

Description:

The purpose of the section is to highlight the current applicable UMCP Design Standards for source fabrication and erection of structural and miscellaneous metals.

Related Sections:

- TBD

Effective Date:

July 10, 2009

Applicable Standards:

- AISC "Specifications for the Design and Erection of Structural Steel for Buildings"
- Comply with AISC "Specification for Structural Joints using ASTM A325 or A490 Bolts."
- Comply with AWS "Structural Welding Code".
- Comply with SJI "Standard Specifications and Standard Load Tables for Open WEB Steel Joists." Fabricator shall provide SJI certification.
- Comply with AISI "Specifications for the Design of Cold-Formed Steel Structural Members."
- Comply with SDI "Design Manual for Floor Decks and Roof Decks."

General Requirements:**1. Structural Steel:**

- Comply with AISC "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings", including commentary and supplements.
- All welders shall be qualified per AWS "Standard Qualification Procedure." Provide certification that welders have passed AWS tests within the past 12 months.
- Testing agency shall inspect erection, bolted and welded connections, and submit reports or inspections and tests to Facilities Management Services. (Certification of independent inspection of shop-welded and bolted connections submitted by fabricator is acceptable.)

2. Steel Joists:

- Comply with SJI "Standard Specifications and Standard Load Tables for Open WEB Steel Joists." Fabricator shall provide SJI certification.
- Comply with AWS "Structural Welding Code."
- All welders qualified per 05100, Note 3.
- All bridging, including end connections to walls, shall be in place prior to installation of floor or roof deck.
- Testing agency to inspect erection and welded connections bridging, anchorage, etc., and submit reports to Facilities Management Services.

3. Metal Decking:

- Comply with AISI "Specifications for the Design of Cold-Formed Steel Structural Members."
- Comply with SDI "Design Manual for Floor Decks and Roof Decks."
- Comply with AWS "Structural Welding Code."
- All welders qualified per 05100, Note 3.
- Welding washers shall be used for all welds.
- Minimum 20 gauge deck shall be used for spans 4'-6" to 5'-6", regardless of continuity over supports. All deck shall be galvanized.
- Testing agency to inspect erection and welded -connections and submit reports to Facilities Management Services.