This section includes fire rated metal access door and frame units for installation in wood and cast-in-place concrete floor/ceiling assemblies; for accessing mechanical, electrical and other concealed items requiring maintenance admission.

Non-rated floor access doors are specified in Section 08 31 15; wall and ceiling access doors are specified in Section 08 31 13; access doors for ducts are described in Section 23 33 00. This section should be referenced from mechanical, electrical and other sections requiring access door or floor panels and frame units.

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

Part 1 General

1.1 SECTION INCLUDES

.1 Fire resistive rated floor access door and frame units.

1.2 RELATED SECTIONS

.1 Section [_____]: Openings in concrete.

.2 Section [_____]: Openings in masonry.

.3 Section [_____]: Openings in partitions.

.4 Section 08 31 13 - Access Doors and Frames: Openings in ceilings.

.5 Section 08 31 15 - Non-Rated Floor Access Doors and Frames: Access doors and frames.

.6 Section 09 91 10 - Painting: Field paint finish.

.7 Section [_____]: [_____] components requiring access.

.8 Section [_____]: Mechanical components requiring access.

.9 Section 23 33 00 - Duct Work Accessories: Access doors in ductwork.

.10 Section [_____]: Electrical components requiring access.

List sections which specify installation of products specified in this section; indicate specific items.

.11 Section [_____]: Placement of access frame unit anchors in [concrete] [_____].

1.3 REFERENCES

List reference standards that are included within the text of this section. Edit the following as required for project conditions.

.1 ASTM A653/A653M-11 - Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

.2 ASTM B209M-07 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate (ASTM B209-07 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate).

.3 ASTM E119-12a - Standard Test Methods for Fire Tests of Building Construction and Materials.

.4 CAN/ULC S101-07 - Standard Methods of Fire Endurance Tests of Building Construction and Materials.

.5 CAN/ULC S104-10 - Standard Method for Fire Tests of Door Assemblies.

.6 ITS - Intertek Testing Services - Certification Listings.

.7 NFPA 251-2006 - Standard Methods of Tests of Fire Resistance of Building Construction and Material.

.8 NFPA 252-2012 - Standard Methods of Fire Tests of Door Assemblies.

.9 NFPA 288-2001 - Standard Method of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire Resistance Rated Floor Systems.

.10 UBC 7-2-94 - Uniform Building Code Standard.

.11 UL - Fire Resistance Directory.

.12 UL 10B-2008 - Standard for Fire Tests of Door Assemblies.

1.4 DESIGN REQUIREMENTS

Use this article carefully; restrict statements to identify system design requirements only. Access doors FHD3R and FHD4R are not fabricated for the optional 1400 kg/sq m (300 lb/sq ft) live load.

.1 Fabricate floor access assemblies to support live load of [700 kg/sq m (150 lb/sq ft)] [1400 kg/sq m (300 lb/sq ft)] with deflection not to exceed [1/180] [1/240] [_____] of span.

.2 Fire-Rated Floor Access Doors: Tested and listed to ASTM E119, CAN/ULC S101, CAN/ULC S101, NFPA 251, NFPA 252, NFPA 288, UL 10B.

1.5 ADMINISTRATIVE REQUIREMENTS

.1 Section 01 31 00: Project management and coordination procedures.

.2 Coordination: Coordinate with other work requiring access doors and having a direct bearing on work of this section.

1.6 SUBMITTALS FOR REVIEW

Do not request submittals if drawings sufficiently describe the products of this section or if proprietary specifying techniques are used. The review of submittals increases the possibility of unintended variations to drawings, thereby increasing the Specifier's liability. The following submittals are intended for review and approval or other action by the Consultant.

.1 Section 01 33 00: Submission procedures.

.2 Product Data: Provide sizes, types, finishes, hardware, scheduled locations, and details of adjoining work.

.3 Shop Drawings: Indicate exact position of all access door units.

Use the following paragraph for submission of physical samples for selection of finish, colour, texture, etc.

.4 Samples: Submit [two (2)] [_____] access units of each type specified, [_____] mm ([_____] inch) in size illustrating frame configuration, anchors and [_____].

1.7 SUBMITTALS FOR INFORMATION

The following submittals are informational; responsive action by the Consultant is not required.

.1 Section 01 33 00: Submission procedures.

When manufacturer's instructions for specific installation requirements are referenced in Part 3 Execution, include the following request for submittal of those instructions. Edit the Part 3 statements to avoid conflict with manufacturer's instructions.

.2 Manufacturer's Installation Instructions: Indicate installation requirements, rough-in dimensions and [_____].

Include the following ONLY if specifying for a LEED project. Specify only the technical requirements necessary to achieve the credits desired for this project.

.1 Sustainable Design:

.1 Section 01 35 18: LEED documentation procedures.

.2 Provide required LEED documentation for Product [regional materials] [recycled content] .

.3 Manufacturer's Certificate: Certify that Products meet or exceed [specified requirements].

1.8 CLOSEOUT SUBMITTALS

The following submittals are for project close-out purposes.

.1 Section 01 78 10: Submission procedures.

.2 Record Documentation: Record actual locations of all access units.

