SECTION 083113 - ACCESS DOORS AND FRAMES

This Section specifies metal access doors and panels for accessing mechanical, electrical, and other concealed items requiring admission for maintenance activities. This Section includes frames for walls, ceilings, and floors, with single- or double-thickness insulation, and with or without fire-resistance ratings.

Access doors and panels for ducts are specified in Section 230923. Exterior sidewalk hatches are not included in this Section but may be edited in as required by Project.

Mechanical, electrical, and other Sections that may require access doors and panels should reference this Section.

Manufacturers found in SpecAgent for this Section were identified as representative and not as an endorsement for meeting requirements of this Specification.

This Section includes performance, proprietary, and descriptive specifications. Edit to avoid conflicting requirements.

This Section may include term "Architect/Engineer." "Architect" is used in AIA contract documents; "Engineer" is used in EJCDC contract documents. Retain appropriate term.

See Drawing Coordination Considerations for information needed to coordinate this Specification Section with Drawings.

1. GENERAL
   * + 1. SUMMARY
          1. Section Includes: [**Fire resistance-rated**] [**and**] [**nonrated**] access doors and panels with frames.
       2. REFERENCE STANDARDS

List reference standards included within text of this Section, with designations, numbers, and complete document titles.

LEED requires compliance with specific editions of referenced standards. Consider including publication dates for referenced standards in this Section to ensure that the correct standard is used for LEED compliance.

* + - * 1. ASTM International:

ASTM A153 - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.

ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.

ASTM A879 - Standard Specification for Steel Sheet, Zinc Coated by the Electrolytic Process for Applications Requiring Designation of the Coating Mass on Each Surface.

ASTM A1008 - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable.

ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.

ASTM F2329 - Standard Specification for Zinc Coating, Hot-Dip, Requirements for Application to Carbon and Alloy Steel Bolts, Screws, Washers, Nuts, and Special Threaded Fasteners.

* + - * 1. National Fire Protection Association:

NFPA 80 - Standard for Fire Doors and Other Opening Protectives.

NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.

NFPA 288 - Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in Horizontal Fire Resistance-Rated Assemblies.

* + - * 1. UL:

UL 10B - Standard for Fire Tests of Door Assemblies.

UL 263 - Standard for Fire Tests of Building Construction and Materials.

* + - 1. COORDINATION
         1. Section 013000 - Administrative Requirements: Requirements for coordination.
         2. Coordinate Work of this Section with controls, valves, traps, dampers, cleanouts, and similar items requiring operation behind finished surfaces.
         3. Coordinate exact locations of access doors and panels.
      2. SUBMITTALS

Provide submittal index. Organize submittal in the order listed below in this article and in Articles 1.4, 1.5, 1.6, and 1.7.

* + - * 1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
        2. Manufacturer’s installation instructions shall be provided along with product data.
        3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
        4. Section 013300 - Submittal Procedures: Requirements for submittals.
        5. Product Data: Submit manufacturer's information indicating sizes, types, finishes, hardware, scheduled locations, fire resistances, and details of adjoining Work.
        6. Shop Drawings: Indicate exact position of access door units and any special installation conditions.

Include following paragraph to submit physical samples to select finish, color, texture, and other properties.

* + - * 1. Samples: Submit two samples, 12 by 12 inches in size, illustrating frame configuration and anchoring.
        2. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

Include separate paragraphs for additional certifications.

* + - * 1. Manufacturer Instructions: Submit installation requirements and rough-in dimensions.
        2. Qualifications Statements:

Coordinate following subparagraph with requirements specified in QUALIFICATIONS Article.

Submit qualifications for manufacturer and fabricator.

* + - * 1. Re-Evaluation Fee: In accordance with the General Conditions 07213 Article 4.7. In accordance with Article 4.7 of the General Conditions, a re-evaluation processing fee of $250 will be levied against the Contractor for each re-evaluation of a Submittal or Submittal Package submission that was returned for failure to comply with the submittal requirements relative to completeness, content, or format.
      1. SUSTAINABLE DESIGN SUBMITTALS
         1. Section 018113 - Sustainable Design Requirements: Requirements for sustainable design submittals.
         2. Manufacturer's Certificate:

Certify that products meet or exceed specified sustainable design requirements.

Insert material certifications list below to suit products specified in this Section and Project sustainable design requirements. Specific certificate submittal and supporting data requirements are specified in Section 018113.

Materials Resources Certificates:

Certify source and origin for [**salvaged**] [**and**] [**reused**] products.

Certify recycled material content for recycled content products.

Certify source for regional materials and distance from Project Site.

* + - * 1. Product Cost Data:

Submit cost of products to verify compliance with Project sustainable design requirements.

