SECTION 08 31 00

ACCESS DOORS AND PANELS

PART 1 – GENERAL

1.01 SECTION INLCUDES

A. Access doors for concrete and masonry construction.

B. Access doors for plaster construction.

C. Access doors for gypsum board construction.

D. Access doors for ceramic tile surfaces.

E. Access doors for floors.

F. Access hatches at station platforms.

G. Access hatch smoke vent.

1.02 RELATED SECTIONS

A. Section 03 30 00, Cast-In-Place Concrete.

1.03 MEASUREMENT AND PAYMENT

A. General: Separate measurement or payment will not be made for the work required under this Section. All costs in connection with the Work specified herein will be considered to be included or incidental to the Work of this Contract.

1.04 DESCRIPTION

A. Furnishing and installing access doors and hatches in finished surfaces to provide access to mechanical, electrical, and piping control devices concealed behind finished surfaces as indicated and required.

B. Concealed work, to which access must be available to personnel after completion, shall have appropriate access doors and frames as specified herein furnished and installed by the Contractor.

C. Locations shall be suitable for access required and shall be approved by the Engineer before installation. Access panels shall be compatible with the construction in which they are installed, and installation shall be complete with required hardware, grounds, screeds, attachment devices, and trim.

D. Coordinate with the Facility Services Section requirements.

1.05 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM A123 Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

2. ASTM A167 Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip

B. National Association of Architectural Metal Manufacturers (NAAMM):

1. NAAMM AMP 503 Finishes for Stainless Steel

C. Underwriters Laboratories Inc. (UL):

1. UL Building Materials Directory

1.06 SUBMITTALS

A. General: Refer to Section 01 33 00, Submittal Procedures, and Section 01 33 23, Shop Drawings, Product Data, and Samples, for submittal requirement and procedures.

B. Shop Drawings and Product Data: Submit Shop Drawings and manufacturer's product data of each different type of access door and panel proposed to be furnished, including the locations of each. Include installation details appropriate for the type of construction into those doors and panels will be installed.

1.07 QUALITY ASSURANCE

A. Regulatory Requirements: Where access is required in one-hour or two-hour fire-rated walls or partitions, floors or ceilings, provide access door assembly of type and manufacture listed in the UL Building Materials Directory. Provide UL or equivalent label on each fire-rated access door assembly.

B. Templates and Setting Instructions: Provide complete information, diagrams, templates, and installation instructions as required for access doors and panels provided herein, and in sufficient time so that backing and framing can be properly installed, and so that work of other trades will not be delayed.

PART 2 – PRODUCTS

2.01 GENERAL REQUIREMENTS

A. Provide access door or panel as a single integral unit with frame, anchors, hardware, accessory parts, fittings and fastenings. Units shall be the standard products of the manufacturer, modified as necessary to meet requirements.

B. Where size of door or panel is not indicated, furnish 24 inches by 24 inches size for hand access or 36 inches by 36 inches size where body access is necessary.

2.02 ACCESS DOORS FOR CONCRETE AND MASONRY CONSTRUCTION

A. Door: Full flush design of 16 gage mild steel, double pan, fully welded, encapsulating two inches of rigid insulation.

B. Frame: 14 gage mild steel with joints fully welded and ground smooth.

C. Anchors: Corrugated steel or similar steel anchors for concrete and masonry construction, galvanized.

D. Hinge: Continuous with stainless steel pin that permits opening door to 175 degrees.

E. Closer: Spring, torque, or tension.

F. Lock: Flush, key-operated to accept District's designated CAT 74 key, spring-loaded latch and interior release.

G. Finish: Phosphate-treated and prime painted, manufacturer's standard.

H. Fire-Rating Label: UL 1-1/2 hour "B" label.

2.03 ACCESS DOORS FOR PLASTER CONSTRUCTION

A. Door: Full flush design of 18 gage mild steel, double pan, fully welded, encapsulating two inches of rigid insulation.

