

## **SECTION 12 48 23**

### **STAINLESS STEEL FLOOR GRIDS SPECIFICATIONS**

#### **PART 1 — GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Division-1 General Requirements, apply to the work of this section.

##### **1.02 WORK INCLUDED**

- A. Furnish and install complete Balco, Inc. [Floor Grid] [Floor Mat] systems.
  - 1. SSMR-58, Stainless Steel grid and frame
  - 2. SSMR-118, Stainless Steel grid and frame

##### **1.03 RELATED WORK**

- A. Related work which is specified elsewhere.
  - 1. Concrete work: Section 03000.
  - 2. Unit Masonry: Section 04200.

##### **1.04 REFERENCES**

- A. Publications listed herein are part of this specification to the extent referenced. The criteria established in the specifications shall take precedence over the standards referenced herein. (An example of a reference standard is given below.)
  - 1. American Society for Testing and Materials (ASTM):
    - a. ASTM A580 – Standard Specification for Stainless Steel Wire.

##### **1.05 SYSTEM DESCRIPTION**

- A. Floor Grid shall consist of a series of treads spaced 0.150" o.c. and running counter to the traffic flow.
  - 1. Maximum allowable load on floor grid shall be [300 psf uniform load] [350 lb. concentrated load (4" diameter circle)] [specify load].
    - a. Floor Grid shall be [SSMR-58] [SSMR-118] and shall be removable and replaceable without disassembly of entire grid and without damage to grid.
    - b. [SSMR-58] [SSMR-118] Floor Grids shall provide a uniform sightline.
    - c. Floor Grids shall have a recycled content of 67% minimum.
- B. SSMR stainless steel floor grid shall consist of a series of stainless steel wire treads spaced 0.150" (3.81 mm) o.c. and running counter to the traffic flow.
  - 1. Tread rails shall be welded to stainless steel support rods (flat panel type) spaced 1" o.c.
    - a. Welds shall not be exposed when the grid is in the installed position.
    - b. Stainless steel angle frames of appropriate depth for the grid shall be provided.
- C. Floor grids shall provide 63% open space (typical) and shall allow debris to fall to sub-floor.

### **1.06 QUALITY ASSURANCE**

- A. Manufacturer: Obtain stainless steel floor grid assemblies through one source from a single manufacturer.
  - 1. Manufacturer shall be ISO 9001 Certified.
    - a. The Manufacturer shall have documented management and control of the processes that influence the quality of its products.
    - b. The Manufacturer shall have documented management and control of the processes that influence the quality of its customer service.
  - 2. Manufacturer shall have a minimum of ten (10) years of experience in the fabrication of floor grid assemblies.
- B. Installer: Firm with not less than three (3) years of successful experience in the installation of systems similar to those required by this project and acceptable to the manufacturer of the system.

### **1.07 SUBMITTALS**

- A. Submit manufacturer's specifications and technical data, including Material Safety Data Sheets, installation instructions, as required, and catalog cuts and templates where required to explain construction and to provide for incorporation into the project.
- B. Submit certificates, copies of independent test reports or research reports showing compliance with specified performance requirements.
- C. Submit shop drawings showing layout and types of [mats] [grids] and frames; full-scale sections of typical installations; anchors and accessories. Shop drawings submittal shall be coordinated with concrete work shop drawings showing oversized recess for deferred installation of frame.
- D. Submit one (1) 6" x 6" sample of the specified system.

### **1.08 DELIVERY, STORAGE AND HANDLING**

- A. Deliver stainless steel floor grid system to the jobsite in new, clean, unopened crates of sufficient size and strength to protect materials during transit.
- B. Store components in original containers in a clean, dry location.

### **1.09 WARRANTY**

- A. Submit manufacturer's warranty that materials furnished will perform as specified for a period of not less than two (2) years for stainless steel floor when installed in accordance with manufacturer's recommendations.