Exclude cost of labor and equipment to install products.

Provide cost data for following products:

Edit list of material cost data below to suit products specified in this Section and Project sustainable design requirements. Specific cost data requirements are specified in Section 018113.

Salvaged, refurbished, and reused products.

Products with recycled material content.

Regional products.

<**\_\_\_\_\_\_\_\_**>.

* + - 1. QUALITY ASSURANCE

Include this Article to specify compliance with overall reference standards affecting products and installation included in this Section.

* + - * 1. Fire-Rated Access Door Construction:

Wall Access Doors: Comply with NFPA 252 or UL 10B.

Ceiling Access Doors: Comply with ASTM E119 or UL 263.

* + - * 1. Fire-Rated Floor Hatch: Tested according to NFPA 288.
        2. Installed Fire-Rated Access Door Assembly: Comply with NFPA 80 for fire-rated class as indicated on Drawings.
        3. Attach label from agency approved by authority having jurisdiction to identify each fire-rated access door.
        4. Fire Rated Access Doors for Walls: Complete assemblies complying with Underwriter’s Laboratories, Inc (UL) requirements for 1-1/2 hour “B Label” rating. Identify each assembly with UL label.
        5. Fire Rated Access Doors for Ceilings: Complete assemblies complying with Warnock Hersey (WHI) requirements for one-hour rating in wood-framed assemblies and three-hour rating in non-combustible assemblies. Identify each assembly with WHI label and NFPA requirement indicating “For Horizontal Installation”.

In following paragraph insert "State of \_\_\_\_\_\_\_\_ Department of Transportation," "Municipality of \_\_\_\_\_\_\_\_ Department of Public Works," or other agency as appropriate.

Include following paragraph only when cost of acquiring specified standards is justified.

* + - * 1. Maintain two copies of each standard affecting Work of this Section on Site.
      1. QUALIFICATIONS

Coordinate following paragraphs with requirements specified in SUBMITTALS Article.

* + - * 1. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum threeyears' documented experience.
        2. Fabricator: Company specializing in fabricating products specified in this Section with minimum threeyears' documented experience.
      1. CLOSEOUT SUBMITTALS
         1. Project Record Documents: Record actual locations of access units.
      2. DELIVERY, STORAGE, AND HANDLING
         1. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
         2. Store materials according to manufacturer instructions.
         3. Protection:

Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.

Provide additional protection according to manufacturer instructions.

* + - 1. EXISTING CONDITIONS
         1. Field Measurements:

Verify field measurements prior to fabrication.

Indicate field measurements on Shop Drawings.

1. PRODUCTS
   * + 1. ACCESS DOORS AND PANELS
          1. [Manufacturers](http://www.specagent.com/LookUp/?ulid=&mf=04&src=wd):
          2. Flush-Framed Access Doors:

Exposed Frame Flanges:

Width: Nominal 3/4 inch

Material: 16-gage [**galvanized**] [**stainless**] steel.

Door Panels: Flush Type 14-gage [**galvanized**] [**stainless**] steel.

* + - * 1. Gypsum Board Access Doors:

Frame Flanges:

Width: Nominal 1 inch

Material: 16-gage [**galvanized**] [**stainless**] steel.

Flange Design: Concealed by gypsum board joint-finishing compound as specified in Section 092116 - Gypsum Board Assemblies.

* + - * 1. Plaster Access Doors:

Frame Flanges:

Width: Nominal 1 inch.

Material: 16-gage galvanized steel.

Flange Design: Concealed by plaster

Following doors have a recessed pan-type door to accept gypsum board on door panel to provide flush, concealed appearance. Construction for recessed models varies. Recessed models are also available for ceiling applications.

* + - * 1. Recessed Wall Access Doors:

Frame Flanges:

Width: Nominal 1 inch.

Material: 16-gage [**galvanized**] [**stainless**] steel.

Flange Design: Concealed by gypsum board joint-finishing compound as specified in Section 092116 - Gypsum Board Assemblies.

Following doors have a flange that allows installation with wall and ceiling surfaces. Fire-rated doors are also available with a pull ring or turn/release mechanism instead of key operation.

* + - * 1. Fire-Rated Access Doors:

Exposed Frame Flanges:

Width: Nominal 1 inch.

Material: 16-gage galvanized steel.

Door Panels: 20-gage steel.

Furnish self-closing and latching doors with keyed lock to match cylinders as specified in Section 087100 - Door Hardware.

* + - * 1. Gypsum Board Fire-Rated Access Doors:

Frames: 16-gage steel with minimum 22-gage galvanized-steel drywall bead flanges.

Door Panels: 20-gage galvanized steel.

