



Alabama Metal Industries Corp.  
3245 Fayette Ave.  
Birmingham, AL 35208

## PRODUCT SPECIFICATION GUIDE RIVETED GRATING

### How to Specify:

This information is designed to conform to the requirements of the Three-Part Section Format of the CSI/CSC *Master Format* for construction specifications. These specifications are intended to be used as a guideline for architects and engineers as they establish the requirements for a particular project, and may be modified by them as deemed appropriate.

### **PART 1: GENERAL**

#### **1.1 Scope of Work**

The contractor shall provide all labor, materials, equipment and incidentals as shown and specified and are required to furnish and install grating, stair treads and supports.

#### **1.2 Quality Assurance**

- A. Comply with applicable provisions and recommendations of the following: NAAMM Metal Bar Grating Manual designated ANSI/NAAMM MBG 531 for Steel, Stainless Steel and Aluminum Gratings and Stair Treads.
- B. Steel Grating: The steel used in the Bearing Bars and the Reticuline Bars shall be of rectangular section and conform to ASTM A1011 Hot Rolled Carbon Steel Sheet and Strip. Rivets shall be ¼ inch diameter and made of low carbon steel.
- C. Aluminum Grating: The aluminum used in the Bearing Bars shall be either alloy 6061-T6 or 6063-T6 conforming to ASTM B221. The aluminum used in the Reticuline Bars shall be alloy 6063-T5 conforming to ASTM B221. Rivets shall be ¼ inch diameter and made of aluminum alloy wire 6053-T61 conforming to ASTM B316.
- D. Stainless Steel Grating: The stainless steel used in the Bearing Bars and the Reticuline Bars shall be of rectangular section and either Alloy Type 304, 304L 316 or 316L as determined by the engineer. Rivets shall be ¼ inch diameter stainless steel Type 300 alloy. As called for in ASTM A167.
- E. Substitution of materials shall not be accepted unless they are submitted for review and the Architect/Engineer approves their use.

#### **1.3 Submittals**

- A. The contractor shall submit to the owner or its representative, for approval, the manufacturer's shop drawings for fabrication and erection of the work. Included shall be plans, elevations, sections and details of the work.
- B. The contractor shall submit the manufacturer's specifications, load tables, anchor details and standard installation details.
- C. The contractor may be required to take field dimensions to verify "as built" conditions to ensure proper fit of grating.

### **PART 2: PRODUCT**

## **2.1 General**

- A.** Grating shall be Amico Riveted Bar Grating Type 18-R- 7 as manufactured by Alabama Metal Industries Corp. or approved equal.
- B.** Bearing bars: Material shall be of steel, aluminum or stainless steel as specified. They may be spaced 1 1/8" or 3/4" face to face of bars as specified by the Architect/Engineer. They shall be rectangular in shape and be of the appropriate depth and thickness for the required load.
- C.** Reticuline bars: Material shall be of steel, aluminum, or stainless steel, rectangular in shape, formed in a crimped pattern, connecting to the bearing bars and riveted to them with 1/4" rivets at 7" or 3 1/2" rivet centers as specified.
- D.** Surface: The bearing bars shall have a smooth top surface unless the engineer determines that a serrated surface is required.
- E.** Loading: The uniform load shall be 100 pounds per square foot or as designated by the Architect/Engineer, the deflection shall not exceed 1/4 inch over the required span.
- F.** Finish: Steel shall be painted with a shop coat of manufacturer's standard black paint or may be galvanized as determined by the Architect/Engineer. Aluminum and Stainless Steel grating shall be mill finish as fabricated (MFAF).

## **PART 3: EXECUTION**

### **3.1 Shop Fabrication**

- A.** All required cutting, fitting and welding shall be performed in the manufacturers shop in accordance with the approved shop drawings and shall be in compliance with the NAAMM Metal Bar Grating Manual tolerance and welding standards.
- B.** All cutouts to clear obstructions shall have a recommended clearance of 1 inch. When banding and toe plates are required they shall be welded to the grating in accordance with NAAMM standards.
- C.** The finish coating, paint or galvanizing shall be applied after all of the required fabrication is complete.

### **3.2 Installation**

- A.** The grating shall be received at the job site by the contractor, unloaded and protected from damage prior to the requirement for it to be installed.
- B.** The installing contractor shall prepare the site for installation, determine that deviations from the approved drawings are corrected prior to grating placement.
- C.** Grating shall be installed in accordance with the approved shop drawings and the installation clearances called for in the NAAMM Metal Bar Grating Manual including the use of the prescribed anchor system.