

This section includes metal access door and frame units for walls and ceilings, single thickness or double thickness insulated; with or without fire resistance ratings; for accessing mechanical, electrical and other concealed items requiring maintenance admission. Floor mounted 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

- A. [Fire resistive rated] [and] [non-rated] access door and frame units.
- B. [Wall] [and] [ceiling] locations.

1.2 RELATED SECTIONS

- A. Section [_____-_____]: Openings in concrete.
- B. Section [_____-_____]: Openings in masonry.
- C. Section [_____-_____]: Openings in partitions.
- D. Section [_____-_____]: 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 23 33 00 - Duct Work Accessories: Access doors in ductwork.
- I. Section [_____-_____]: Electrical components requiring access.

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

- J. 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/CSA-A440-00/A440.1-00 (R2005) - User Selection Guide to CSA Standard A440-00, Windows.
- C. CAN/ULC S101-04 - Standard Methods of Fire Endurance Tests of Building Construction and Materials.

- D. ITS - Intertek Testing Services - Certification Listings.
- E. NFPA 251-2006 - Standard Methods of Tests of Fire Resistance of Building Construction and Material.
- F. NFPA 252-2003 - Standard Methods of Fire Tests of Door Assemblies.
- G. NFPA 288-2001 - Standard Method of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire Resistance Rated Floor Systems.
- H. UBC 7-2-94 - Uniform Building Code Standard.
- I. UL - Fire Resistance Directory.
- J. 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. Gasketed Access Doors:
 - 1. Air infiltration rating: A-3 at 75 Pa, A-3 at 300 Pa, to CSA A440.
 - 2. Air exfiltration rating: A-3 at 75 Pa, A-2 at 300 Pa, to CSA A440.

The B-1 rating below is for the Van-Met Model NGP and NGS doors, and the B-4 rating is for the Model NWR door.

- 3. Water tightness rating: [B-1] [B-4] using the screwdriver cylinder cam latch, to CSA A440.

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. Van-Met Series, by Maxam Metal Products Limited.
Maxam Metal Products Limited
Toll Free Phone: 866-446-2926
Toll Free Fax: 866-436-2926

Digicon Information Inc.

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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, off-white prime finish.
- B. Stainless Steel: Type [304] [316], [No. 4 polished] [No. 2b mill] finish.
- C. Gasketing: Urethane composition maximum compression set two percent (2%) at 73 degrees F.
- D. Insulation: Fiberglass, R-4.2 per inch.

2.3 ACCESS UNITS - WALLS

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. Non-Fire Rated Door and Frame Unit:
 - 1. Exterior Flange Doors:
 - a. Standard Doors: [Galvanized steel, Model NSM.] [Stainless steel, Model NSS.]
 - b. Oversize Doors: Galvanized steel, double-leaf design, Model NDL.
 - 2. Concealed Flange Doors:
 - a. In Gypsum Board on Studs
 - 1) Standard: Galvanized steel, Model NDB.
 - 2) High profile: Galvanized steel, Model NSL.
 - b. In Plaster on Metal Furring: Galvanized steel, Model [NAP] [NSK].
 - c. Fan coil access: Galvanized steel, Model NFC.
 - 3. Recessed Access Doors:
 - a. In Acoustic Tile: Galvanized steel, Model NAT.
 - b. In Gypsum Bead: Galvanized steel, Model NDI.
 - 4. Air and Water Resistant Doors: [Galvanized steel, Model NGP.] [Stainless steel, Model NGS.] [Galvanized steel, insulated, Model NWR.]
 - 5. Security Doors: Galvanized steel, [12 gauge thick, Model NSD.] [10 gauge thick, Model NHS.]
 - 6. Specialty Doors:
 - a. No inner frame: Galvanized steel, Model NFM.
 - b. Plenum door: Galvanized steel, Model NPL.

- c. Removable panel: Galvanized steel, Model NRP, with safety chain.
 - d. Inward/Outward swinging panel: Galvanized steel, Model NUP.
- B. Fire Rated Door and Frame Unit: Galvanized steel.

Keep in mind that there are maximum leaf sizes for fire-rated doors.

- 1. Exterior Flange Doors:
 - a. Insulated, 2-hour rating: [Van-Met Model FIN-150.] [Van-Met Model FCI-150.] [Van-Met Model FAI-150.] [Van-Met Model FDL-150.]
 - b. Uninsulated, 2-hour rating: [Van-Met Model FRM.] [Van-Met Model FSD.]

*Maximum Van-Met FCL-250 3-hour door leaf size for wall application is 1200 x 1500 mm (48 x 60 inches), and ceiling application is 750 x 1200 mm (30 x 48 inches) or 900 x 900 mm (36 x 36 inches).
Maximum Van-Met FDL-250 3-hour door size for wall application is 1050 x 1500 mm (42 x 60 inches), and ceiling application is 1500 x 1200 mm (60 x 48 inches).
Maximum Van-Met FAI-250 3-hour door leaf size for is 750 x 1200 mm (30 x 48 inches)*

- c. Insulated, 3-hour rating: [Van-Met Model FCI-250.] [Van-Met Model FAI-250.] [Van-Met Model FCL-250.] [Van-Met Model FDL-250.]
- 2. Concealed Flange Doors:
 - a. Insulated, 2-hour rating: [Van-Met Model FCB-150.]
 - b. Uninsulated, 2-hour rating: [Van-Met Model FDB.] [Van-Met Model FRK.]
- 3. Recessed Access Doors:
 - a. Insulated, 2-hour rating: [Van-Met Model FCL-150.] [Van-Met Model FTA-150.]
 - b. Uninsulated, 2-hour rating: [Van-Met Model FRL.]
- 4. Specialty Doors:
 - a. High Temperature Doors: [Van-Met Model FCI-300.] [Van-Met Model FCI-400.] [Van-Met Model FCI-600.]
 - b. Chute Doors: [Laundry service, insulated, Model FCC-150,] [Refuse service, uninsulated, Model FRCD,] 2 hour rating.

