis Hatchways, Inc.

2.2 MATERIALS

- **A. Steel Sheet:** ASTM A 366 commercial-quality, cold-rolled steel sheet with baked-on, rust-inhibitive primer.
- **B.** Zinc-Coated Steel Sheet: ASTM A 591, Electrolytic zinc-coated steel sheet with Class C coating and phosphate treatment to prepare surface for painting.
- **C. Stainless-Steel Sheet:** ASTM A 167, Type 304 with No. 4 finish according to ASTM A 480.
- D. Stainless-Steel Bars and Shapes: ASTM A 276, Type 304.
- **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.

2.3 FABRICATION

A. General: Furnish each access door assembly manufactured as an integral unit, complete with all parts, and ready for installation. Fabricate units of continuous welded steel construction. Grind welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of type suitable to secure access panels to types of construction involved.

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- **B.** Frame Construction: Fabricate from 16-gage steel, with manufacturer's factory-applied prime paint.
 - 1. Fabricate frame with exposed flange nominal 1-inch wide around perimeter of frame, unless otherwise indicated.
 - 2. For gypsum drywall furnish perforated frames with drywall bead.
 - 3. For installation in masonry construction, furnish frames with adjustable metal masonry anchors.
- **C. Flush Panel Doors, Steel:** Fabricate from not less than 14-gage sheet steel, with concealed spring hinges or concealed continuous piano hinge set to open 175 degrees. Finish with manufacturer's factory-applied prime paint.
- **D.** Flush Panel Doors, Stainless Steel: Fabricate from not less than 14-gage sheet steel, with concealed spring hinges or concealed continuous piano hinge set to open 175 degrees. Buff exposed surfaces to #4 satin finish.
- **E. Fire-Rated Units:** Provide manufacturer's standard insulated flush panel/doors, with continuous piano hinge and self-closing mechanism.
- **F.** Locking Devices: Furnish flush, screw driver-operated cam locks of number required to hold door in flush, smooth plane when closed.
 - Where shown or scheduled, provide 1 cylinder lock per access door. Furnish 2 keys per lock. Key all locks alike unless otherwise scheduled.

2.4 FLOOR DOORS

- A. Floor Doors, General: Equip each door with adjustable counterbalancing springs, heavy-duty hold-open arm that automatically locks door open at 90 degrees, release handle with red vinyl grip that allows for one-handed closure, and recessed lift handle.
- **B.** Aluminum Floor Door: Extruded-aluminum angle frame with ¼-inch-thick, diamond-pattern, aluminum tread plate door; nonwatertight; loading capacity to support 300 lbf/sq. ft. pedestrian live load. Aluminum mill finish.
- **C. Options:** If available from specified manufacturers, include the following options:
 - 1. Hinges: Heavy-duty, stainless-steel butt hinges with stainless-steel pins.
 - 2. Latch: Stainless-steel snap lock with removable outside handle.
 - 3. Hardware Material: Stainless steel, including latch and lifting mechanism assemblies, hold-open arms, and all brackets, hinges, pins, and fasteners.

2.5 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.

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- 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. For trimless frames with drywall bead for installation in gypsum board assembly, provide edge trim for gypsum board securely attached to perimeter of frames.
- **D.** Access Doors: Form face of panel to provide recess for application of applied finish. Reinforce panel as required to prevent buckling.
- **E.** Latching Mechanisms: Furnish number required to hold doors in flush, smooth plane when closed.
- **F. Extruded Aluminum:** After fabrication, apply manufacturer's standard protective coating on aluminum that will come into contact with concrete.

2.6 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.
- C. Provide access door finishes matching adjacent floor, wall and ceiling finishes as scheduled. Provide stainless steel access doors where walls are scheduled to receive tile finishes.

2.7 STEEL FINISHES

A. Surface Preparation: Prepare uncoated ferrous-metal surfaces to comply with SSPC-SP 3, "Power Tool Cleaning," surface-preparation specifications and environmental exposure conditions of installed fabrications.

2.8 ALUMINUM FINISHES

A. As-Fabricated Finish: AA-M10 (Mechanical Finish: as fabricated, unspecified).

2.9 STAINLESS STEEL FINISHES

A. Directional Satin Finish: No.4.

PART 3 - EXECUTION

3.1 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.

3.2 INSTALLATION

A. Comply with manufacturer's instructions for installation of access doors.

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- **B.** Coordinate installation with Work of other Sections.
- **C. Set frames** accurately in position and securely attach to supports with face panels plumb or level in relation to adjacent finish surfaces.
- **D. Install access doors** with trimless frames and floor doors flush with adjacent finish surfaces or recessed to receive finish material.
- **E. Protect** steel panels and frames from damage and marring during subsequent construction. Use self-adhesive paper or plastic which can be removed without damage to access doors.

3.3 COMPLETION

- A. Touch-up damaged prime coats.
- **B.** Adjust hardware and panels after installation for proper operation.
- **C. Remove and replace** panels and frames which are warped, bowed, or otherwise damaged.
- **D.** Clean surfaces of panels and frames, including portions concealed when doors are closed, to remove adhered materials from subsequent construction. Remove temporary protection.
- **E. Deliver keys,** tagged for identification, to Owner's representative.

END OF SECTION