1.9 QUALITY ASSURANCE

This article includes statements that require quality applicable to the whole section. Include the last sentence of the following paragraph only when the costs of acquiring the specified standards are justified.

.1 Perform Work in accordance with [ULC Design #[_____]] [UL Design #[_____]] [ITS - Intertek Testing Services Design #[_____]] [_____] requirements. [Maintain [one (1) copy] [[_____] copies] of document on site.]

.2 Provide fire rated products with Intertek/Warnock Hersey labels.

.3 Source Quality Control: Provide all products specified in this Section from one (1) manufacturer.

1.10 REGULATORY REQUIREMENTS

Different types of access units are rated by a variety of agencies. If proprietary specifying, edit this article to suit the appropriate testing or approving agency.

.1 Conform to [applicable] [_____] code for fire rated access doors.

.2 Provide certificate of compliance from [authority having jurisdiction] [_____] indicating approval of fire rated doors.

Part 2 Products

2.1 MANUFACTURERS

In this article, list the manufacturers acceptable for this project. Edit the subsequent descriptive specifications to identify project requirements and to eliminate any conflict with specified manufacturer's products.

.1 Van-Met [Series] [Model [_____]], by Maxam Metal Products Limited.

Maxam Metal Products Limited
Toll Free Phone: 866-446-2926
Toll Free Fax: 866-436-2926
Direct Phone: 604-433-4243
Direct Fax: 604-433-4148
E-mail: info@maxammetal.com
Internet: www.maxammetal.com

.2 [_____].

.3 Substitutions: [Refer to Section 01 61 00.] [Not permitted.]

2.2 MATERIALS

.1 Steel: ASTM A653/A653M, galvannealed coated steel, ZF120 (A40) coating designation, with electrostatically applied rust inhibitor, off-white prime finish.

Some components on rated Van-Met floor access doors are provided in aluminum.

.2 Aluminum: ASTM B209M (ASTM B209), 6061-T6 aluminum plate, mill finish.

.3 Gasketing: Urethane composition maximum compression set two percent (2%) at 23 degrees C (73 degrees F).

.4 Insulation: Fibreglass, RSI-0.74 (R-4.2) per inch.

Repeat the following article as required if more than one unit is being specified.

2.3 ACCESS UNITS

.1 Fire Rated Floor Access Door: [Steel] [Aluminum] [Recessed Aluminum], Warnock-Hersey listed, [1 hour fire rating, Model FHD1R] [1-1/2 hour fire rating, Model FHD1.5R] [2 hour fire rating, Model FHD2R] [3 hour fire rating, Model FHD3R] [4 hour fire rating, Model FHD4R.]

Access doors are available in numerous standard sizes, as well as custom sizes. Contact the manufacturer for available sizes.

.1 Size: [_____] mm ([_____] inch).

Select frame and door material appropriate to the door models required; refer to manufacturer's literature.

.2 Frame: Galvannealed steel, [2.75 mm (12 gauge)] [2.0 mm (14 gauge)] thick, gasketted on four (4) sides.

.3 Doors: [Galvannealed steel, checker plate surface, 5 mm (3/16 inch) thick.] [Aluminum, [checker plate] [smooth] surface, 6 mm (1/4 inch) thick.] Provide [handles] on underside.

Provide large doors with continuous zinc-plated steel hinge with brass pin.

.4 Hinges: Continuous [stainless steel] [zinc plated steel with brass pin] hinges.

.5 Panel Operator: Type 316 stainless steel nitrogen cylinder.

.6 Insulation: High temperature material.

.2 Hardware:

.1 Lift Assist: Counterbalanced door.

.2 Hold Open Arm: Automatically lock door in 90 degree (open) position.

There are numerous latch/lock combination options available. Refer to manufacturer's literature.

.3 Latch: Type 316 stainless steel slam latch, with removable cover plug operable from inside by spoon handle, and outside by removable tool. [Provide recessed turn handle operator topside.]

.4 Lock: [Screw driver slot for quarter turn cam lock] [Removable wrench lift handle] [_____].

2.4 FABRICATION

.1 Weld, fill, and grind joints to assure flush and square unit.

2.5 FINISHES

Include the first paragraph if steel access doors are required. Aluminum doors, particularly recessed doors, are normally provided with mill finish.

.1 Steel Finish: Galvannealed coated finish with applied grey primer.

.2 Aluminum Finish: [Mill] [_____] finish.

Part 3 Execution

3.1 EXAMINATION

.1 Section 01 73 03: Verification of existing conditions before starting work.

.2 Verify that rough openings for door and frame are correctly sized and located.

3.2 INSTALLATION

.1 Install units in accordance with manufacturer's instructions.

.2 Install frames plumb and level in opening. Secure rigidly in place.

.3 Position unit to provide convenient access to concealed work requiring access.

3.3 SCHEDULE

Provide a schedule to list typical or specific locations, sizes, types, fire rating, and finishes of access units. Be careful in identifying locations and quantities, and in coordinating with mechanical and electrical work. The following is a "sample" indicating what a project schedule may look like.

.1 Typical Floor Type: Inset for 3 mm (1/8 inch) thick resilient tile finish, 300 x 300 mm (12 x 12 inch) size, screwdriver slot lock.

END OF SECTION