2.4 ACCESS UNITS - CEILINGS

*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. Non-Fire Rated Door and Frame Unit:
 - 1. Exterior Flange Doors:
 - a. Standard Doors: [Galvanized steel, Model NSM.] [Stainless steel, Model NSS.]
 - b. Oversize Doors: Galvanized steel, double-leaf design, Model ND.L.
 - 2. Concealed Flange Doors:
 - a. In Gypsum Board on Studs
 - 1) Standard: Galvanized steel, Model NDB.
 - 2) High profile: Galvanized steel, Model NSL.

- b. In Plaster on Metal Furring: Galvanized steel, Model [NAP] [NSK].
- c. Fan coil access: Galvanized steel, Model NFC.
- 3. Recessed Access Doors:
 - a. In Acoustic Tile: Galvanized steel, Model NAT.
 - b. In Gypsum Bead: Galvanized steel, Model NDI.
- 4. Air and Water Resistant Doors: [Galvanized steel, Model NGP.] [Stainless steel, Model NGS.] [Galvanized steel, with foil-faced insulated, Model NWR.]
- 5. Security Doors: Galvanized steel, [12 gauge thick, Model NSD.] [10 gauge thick, Model NHS.]
- 6. Specialty Doors:
 - a. No inner frame: Galvanized steel, Model NFM.
 - b. Plenum door: Galvanized steel, Model NPL.
 - c. Removable panel: Galvanized steel, Model NRP.
 - d. Inward/Outward swinging panel: Galvanized steel, Model NUP.
- B. Fire Rated Door and Frame Unit: Galvanized steel.
 - 1. Exterior Flange Doors:
 - a. Insulated, 2-hour rating: [Van-Met Model FAI-150.] [Van-Met Model FCI-150.] [Van-Met Model FAI-150.] [Van-Met Model FDL-150.]
 - b. Insulated, 3-hour rating: [Van-Met Model FAI-250.] [Van-Met Model FCI-250.] [Van-Met Model FCL-250.]
 - 2. Concealed Flange Doors:
 - a. Insulated, 2-hour rating: [Van-Met Model FCB-150.]
 - 3. Recessed Access Doors:
 - a. Insulated, 2-hour rating: [Van-Met Model FCL-150.] [Van-Met Model FTA-150.]

2.5 FABRICATION

Specify metal thickness for the majority of panels and frames. Thicknesses may be deleted if specifying by proprietary method (with model numbers).

- A. Panel: Galvanized steel, [1.2 mm (18 gauge)] [1.5 mm (16 gauge)] [2.0 mm (14 gauge)] thick, [insulated], [gasketed].
- B. Frame: Galvanized steel, minimum [1.5] [1.2] mm ([16] [18] gauge) thick.

Stainless steel piano hinges are standard on some doors, and optional on others. Refer to Maxam technical literature to make sure the proper hinge is specified for the project.

- C. Hinge: Continuous, [concealed rod] [stainless steel piano] hinge, allows door panel to open 175 degrees.
- D. Flanges:
 - 1. Exterior: [19 mm (3/4 inch)] [32 mm (1-1/4 inch)] wide at perimeter.
 - 2. Gypsum: Gypsum bead, galvanized steel.
 - 3. Plaster: Metal lath, galvanized steel.
 - 4. Concealed: Galvanized steel.
- E. Latching/Locking Devices:

1. Cam Latch: 5 mm (3/16 inch) allen key operator.
 2. Key operated cylinder cam lock with two (2) keys, keyed alike.
 3. Handle: Non-locking, two position.
 4. Preparation to accept a 1.125 inch mortise cylinder. Cylinder and core specified in Section 08 70 00 - Door Hardware.
[OR]
 5. Preparation to accept a 1.125 inch mortise cylinder with 1.125 inch satin chrome 626 finish mortise cylinder, keyway X01 Schlage "C", keyed alike (KA43758) and factory installed. Fabricate frames [and flanges] of [1.5] [____] mm ([0.058] [____] inch) steel.
 6. Fabricate door panels of [1.8] [____] mm ([0.070] [____] inch) steel [single thickness steel sheet] [double sheet with integral [non-combustible] [batt] [_____] insulation filler].
- F. Weld, fill, and grind joints to ensure flush and square unit.
- G.

2.6 FINISHES

Delete the first two paragraphs if stainless steel units are specified.

- A. Base Metal Protection: [Galvanized, [hot dipped] [wiped coat] finish.] [Prime coat units with [alkyd] [baked on] primer.]
- B. Finish: [One coat] [Two coats] baked enamel, [_____] colour [as selected].
[OR]
- C. Stainless Steel: No. [4] [____] finish.

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. Washroom Walls Above Urinal Valves: Ceramic tile finish type, 300 x 300 mm (12 x 12 inch) size, cylinder lock, primed to receive two coats baked enamel to match ceramic tile colour.

END OF SECTION