

I. Division 5 - Metals

1. Structural Steel

a. General

- 1) State required qualifications for this trade such as experience welding certification, etc.
- 2) State testing and inspection required and how it is to be paid for and who will appoint the company
- 3) State special shop drawing requirements such as scale and what special items are to be covered

b. Products

1) Materials

State requirements for standard hot rolled sections, hollow structural sections, cold rolled sections, plates and fasteners

2) Fabrication

a) State workmanship standards

b) State welding standards

c) State any special items to be noted (e.g., Masonry anchors holes in members, requirements of other trades, base plate setting method, etc.)

d) State bolt and anchor requirements

3) Paint

State preparation required and paint to be used

c. Execution

- 1) State standard to be adhered to

- 2) State responsibility for temporary bracing design and how long it is to remain in place

## 2. Open Web Steel Joists

### a. General

- 1) State required qualifications for this trade such as experience, welding certification, etc.
- 2) State testing and inspection required and how it is to be paid for and who will appoint the company
- 3) State special shop drawing requirements such as scale, camber, materials proposed and calculations required

### b. Products

- 1) Materials
  - a) Steel, paint, bolts, etc.
  - b) Design requirements including deflection, special bridging provision for ducts and chord extensions

### c. Execution

- 1) Requirements for fastening
- 2) Requirements for bridging

## 3. Metal Decking

### a. General

- 1) State required qualifications for this trade such as experience, welding certification, etc.
- 2) State testing and inspection required and how it is to be paid for and who will appoint the company
- 3) State special shop drawing requirements such as scale, material notes, sheet layout deck profiles, etc.

b. Products

1) Materials

- a) Specify grade of steel, coating and profiles, (regular, composite or acoustic).
- b) Specify design standard as well as any restrictions on the design such as gauge, deflection, length of sheets. Note special requirements for composite deck to receive concrete.

2) Installation

Specify details of fastening, restrictions on hole cutting and paint touch-up of welds.

4. Steel Stairs and Railings

a. Materials

1) Steel

Flat and rolled shapes conforming to Grade 44W; hollow structural sections to Grade 50W; pipe conforming to ASTM A-53 Grade "B". All material shall be new, free from defects impairing strength, durability or appearance and of best commercial quality for the purposes intended.

- 2) Specify materials, component sizes, gauges of metals, anchorage and fastenings that shall withstand the intended use within allowable design factors, as required by the Building Code. Specify that all work is free of warping, buckling, opening of joints and seams, distortion and permanent deformation.

- 3) The fabricator shall design the details of the railings and stairs, and the connections to the building structure, to satisfy the requirements of the Uniform Building Code, and shall provide copies of the calculations stamped by a registered Professional Engineer if so requested. Fabricate all components in compliance with these design details.