B. Frame: 16 gage fully welded mild steel with a one-inch deep plaster ground on three inches wide expanded metal lath.

C. Anchors: No. 10-32 FHMS to steel studs at 12 inches on center.

D. Hinge: Continuous with stainless steel pin which permits opening door to 175 degrees.

E. Closer: Spring, torque, or tension.

F. Lock: Flush, key-operated to accept District's designated CAT 74 key, spring-loaded latch and interior release.

G. Finish: Phosphate-treated and prime painted, manufacturer's standard.

H. Fire-Rating Label: UL 1-1/2 hour “B” label.

2.04 ACCESS DOORS FOR GYPSUM BOARD CONSTRUCTION

A. Door: Single sheet of 14 gage galvanized mild steel sheet.

B. Frame: 16 gage galvanized mild steel with drywall bead.

C. Anchors: Self-drilling, self-tapping screws to steel studs at eight inches on center.

D. Hinges: Concealed spring-loaded that permits opening door to 175 degrees.

E. Lock: Flush, key-operated to accept District’s designated CAT 74 key, spring-loaded latch and interior release.

F. Finish: Phosphate-treated and prime painted, manufacturer’s standard.

2.05 ACCESS DOORS FOR CERAMIC TILE SURFACES

A. Door: Single sheet of 14 or 16 gage, Type 304 stainless steel sheet meeting requirements of ASTM A167.

B. Frame: 16 gage stainless steel with fully welded joints ground smooth.

C. Anchors: Self-drilling, self-tapping screws to steel studs at eight inches on center.

D. Hinges: Concealed spring-loaded that permits opening door to 175 degrees.

E. Lock: Flush, key-operated to accept District’s designated CAT 74 key, spring-loaded latch and interior release.

F. Finish: Satin (NAAMM AMP 503 No. 4 finish).

2.06 ACCESS DOORS FOR FLOORS

A. Door: Diamond or checkered pattern, one-fourth inch thick steel plate minimum, designed for live load of 300 pounds per square foot.

B. Frame: Integral gutter-frame of one-fourth inch steel plate with a continuous anchor flange. Equip gutter with one-and-one-half inch coupling for drainage connection.

C. Hinges: Heavy forged brass with stainless steel pins.

D. Control: Coil spring opening assist and closing retarder. Provide hold open arm that becomes engaged when the door reaches its fully open position. Provide hold open release handle.

E. Lock: Spring-loaded stainless steel latch with interior handle and removable exterior wrench. Provide two interior slide bolts on inactive leaf of pair of doors.

F. Finish: Galvanized after fabrication in accordance with ASTM A123.

G. Safety Chain: Provide safety chain on inactive side of pair of open doors.

2.07 ACCESS HATCHES AT STATION PLATFORMS

A. Pan Type Door: Fabricated from minimum 3/16-inch thick Type 304 or Type 316 stainless steel plate with stainless steel angle frame meeting requirements of ASTM A167, designed for live load of 300 pounds per square foot.

B. Frame: Type 304 or Type 316 stainless steel angle frame anchored in concrete.

C. Hinges: Heavy forged brass with stainless steel pins.

D. Control: Coil spring opening assist and closing retarder. Provide hold open arm that becomes engaged when the door reaches its fully open position. Provide hold open release handle.

E. Lock: Spring-loaded stainless steel latch with interior handle and removable exterior wrench. Provide two interior slide bolts on inactive leaf of pair of doors. Lock to be operable from below at all times.

F. Finish: At top edges of frame and pan, provide NAAMM AMP 503, No. 4 finish.

G. Epoxy adhesive: Refer to Section 03 30 00, Cast-in-Place Concrete, for requirements.

H. Safety Chain: Provide safety chain on inactive side of pair of open doors.

2.08 ACCESS HATCH SMOKE VENT

A. Single Leaf Door: Provide door fabricated from minimum 14 gage hot-dip galvanized steel cover, complete with 1-inch insulation protected by metal liner, neoprene draft seal, and inside handle.

B. Curb: Provide metal curb fabricated from 14 gage hot-dip galvanized steel, complete with counterflashing and one-inch insulation outside. Curb shall be 12 inches high, formed with three-and-one-half inch roof flange anchored in concrete.

C. Hardware: Provide smoke vent equipped with spring hinges, hydraulic shock absorbers, shubber springs, and spring latch with Underwriters Laboratories approved 160-degree Fahrenheit fusible link. All hardware shall be zinc-plated.

PART 3 – EXECUTION

3.01 INSTALLATION

A. Access doors and panels shall be installed as indicated and in accordance with the approved Shop Drawings and the manufacturer's installation instructions and recommendations. Finished installations shall be square and true, plumb and level, as required, and flush with surrounding surfaces. In tile walls, align edges with tile joints.

B. Coordinate the locations of access doors and panels with the Engineer and receive approval from the Engineer for exact locations before doing any installation work. Coordinate the installation of access doors and panels with the trades in whose finishes the doors and panels will be installed. See that appropriate finish materials are installed in recesses of door panels as required to match surrounding adjacent surfaces.

C. Access doors and panels required for plumbing, mechanical, and electrical equipment and items requiring access, in other Sections when applicable, shall be installed under this Section in accordance with the approved Shop Drawings, and the manufacturer's installation instructions and recommendations, and as required to complete the work.

END OF SECTION 08 31 00