SECTION 083113 - ACCESS DOORS AND FRAMES

PART 1 - GENERAL

1.1 M.S.U ISSUES

- A. M.S.U. avoids access doors whenever possible by using lay-in type ceilings, but all valves and equipment requiring maintenance or adjustments will be accessible. Any door through which a person must work will be a minimum of 24" by 24".
- B. Where ceiling mounted access panels are in walkways the lower edge of any panel when opened should be a minimum of seven (7) feet above the floor.

1.2 SUMMARY

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

1.3 SUBMITTALS

A. 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.

1.4 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 or UL 10B, whichever is most restrictive, for vertical access doors.
 - 2. ASTM E 119 or UBC Standard 7.1 or UL 263, whichever is most restrictive, for horizontal access doors and frames.

1.5 COORDINATION

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

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Access Doors:
 - a. Acudor Products, Inc.
 - b. J. L. Industries, Inc.
 - c. Karp Associates, Inc.
 - d. Milcor Limited Partnership.
 - e. Nystrom Building Products Co.
 - f. Williams Bros. Corporation of America (The).

2.2 MATERIALS

- A. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- B. 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.
- C. 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 and gypsum base for veneer plaster.
- D. Plaster Bead: Casing bead formed from 0.0299-inch zinc-coated steel sheet with flange formed out of expanded metal lath and in size to suit thickness of plaster.

2.3 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.

2.4 ACCESS DOORS AND FRAMES

- A. Flush, Insulated, Fire-Rated Access Doors and Frames with Exposed Trim: Fabricated from steel sheet.
 - 1. Locations: Wall and ceiling surfaces in rated existing construction not being patched.
 - 2. Fire-Resistance Rating: Consistent with rating of ceiling in which it is installed.
 - 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.
- 5. Frame: Minimum 0.060-inch- thick sheet metal with 1-inch-wide, surface-mounted trim.
- 6. Hinges: Concealed pin type.
- 7. Automatic Closer: Spring type.
- 8. Latch: Self-latching bolt operated by knurled knob with interior release.
- B. Flush, Insulated, Fire-Rated Access Doors and Trimless Frames: Fabricated from steel sheet.
 - 1. Locations: Wall and ceiling surfaces in rated new plaster construction or plaster construction being repaired in the area.
 - 2. Fire-Resistance Rating: Consistent with rating of ceiling in which it is installed.
 - 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.
 - 5. Frame: Minimum 0.060-inch- thick sheet metal with plaster bead.
 - 6. Hinges: Concealed pin type.
 - 7. Automatic Closer: Spring type.
 - 8. Latch: Self-latching bolt operated by knurled knob with interior release.
- C. Flush, Uninsulated, Fire-Rated Access Doors and Frames with Exposed Trim: Fabricated from sheet steel.
 - 1. Locations: Wall surfaces.
 - 2. Fire-Resistance Rating: Consistent with rating of wall in which it is installed.
 - 3. Door: Minimum 0.060-inch-thick sheet metal, flush construction.
 - 4. Frame: Minimum 0.060-inch-thick sheet metal with 1-inch-wide, surface-mounted trim.
 - 5. Hinges: Concealed pin type.
 - 6. Automatic Closer: Spring type.
 - 7. Latch: Self-latching bolt operated by knurled knob with interior release.
- D. Flush Access Doors and Frames with Exposed Trim: Fabricated from steel sheet.
 - 1. Locations: Wall and ceiling surfaces in existing construction not being patched.
 - 2. Door: Minimum 0.060-inch- thick sheet metal set flush with exposed face flange of frame.
 - 3. Frame: Minimum 0.060-inch- thick sheet metal with 1-inch wide, surface-mounted trim.
 - 4. Hinges: Concealed pin type.
 - 5. Latch: Screwdriver-operated cam latch.
- E. Flush Access Doors and Trimless Frames: Fabricated from steel sheet.
 - 1. Locations: Wall and ceiling surfaces in new plaster construction or plaster construction being repaired in the area.
 - 2. Door: Minimum 0.060-inch- thick. Sheet metal set flush with surrounding finish surfaces.
 - 3. Frame: Minimum 0.060-inch- thick sheet metal with plaster bead.
 - 4. Hinges: Concealed pin type
 - 5. Latch: Screwdriver operated cam latch.
- F. Recessed Access Doors and Trimless Frames: Fabricated from steel sheet.

- 1. Locations: Acoustical-tile ceiling surfaces.
- 2. Door: Minimum 0.060-inch- thick sheet metal in the form of a pan recessed 5/8-inch acoustical-tile infill.
- 3. Frame: Minimum 0.060-inch- thick sheet metal with only frame edge exposed in acoustical ceiling surfaces.
- 4. Hinges: Concealed pin type.
- 5. Latch: Screwdriver-operated cam latch with plastic grommet for access through pan recess.

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.
- 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 and gypsum veneer plaster, provide edge trim for gypsum board and gypsum base securely attached to perimeter of frames.
 - 3. For trimless frames with plaster bead for full-bed plaster applications, provide zinc-coated expanded metal lath and exposed casing bead welded to perimeter of frames.
 - 4. Provide mounting holes in frames to attach frames to metal or wood framing in plaster and drywall construction and to attach masonry anchors in masonry construction.
- D. Recessed 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.

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.

2.7 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

3.1 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 written instructions for installing access doors and frames.
- B. Install access doors with trimless frames flush with adjacent finish surfaces or recessed to receive finish material.

3.3 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 083113