Flange Design: Concealed by gypsum board joint-finishing compound as specified in Section 092116 - Gypsum Board Assemblies.

Furnish self-closing and latching doors with keyed lock to match cylinders as specified in Section 087100 - Door Hardware.

* + - 1. FLOOR HATCHES
         1. [Manufacturers](http://www.specagent.com/LookUp/?ulid=&mf=04&src=wd):

Insert descriptive specifications below to identify Project requirements and to eliminate conflicts with products specified above. Include configuration, size, color, material composition, and other properties needed to describe product.

* + - * 1. Angle-Framed Floor Hatches:

Size: 30 by 36 inches.

Configuration: Single leaf.

Door:

Material: 3/16-inch thick steel.

Pattern: Diamond tread.

Frame: 3/16-inch thick steel angle.

Hinge Type: Butt.

Hardware: Stainless steel.

Fire Rating: 3 hr.

Minimum Load Capacity: 300 psf

Finishing:

Factory painted.

Painted Message: FIRE DOOR - DO NOT STORE MATERIALS ON SURFACE.

* + - 1. SUSTAINABILITY CHARACTERISTICS

Insert sustainable design characteristics in this Article to suit content of this Section and Project sustainable design requirements as specified in Section 018113.

* + - * 1. Section 018113 - Sustainable Design Requirements: Requirements for sustainable design compliance.
        2. Material and Resource Characteristics:

Recycled Content Materials: Furnish materials with maximum available recycled content [**including:**] [**.**]

Insert list of materials specified in this Section required to have recycled content.

Regional Materials: Furnish materials extracted, processed, and manufactured within 500 miles of Project Site

Insert list of materials specified in this Section required to be regional materials.

* + - 1. MATERIALS
         1. Galvanized-Steel Sheet:

Description: Mill-phosphatized; stretcher-leveled.

Comply with ASTM A653.

Quality: **CQ.**

Coating: Designation: G90.

* + - * 1. Steel Sheet:

Description:

Commercial quality, cold-rolled carbon steel sheet.

Stretcher-leveled.

Comply with following requirements at fabricator's option:

ASTM A879.

Cold-Rolled Steel Sheet Substrate: ASTM A1008; Type CS; exposed.

Finish: [**Uncoated**] [**Electrolytic zinc coated**].

* + - * 1. Stainless-Steel Sheet:

Comply with ASTM A666.

Type [**302**] [**304**] [**316**].

Stretcher-leveled.

* + - * 1. Frame Anchors: Same material as door face.
        2. Inserts, Bolts, and Anchor Fasteners:

Hot-dip galvanized steel.

Comply with ASTM [**A153**] [**F2329**].

* + - 1. FABRICATION
         1. Construction:

Continuously welded.

Joints: Weld, fill, and grind to ensure flush and square units.

* + - * 1. Wall and Ceiling Access Door, and Panel Hardware:

Hinges:

Type: Standard continuous or concealed spring pin.

Material: Steel.

Rotation: 175 degrees.

Lock:

Type: Self-latching.

Operation: [**Screwdriver slot for quarter-turn cam lock**] [**Removable wrench lift handle**].

* + - * 1. Floor Hatch Hardware:

Hinges:

Rotation: 175 degrees.

Material: **Stainless** steel.

Type: Continuous, with [**removable**] pin.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

Type: Concealed, with constant-force closure spring.

Lock:

Type: Self-latching.

Operation: [**Screwdriver slot for quarter-turn cam lock**]

* + - * 1. Size Variations: As approved by Architect/Director’s Representative.
      1. FINISHES

Delete first two following paragraphs if only stainless-steel units are specified. Verify availability of other finishes prior to specifying.

* + - * 1. Base Metal Protection:

Hot-dip galvanized.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

Coat units with baked-on primer.

* + - * 1. Top Coat:

Two coats baked enamel.

Color: as selected.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

* + - * 1. Stainless Steel: No. 4 finish.

1. EXECUTION
   * + 1. EXAMINATION
          1. Verify that rough openings for access doors and panels are correctly sized and located.
       2. INSTALLATION
          1. Secure frames rigidly in place, plumb, and level in opening.
          2. Adjacent Surfaces:

Align plane of door and panel face with adjacent finished surfaces.

Set concealed-frame type units flush with adjacent finished surfaces.

* + - * 1. Position unit to provide convenient access to concealed Work.
        2. Fire-Rated Units: Comply with NFPA 80 and fire-listing requirements.
      1. ADJUSTING
         1. Adjust hardware and doors for proper operation.
      2. SCHEDULE
         1. Provide non-fire rated access doors in non-fire rated construction and fire rated access doors in fire rated construction.

END OF SECTION 083113