

This section includes metal access door and frame units for floors, single thickness or double thickness insulated; with fire resistance ratings; 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. 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

- A. Fire resistive rated floor access door and frame units.

1.2 RELATED SECTIONS

- A. Section [_____-_____]: Openings in concrete.
- B. Section [_____-_____]: Openings in masonry.
- C. Section [_____-_____]: Openings in partitions.
- D. Section 08 31 13 - Access Doors and Frames: Openings in ceilings.
- E. Section 09 91 10 - Painting: Field paint finish.
- F. Section [_____-_____]: [_____] components requiring access.
- G. Section [_____-_____]: Mechanical components requiring access.
- H. Section [_____-_____]: Electrical components requiring access.

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

- I. 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.

- A. ASTM E119-05a - Standard Test Methods for Fire Tests of Building Construction and Materials.
- B. CAN/ULC S101-04 - Standard Methods of Fire Endurance Tests of Building Construction and Materials.
- C. ITS - Intertek Testing Services - Certification Listings.
- D. NFPA 251-2006 - Standard Methods of Tests of Fire Resistance of Building Construction and Material.

- E. NFPA 252-2003 - Standard Methods of Fire Tests of Door Assemblies.
- F. NFPA 288-2001 - Standard Method of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire Resistance Rated Floor Systems.
- G. UBC 7-2-94 - Uniform Building Code Standard.
- H. UL - Fire Resistance Directory.
- I. UL 10B-1997 - Standard for Fire Tests of Door Assemblies.

1.4 DESIGN REQUIREMENTS

Use this article carefully; restrict statements to identify system design requirements only.

- A. Fabricate floor access assemblies to support live load of 700 kg/sq m (150 lb/sq ft) with deflection not to exceed [1/180] [1/240] [____] of span.
- B. Fire-Rated Floor Access Doors: Tested and listed to ASTM E119, CAN/ULC S101, NFPA 251, NFPA 252, NFPA 288, UL 10B.

1.5 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.

- A. Section 01 33 00: Submission procedures.
- B. Product Data: Provide sizes, types, finishes, hardware, scheduled locations, and details of adjoining work.
- C. 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.

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

1.6 SUBMITTALS FOR INFORMATION

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

- A. 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.

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

1.7 SUBMITTALS AT PROJECT CLOSEOUT

The following submittals are for project close-out purposes.

- A. Section 01 73 03: Submission procedures.
- B. Record actual locations of all access units.

1.8 QUALITY ASSURANCE

Include the last sentence of the following paragraph only when the costs of acquiring the specified standards are justified.

- A. Perform Work in accordance with [UL Design #[____]] [ITS - Intertek Testing Services Design #[____]] [_____] requirements. [Maintain [one copy] [[____] copies] on site.]
- B. Provide fire rated products with Intertek/Warnock Hersey labels.
- C. Provide all products specified in this Section from one manufacturer.

1.9 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.

- A. Conform to [applicable] [_____] code for fire rated access doors.
- B. Provide certificate of compliance from [authority having jurisdiction] [_____] indicating approval of fire rated doors.

1.10 PROJECT CONDITIONS

- A. Section 01 33 00: Coordination and meetings.
- B. Coordinate the work with other work requiring access 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.

- A. Maxam Series, 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
- B. [_____].
- C. Substitutions: [Refer to Section 01 61 00.] [Not permitted.]

2.2 MATERIALS

- A. Galvanized Steel: Bonderized, with electrostatically applied rust inhibitor, grey prime finish.

Some components on rated Maxam floor access doors are provided in aluminum.

- B. Aluminum: 6061-T6 aluminum, mill finish.
- C. Gasketing: Neoprene composition maximum compression set two percent (2%) at 73 degrees F.
- D. Insulation: High temperature insulation material.

2.3 ACCESS UNITS

The following paragraphs are used primarily to specify by proprietary method indicating model numbers, and by implication, the various mounting methods. Edit to include only those types required for the project.

This article should be coordinated with the more general statements included in the associated Fabrication article.

- A. Fire Rated Hatch and Frame Unit: Formed [steel] [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.]

2.4 FABRICATION

If proprietary specifying, delete references to metal thicknesses in the following paragraph if the unit construction is inferred by the unit model number.

- A. Fire-Rated Floor Access Doors:

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

1. Frame: Galvanized steel, [2.75 mm (12 gauge)] [1.99 mm (14 gauge)] thick, gasketed on four sides.
 2. Doors: [Galvanized steel, checker plate surface, [4.78 mm (3/16 inch)] [6.35mm (1/4 inch) thick.] [Galvanized steel, smooth surface, 4.78mm (3/16 inch) thick.] [Aluminum, [checker plate] [smooth] surface, 6.35 mm (1/4 inch) thick.] Provide handles on underside.
 3. Hinges: Continuous stainless steel hinges. Provide large doors with continuous zinc-plated steel hinge with brass pin.
 4. Panel Operator: Type 316 stainless steel nitrogen cylinder.
 5. Insulation: High temperature material.
- B. Weld, fill, and grind joints to assure flush and square unit.
 - C. Hardware:
 1. Lift Assist: Counterbalanced door.
 2. Hold Open Arm: Automatically lock door in 90 degree (open) position.
 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 with stainless steel latch underside (not available with recessed door panel).] [Provide recessed turn handle topside with security detention lock underside (not available with recessed door panel).] [Provide Security detention lock topside with operable knob underside.]

2.5 FINISHES

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

- A. Steel Finish: Prime coat units with grey primer.
- B. Aluminum Finish: [Mill] [_____] finish.
- C. Door panel painted yellow with the following instructions painted in black: “FIRE DOOR DO NOT STORE MATERIALS/EQUIPMENT ON SURFACE”.

Part 3 Execution

3.1 EXAMINATION

- A. Section 01 73 03: Verification of existing conditions before starting work.
- B. Verify that rough openings for door and frame are correctly sized and located.

3.2 INSTALLATION

- A. Install units in accordance with manufacturer's instructions.
- B. Install frames plumb and level in opening. Secure rigidly in place.
- C. 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.

- A. Typical Floor Type: 3/16 inch steel checker plate panel for cast in place application, 610 x 610mm (24 x 24 inch) inside opening size, c/w self-closing mechanism, standard latch.

END OF SECTION