**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 submittal
         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 produc

* + - 1. closout 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

* + - 1. ALUMINUM FLOOR DOORS
         1. Gutter Channel Frame (Drainable) Large Equipment Hatch, H20 or HS20: designed for infrequent, off-street traffic where moisture or liquid flow into the door is a concern. exterior applications or where water penetration is a concern. Model FDOHA (H20 Load), Model FDOSA (HS20 Load)

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

Frame: Aluminum, **[gray primed] [clear anodized],** gutter profile, with 1-1/2 inch (38.1 mm) drainage coupling, integral EPDM gasket and frame with continuous 1 inch (25.4mm) anchor flange. Hinge side frame reinforced by 1/4-inch (6mm) by 3-inch (76mm) by 2-inch (51mm) aluminum angle on 60-inch (1524mm) to 108-inch (2743mm) frames.

Door: Double leaf; 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**: [AASHTO H20 concentrated wheel load; Model FDOHA] [AASHTO HS20 concentrated wheel load, Model FDOSA]**

Hardware:

1. Material: Type 316 stainless steel, including latch, hold-open arms, brackets, hinges, pins, and fasteners.
2. Hinges: Heavy-duty butt hinges with stainless-steel pins.
3. Operating Mechanism: Adjustable, enclosed stainless-steel counterbalancing spring, heavy-duty hold-open arm that automatically locks door open at 90 degrees, release handle with red vinyl grip.
4. Latch: Stainless-steel slam latch with inside lever handle and outside removable handle.

Revise "Lock" Subparagraph below for other options available; common types are listed.

1. Optional Lock: **[Padlock hasp and staple] [Recessed padlock hasp with cover] [Mortise Cam w/6-Pin IC Core and Key]** 
   * + - 1. Safety Grating System: The fall protection grating shall be constructed of 6 inch (152 mm) by 1-1/2 inch (38 mm) safety orange, powder coated, serrated, aluminum panels and shall have a 6 inch (152 mm) view area on at least one lateral unhinged side for visual observation. Grating shall have 316 SST hinges and positive latching in both open and closed positions. Grating shall include padlock hasp for owner supplied lock which is capable of locking in both open and closed positions and shall not impede clear opening. Grating shall be designed for 300 psf loading and shall include two aluminum nut rails.
         2. Safety Accessories: Safety **[chains] [net] [railing] [telescoping safety post] <Insert safety device>**.
2. 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