**SECTION 12483**

**Entrance Mats - V-wire**

**PART 1: General**

**1.1 General Requirements**

A. Work of this section, as shown or specified, shall be in accordance with the requirements of the Contract documents.

**1.2 Work Related**

A. Work of this section includes labor, materials, equipment, and services necessary to complete the floor mats as shown on the drawings and specified here in.

**1.3 Related Work**

 A. Concrete Recess - see Structural Drawings

**1.4 References**

 A. American Society for Testing and Materials

 1. ASTM A-276 Standard Specification for Stainless and Heat Resisting Steel Bars and Shapes.

 2. ASTM B-221-88 Standard Specification for Aluminum-Alloy

**1.5 Submittals**

A. Submit the following in accordance with Contract Documents, with conditions of contract, and Division 1 Specification Section:

1. Product Data – Manufacturer’s product specifications, installation, and maintenance instruction.

2. Shop Drawings – Show layout and types of floor grates, including typical installations, details of patterns or designs, anchors and accessories, and field measurements of slab recess to receive floor grating.

 3. Samples – per architect’s request.

**1.6 Quality Assurance**

1. Manufacturer: Except as otherwise indicated, provide entrance mats and accessories by a single manufacturer for the entire project.

**1.7 Product Handling**

A. Protection: Use all means necessary to protect materials of this section before, during and after installation, and to protect the installed work and materials of all other trades.

B. Replacements: In the event of damage, immediately make all repairs and replacements necessary.

**1.8 Product Conditions**

A. Field Measurements: Check actual block-out openings in floors by accurate field measurements before fabrication of grates; show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of work.

**1.9 Warranty**

A. Floor grates shall be fabricated free of defects in materials and workmanship and the manufacturer shall offer. A one year warranty against defects in materials and workmanship.

**PART 2: Products**

**2.1 Mat Assembly**

A. Furnish and install HSC Wedge Tread Model (HSC100, HSC58, HSC38), Stainless Steel Floor Grate as Manufactured by **Hendrick Architectural**, Carbondale, PA

 email: arch@hendrickcorp.com, phone: 877-840-0881, fax: 570-282-1506

B. Tread Material: Type 304 or 316 stainless steel. (HSC100, HSC58, HSC38) .090 x .150 wire. Standard slot opening shall be .145”.

C. Support Rods: Type 304 or 316 Stainless steel HSC100: 1” fin supports, spaced 1”o.c.

 HSC58: .5” fin supports. spaced 1” o.c.

 HSC38: 3x7mm supports, spaced 1”o.c.

 D. Surface finish will be matte.

 E. Frames shall be 304 or 316 stainless steel angle (HSC100 & HSC58 only).

1. Drainage application HSC100 framing shall consist of intermediate supports spaced no greater than 3’ apart. Units shall support a uniform load of 300lbs. per square foot or a specified load.

 F. Level bed application HSC100, HSC58 and HSC38 must rest directly on the recessed floor.

G. Hidden locking devices shall be used to prevent warping and rattling. The number of lockdowns to be used shall be in accordance with the manufacturer’s recommendations.

**2.02 Fabrication**

A. Shop to fabricate floor grates to greatest extent possible in sizes shown. Where not otherwise shown, provide single unit for each grate installation, but do not exceed manufacturer’s maximum size recommendation for units intended for removal and cleaning. Where possible, contractor must verify field measurements sizes before shop fabrication.

**PART 3: Execution**

**3.1 Examination**

A. Examine all areas and conditions where grating is to be installed, and notify the architect of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work. For level bed applications, it is essential that the grating units be placed on a flat substrate.

**3.2 Installation**

A. Install recessed floor grates and frames in accordance with manufacturer’s instructions, at locations shown. Coordinate top of grate surface with doors that swing across grates to provide under door clearance. Coordinate for coplanar installation of grate surface to surrounding floor conditions.

**3.3 Protection**

A. Upon completion of frame installation and concrete work, provide temporary filler of plywood or fiberboard in grate recesses and cover frames with plywood protective flooring. Maintain protection until construction traffic has ended and project is near time of Substantial Completion.

 B. Installation of grating shall be deferred until near of Substantial Completion for project.

 **END OF SECTION**