**3-Part CSI MasterFormat Specification**

**SECTION 08 3123**

**Floor DOORs AND FRAMES**

Rev 11/22

1. GENERAL
   * + 1. SUMMARY
          1. Section includes:

Floor Doors for access between building floors as indicated on drawings and specified herein

* + - 1. references
         1. Aluminum Diamond Tread Plate: ASTM B632-02, 1/4 inch 6061-T6 aluminum with mill finish.
         2. Aluminum Extrusion: 6061-T6 aluminum.
         3. Steel Diamond Tread Plate: ASTM A786.
         4. Steel Angle: ASTM A36-94 steel frame, structural.
         5. Stainless Steel Diamond Tread Plate: ASTM A793 stainless steel, No. 304 finish.
         6. Stainless Steel Angle: ASTM A276 stainless steel, No. 304 finish.
         7. Stainless Steel Smooth Plate: ASTM A240 smooth plate stainless steel, type No. 316.
         8. Fasteners: Type No. 316 stainless steel. ASTM F593 for bolts and ASTM F594 for nuts.
         9. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
      2. Action SUBMITTALS
         1. Shop Drawings: Indicate configuration and dimensions, show components, adjacent construction, required clearances and tolerance and other affected work.
         2. Product Data: Manufacturer’s technical data for each type of floor door, including setting drawings and finish requirements
      3. informational submittals
         1. Provide manufacturer's standard warranty.
         2. Sustainable Design Submittals:

Building Product Disclosure Requirements: To encourage the use of building products that are working to minimize their environmental and health impacts, provide the following information when available:

Material Ingredients Documentation demonstrating the chemical inventory of the product

* + - 1. Closeout submittals
         1. Manufacturer's Installation Instructions and Operation & Maintenance: Indicate installation, operation and maintenance requirements and rough-in dimensions.
      2. Quality Assurance
         1. Qualifications:

Manufacturer/Installer: Company specializing in manufacturing and installation of components specified in this Section with minimum of 5 years documented experience.

* + - * 1. Regulatory Requirements:

International Building Code for fire resistance rated construction

IBC Section 712 for Floor Fire Doors- tested in accordance with NFPA 288 and labeled by approved agency; Warnock Hersey or Underwriters Laboratory.

1. PRODUCTS
   * + 1. MANUFACTURER
          1. Nystrom

9300 73rd Ave N

Minneapolis, MN 55428

PH: 800-547-2635

[www.Nystrom.com](http://www.Nystrom.com)

* + - 1. ALUMINUM FLOOR DOORS
         1. Channel Frame Non-Drainable Aluminum Floor Door: Cast-in installation, used where water infiltration and moisture are not a concern. Model FDN

Clear Unobstructed Opening Size: <**Insert dimensions**>.

Frame: Mill finish aluminum, C channel and angle profile.

Door: [**Single**] [**Double**] 1/4-inch-thick (6.4-mm-thick), diamond-pattern **[Mill] [Clear Anodized] [Clear Lacquer] [SlipNOT®]** finish aluminum plate, with 6 inch (152 mm) rectangular tubes and 6 inch (152 mm) center I-beam support.

Manufacturers' offerings for loading capacity vary; confirm availability. See the Evaluations for discussion of AASHTO H20.

Loading Capacity: **[300-lbf/sq. ft. (14.4-kN/sq. m) pedestrian live load and a maximum deflection of L/150; Model FDNPA] [AASHTO H20 concentrated wheel load; Model FDNHA].**

Gasket around entire perimeter

Hardware:

Material and Finish: Type 316 stainless steel, including latch, handle, lifting mechanism assemblies, hold-open arms, and brackets, hinges, pins, and fasteners.

Hinges: Heavy-duty butt hinges with stainless-steel pins.

Operating Mechanism: Adjustable enclosed Type 17-7 stainless steel counterbalancing spring, heavy-duty hold-open arm that automatically locks door open at 90 degrees, release handle with red vinyl grip that allows for one-handed closure, and recessed lift handle.

Latch: Type 316 Stainless-steel slam latch, with inside lever handle and outside removable square L handle.

Options:

Lock: **[Padlock hasp and staple] [Recessed padlock hasp with cover] [Mortise Cam w/6-Pin IC Core and Key] [Mortise Cam w/ Plastic Core] [Mortise Prep slam latch] [Mortise deadbolt with thumb turn access from above] [Mortise deadbolt with thumb turn access from below] [Detention Lock Prep, 7016 Style] [Detention 7016 Installed] [Detention Lock Prep, 1080 Style] <Insert lock type>**

Skirting: 1/8 inch (3.2 mm) sheet aluminum used to form slab concrete opening beneath the frame, <Insert height>.

Safety Accessories:

Safety Grating System: 6 inch (152 mm) by 1-1/2 inch (38.1 mm) safety orange, powder coated, serrated, aluminum panels, 6 inch (152 mm) view area on at least one lateral unhinged side for visual observation. 316 SST hinges and positive latching in both open and closed positions. Padlock hasp for owner supplied lock capable of locking in both open and closed positions and not impede clear opening. 300-lbf/sq. ft. (14.4-kN/sq. m) load capacity with two aluminum nut rails.

Safety **[chains] [net] [railing] [telescoping safety post] <Insert safety device>.**

1. EXECUTION
   * + 1. EXAMINATION
          1. Verify that preparation and affected dimensions are acceptable.
          2. Verify tolerances and correct improper conditions.
       2. PREPARATION
          1. Advise installers of details relating to floor hatch installation, including rough opening dimensions, locations of supports, and anchoring methods.
       3. INSTALLATION
          1. Follow manufacturer’s instructions for installing floor doors and hatches.
          2. Install frames plumb and level in opening, in proper alignment with floor surface for flush installation. Secure rigidly in place.
          3. Position units to provide convenient access to concealed Work requiring access.
       4. ADJUSTING
          1. Operational Units: Test-operate units with operable components.
          2. Clean and lubricate joints and hardware.
          3. Adjust for proper operation.
       5. CLEANing
          1. Clean adjacent surfaces and remove unused product and debris from site.
          2. Adjust doors for smooth operation.

END OF SECTION