## **PART 2 — PRODUCTS**

### **2.01 ACCEPTABLE MANUFACTURERS**

- A. Furnish and install as noted in specifications and as indicated on drawings, [Stainless Steel Floor Grid system (type no.)] as manufactured by: Balco, Inc., P.O. Box 17249, 2626 S.

Sheridan, Wichita, KS 67217; phone: 800-767-0082 or (316) 945-9328; fax: (316) 945-0789.

- B. Substitutions: Submit proposed substitutions in writing to Architect no less than 10 days before bids are due. Submit samples and product data to demonstrate acceptability of proposed substitute. Acceptance will be by Addendum.

## **2.02 MATERIALS**

- A. Stainless Steel Floor Grid Systems: [Manufacturer's type number] [proprietary product name].
1. Treads: Stainless Steel Wire, alloy 304, standard.
  2. Support Rods: Stainless steel, alloy 304, flat panel style.
  3. Frames: Stainless steel angle, alloy 304.
  4. Lockdown Pads: Stainless steel bar, alloy 304.
  5. Catch and Drain Pan (optional): Stainless Steel, sheet, optional.
- F. Fasteners, accessories and other materials indicated as provided by the manufacturer on the manufacturer's details and in the manufacturer's installation instructions and required for complete installation to manufacturer's instructions.

## **2.03 FABRICATION**

- A. Fabricate the stainless steel floor grid assemblies as detailed.
1. Fabricate grid custom cut sections as required.
  2. Fabricate floor grids as a series of grid wire treads spaced at 0.150 inches o.c.
  3. Provide necessary and related parts, devices, anchors and other items required for proper installation.
- B. Provide components in single size where possible; minimize site splicing.
1. Maximum single grid size shall be 23.33 sq. ft. (70" x 48"). Larger sizes shall be fabricated in modular sections.
  2. Fabricate grid units to maximum size recommended by the manufacturer for units intended for removal and cleaning. Where joints in grid are necessary, space them symmetrically and away from normal traffic flow patterns.
  3. Provide minimum number of pieces possible for frames that exceed maximum length.
  4. Provide frames with hairline joints, equally spaced, complete with corner pin, splice plates and installation anchors.
  5. Frame and pan shall be shop fabricated as an assembled unit for installation in the field.
- C. Shop assemble components and package with anchors and fittings.

## **2.04 FINISHES**

- A. Stainless Steel Grid:
1. Mill Finish (standard)
  2. Optional [Brushed]

## **PART 3 — EXECUTION**

### **3.01 EXAMINATION**

- A. Contractor shall verify that field measurements [and recessed dimensions] are as shown on shop drawings prior to releasing materials for fabrication by the manufacturer.
- B. Installer shall examine conditions under which work is to be performed and shall notify the contractor in writing of unsatisfactory conditions. Installer shall not proceed until unsatisfactory conditions have been corrected in a manner acceptable to the installer.

### **3.02 INSTALLATION**

- A. Install stainless steel floor grid system in accordance with the governing regulations, the industry standards applicable to the work and the manufacturer's written installation instructions.
- B. Work shall be aligned plumb, level, and, where required, flush with adjacent surfaces.
- C. Anchors shall be spaced at 20 inches o.c.

### **3.03 ADJUSTING AND PROTECTION**

- A. Inspect system components for proper fit. Adjust, repair or replace components not conforming to requirements. Repair or replacement of an individual unit shall be as approved by the Architect.
- B. Advise the contractor of procedures required to protect the finished work from damage during the remainder of the construction period.
- C. Finished units shall be without damage. Units damaged during shipping or construction shall be repaired by the contractor at the expense of the party damaging the material, in accordance with the contract requirements.
- D. Protect installation from damage by work of other Sections. After installation of frame, install temporary filler of plywood in recesses and cover frames with plywood protective flooring. Maintain protection until construction traffic has ended and project is near time of Substantial Completion.
- E. Install stainless steel grids near time of Substantial Completion.

### **3.04 GENERAL RESPONSIBILITY**

- A. Any variation from this specification resulting in additional cost to any other contractor or subcontractor on this project shall be the sole financial responsibility of the contractor for the work of this section.

End of Section