

SECTION 051200**STRUCTURAL STEEL****PART 1 - GENERAL****1.1 GENERAL PROVISIONS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions of the Specifications and Addenda apply to work of this section.
- B. The Contractor shall cooperate with and coordinate all other trades in executing the work described in this section.
- C. The work covered by this section consists of furnishing all labor and materials, equipment, and tools, protection and performing all operations in connection with the fabrication and erection of structural steel members, including the connection of the members to each other and adjacent structure.
- D. Quality Assurance: Codes and Standards: Conform to New York City Building Code, as amended; AISC "Code of Standard Practice for Steel Buildings and Bridges;" AISC "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings" including "Commentary;" AWS "Structural Welding Code - Steel;" comply with applicable provisions except as otherwise indicated.

1.2 SHOP DRAWINGS

- A. Show complete details and schedules for fabrication, assembly and erection. Furnish anchor bolts required for installation in other work; furnish templates for bolt installation.

1.3 FABRICATION

- A. Comply with AISC "Specifications" and final shop drawings. Mark and match mark units for field assembly.
- B. Connections shall be as shown on final shop drawings. Use 3/4" diameter A325 high-strength bolts for field connections. Comply with AWS Code for procedures, appearance and quality of welds.
- C. Provisions for Other Work: Fabricate structural steel members to provide holes for securing other work and for passage of other work through steel framing as indicated.

PART 2 - PRODUCTS**2.1 MATERIALS**

- A. Steel W, S, I, and M Shapes: ASTM A992 with a minimum yield stress of 50 ksi or ASTM A572, Grade 50.
- B. Steel Plates, Bars, and L, C, and MC Shapes: ASTM A36.
- C. Cold-Formed Steel Tubing: ASTM A500, Grade B.
- D. Fasteners: High-strength bolts and nuts, ASTM A325SC (Galvanized).
- E. Shop Paint: FS TT-P-86, Type II; or SSPC-Paint 2 (Paint shall be compatible with galvanized steel).

PART 3 - EXECUTION

3.1 TEST AND INSPECTION

- A. The contractor shall have available for submission to the Commissioner affidavits from the steel mill attesting to the strength and composition of the structural steel.
- B. All shop and field welding is to be performed by a welder qualified by the American Welding Society and licensed by the New York City Building Department.
- C. Inspection of welds and high-strength bolting as required by the New York City Building Department shall be performed by the City of New York.

3.2 PROCEDURE

- A. Shop Painting: Paint structural steel work, except members or portions of members embedded in concrete, spray fireproofing, and contact areas to be welded or bolted. Clean steel free of loose mill scale, rust, oil and grease. Apply prime paint to provide a minimum dry film thickness of 2.0 mils.
- B. Erection: Comply with AISC Code and Specifications and maintain work in safe and stable condition during erection. Provide temporary bracing and shoring as required; remove when final connections placed.
 - 1. Splice members only where shown on final shop drawings.
 - 2. Touch-up prime paint after erection. Clean field welds, bolted connections and abraded areas, and apply same type paint as used in shop.

END OF SECTION 051200