



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

PRODUCT SPECIFICATION GUIDE WELDED STEEL BAR GRATING

How to Specify:

This information is designed to conform to the requirements of the Three-Part Section Format of the CSI/CSC *MasterFormat* 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 Manuals designated ANSI/NAAMM MBG 531 for Steel, Stainless Steel and Aluminum Gratings and Stair Treads.
- B. The steel used in the Bearing Bars shall be of rectangular section and conform to ASTM A1011 Hot Rolled Carbon Steel Sheet and Strip. The Cross Bars shall be of ASTM A510 Carbon Steel Rods and Course Round Wire.
- C. No substitution of materials will 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, 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 Standard Welded Type "W" 19W4 resistance welded grating as manufactured by Alabama Metal Industries Corp. or approved equal.
- B. Bearing bars: Rectangular steel bars of an appropriate depth and thickness for the required load, on 1 3/16" centers. Other available centers are; (15/16"; 13/16"; 11/16"; 5/8"; and 1/2") which may be selected at the discretion of the Architect/Engineer.

- C. Cross Bars: Twisted wire rod, at 4" on center, resistance welded to the bearing bars and at right angles to them. Other available center is 2" as may be selected by the Architect/Engineer.
- D. Surface: The bearing bars shall have a smooth top surface unless the Architect/Engineer determines the need for a serrated surface.
- E. Loading: At a uniform load of 100 pounds per square foot, deflection shall not exceed ¼ inch over the required span.
- F. Finish: Manufacturers standard shop coat of black paint or Galvanized as required by Architect/Engineer.

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 tolerances 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, determining 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.
- D. Pipe penetrations of 4" or less shall be cut in the field. When installed, Grating Cross Bars shall be in alignment.