

## SECTION 504 STEEL GRID FLOORS

### 504-1 Description.

Furnish and erect open-type steel grid roadway and sidewalk floors, on the movable spans of bridges and at other locations shown in the plans. Where specified in the plans, completely fill the floor with concrete.

### 504-2 Materials and Construction Methods.

**504-2.1 General:** Meet the following requirements:

Portland Cement Concrete ..... Section 346  
Structural Steel and Miscellaneous Metals ..... Section 460  
Shop, Field, and Maintenance Painting of Structural Steel ..... Section 560

**504-2.2 Roadway Floor:** Construct the roadway floor as an open steel grid with rectangular openings. Place and weld the grid to the floor stringers as shown in the plans. If the flooring requires secondary or supplemental stringers, the Department will consider these stringers and their fastenings a part of, and included in, the materials to be furnished and erected under this Section.

**504-2.3 Sidewalk Floor:** Erect sidewalk flooring consisting of a system of main bars and secondary bars, arranged in a system of rectangular, reticulum or U-shaped openings. Do not allow the clear distance in any opening to exceed 5/8 inch [16 mm] in one direction. Do not allow the longest dimension of any opening to exceed 3 inches [75 mm]. Place and weld the floor to the supporting members in accordance with the details shown in the plans, or in accordance with the manufacturer's directions as approved by the Engineer.

**504-2.4 Conformance with Manufacturer's Specifications:** Meet the manufacturer's specifications for the material and construction methods, as approved by the Engineer, for any type of steel floor used.

**504-2.5 Use of Trade Names:** Where the plans refer to the type of floor by manufacturer's designation or trade name, the Contractor may use a similar floor providing equivalent section modulus per unit width, and equivalent surface qualities, if approved by the Engineer.

### 504-3 Painting.

Apply to all exposed areas of steel grid floors the same number, type, and thicknesses of paint coatings as are specified for painting structural steel. Prepare the surface the same as required for painting structural steel. Although not required, the Contractor may apply paint on areas to be covered by concrete.

### 504-4 Method of Measurement.

The quantities to be paid for will be the plan quantity, in square feet [square meters], installed, complete and accepted. Proper deductions for open joints in the floor will be made in calculating plan quantity.

### 504-5 Basis of Payment.

Prices and payments will be full compensation for all work specified in this Section, including furnishing and installing the complete floor above the tops of the main floor members shown in the plans, furnishing and installing any secondary joists which are required in addition to the main floor members, filling any specified portion with concrete, furnishing paint materials, painting, and welding.

Payment will be made under:

Item No. 504 - 1-	Steel Roadway Floor - per square foot.
Item No. 2504 - 1-	Steel Roadway Floor - per square meter.
Item No. 504 - 2-	Steel Roadway Floor - per square foot.

Item No. 2504 - 2- Steel Sidewalk Floor - per square meter.