**SECTION 12 48 16**

**Entrance Grille - Resistance Welded**

**Guidance - Specifier please choose (1) option in each of the highlighted areas and remove remaining choices.**

**PART 1: General**

**1.1 Summary**

1. Provide stainless steel grating panels as shown and specified, in accordance with the requirements of the Contract Documents and Drawings.

**1.2 Related Sections**

 Section XXXX – Submittals

**1.3 Submittals**

1. Submit a Quality Manual showing evidence of being an ISO 9001 certified company.
2. Submit shop drawings showing compliance with the specifications including layout of unit with required sectioning, framing, support system, mounting type and locations along with tolerances, prior to manufacturing of grating.
3. Submit design calculations, by a registered ENGINEER, including loading conditions, support design, and deflection calculations of the stainless steel grating panels.
4. A 4" x 4" standard sample size can be submitted for verification purposes.

**1.4 Warranty**

1. Manufacturing Warranty Period: One year from acceptance and furnish owner items found to be defective within the one year period.
2. Extended warranties are available at additional cost and must be approved by management prior to receipt of purchase order.

**1.5 Quality Assurance**

1. Grating shall be manufactured by an ISO 9001-2015 Certified company, fabricated by ASME Section IX Certified welders.

**PART 2: Products**

**2.01 Manufacturers**

1. **Hendrick Architectural Products**, Carbondale, PA email: sales@hendrickarchproducts.com, phone: 877-840-0881, fax: 570-282-1506

**2.02 Materials**

1. Construction: Floor Panels shall consist of resistance welded wires and supports In type 304 or 316 stainless steel.

**2.03 Floor Grates**

1. Resistance Welded 3/8", 5/8" or 1-1/8" heights with traffic surface to have a smooth profile shape with inwardly enlarging openings to minimize the likelihood of debris entrapment.
2. Wire and Opening: The surface bars shall be Hendrick Screen Co. No. .090" V-wire. The tread surface opening shall be .145 inches (3.683" mm). The open area for this opening shall be 62%. Opening size shall be controlled and continuously monitored during manufacture. The direction of walking or flow must be perpendicular to the wire direction.
3. Supports: Placed on approx. 1" center to center spacing.
4. Finishing: Matte, #4 satin, sandblasted or beadblasted.

**2.04 Mounting**

1. (a) Hidden hold-down clips, (b) Hidden Mounting Tabs with slotted holes, (c) Surface mounting blocks, (d) EZ Loc mounting system type 304 or 316 stainless steel to secure screen to concrete surface.

**2.05 Framing**

1. Perimeter angle frame from 1/8" thick 304 or 316 stainless steel with drilled and countersunk mounting holes or concrete anchors.
2. Pan: 16ga. 304 or 316 stainless steel cut to fit Inside leg of frame.

**2.1 Performance**

1. Entrance grilles capable of withstanding 300 lb/sf pedestrian load, 1000 lb. rolling load using a 5" diameter x 2" wide polyurethane tread for 1,000 passes.
2. Entrance grilles that meets or exceed the minimum Coefficient of Friction of 0.60 as tested by the James Machine using Neolite in wet and dry applications.
3. Tolerances: Panels shall be designed and fabricated so as to ensure that the completed tread panels are within the tolerances specified herein while under a no-load condition: Panel length and width shall be within 1/8 inch plus or minus.

**Part 3: Execution**

**3.01 Examination**

1. A. Verification of conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper or timely completion.

 1. Do not proceed until unsatisfactory conditions have been corrected.

**3.02 Preparation**

1. Manufacturer shall offer assistance and guidance to provide a template of irregular shaped grid assemblies to ensure a proper installation.

**3.03 Installation**

1. Install the work of this section in strict accordance with the manufacturer’s recommendations.
2. Set grid type at height recommended by manufacturer for most effective cleaning action.
3. Coordinate top of grid surfaces with bottom of doors that swing across to provide ample clearance between door and grid.

**3.04 Cleaning**

1. A. Clean the tread surface and recessed well as frequently as recommended by manufacturer to reduce the effects of accumulated soiling that may hinder performance and lifetime.

**3.05 Protection**

1. After Installation of frame and concrete work It Is recommended to provide a temporary filler until surrounding work Is complete.
2. Final Installation of floor grating should not take place until project has reached substantial completion stage.

**END OF SECTION**