DIVISION 05 - METALS

05 00 00. METALS

05 10 00. STRUCTURAL METAL FRAMING

.1 GENERAL PROVISIONS: Use of ink marking pens on surfaces of any kind of materials is prohibited. Experience has shown that such marks bleed through paint and other finishes. Also prohibited are any marking devices that would leave residual material on metal surfaces, such as ink, wax-based or felt markers.

.2 POWER OR POWDER DRIVEN ANCHORS: Refer to Appendix V Section 01 35 23 Safety Health & Environment 1.6 USE OF POWER ACTUATED FASTENER TOOLS.

05 12 00. STRUCTURAL STEEL: Include a complete section in the specifications for this part of the work, in addition to the Structural Consultant notes on the drawings. The Architect/Engineer is responsible for complete coordination of statements in the specifications and the notes on drawings.

.1 PROVISIONS FOR VERTICAL EXPANSION: In buildings designed for future vertical expansion, structural steel shall be erected within tolerances stipulated in the AISC Code of Standard practice.

.2 AFFIDAVIT FROM ERECTOR: The General Contractor shall be required to provide an affidavit, at the completion of the job, to the effect that the structural steel frame is plumb and level within the normal tolerances specified in the code.

.3 RECORD OF ERECTION: The General Contractor shall provide a certified survey by a registered Civil Engineer showing the exact location of the centers and elevations of the columns at their topmost level, exactly as installed. This information shall be incorporated into the "record" drawings.

05 20 00. METAL JOISTS

.1 MANUFACTURER’S CERTIFICATE of compliance with Steel Joist Institute Specifications is required.

.2 PRIME COAT AND TOUCH-UP PAINTING will be considered adequate for joists, except where subjected to moisture or where exposed to view. Asphalt coatings are not permitted on metal joists that are to remain exposed and receive painted finish.

05 30 00. METAL DECKING

.1 MANUFACTURER’S CERTIFICATE of compliance with Steel Deck Institute Specifications is required.

.2 PRIME COAT AND TOUCH-UP PAINTING will be considered adequate for metal deck, except where subjected to moisture or where exposed to view.
05 40 00.  COLD-FORMED METAL FRAMING

.1 A manufacturer’s certificate of compliance with American Iron & Steel Institute (AISI) specifications SG02-1 North American Specifications for the Design of Cold-Formed Steel Structural /Members and SG-973 Cold –Formed Steel Design Manual is required.

.2 COLD-FORMED METAL STUD SYSTEM: Studs and furring strips shall be spaced 16 inches on center, maximum.

05 50 00.  METAL FABRICATIONS

.1 GALVANIZING REQUIREMENTS: All exterior ferrous metals shall be hot-dip galvanized after fabrication.

.2 MISCELLANEOUS METAL FRAMING FOR ELECTRICAL SUPPORT SYSTEMS: If electrical equipment is attached to support framing, the Electric Contractor will provide and install that metal framing. See Facility Services-3.15.

.3 LINTELS FOR PLUMBING, HVAC, AND ELECTRICAL INSTALLATIONS: Specify that the General Contractor furnish lintels for all openings through walls when openings are shown on the architectural or structural (General Contract) drawings. Note all such lintels and openings to require coordination of work and exact locations, by affected contractors. All such plumbing, HVAC, electrical, and sprinkler openings must be coordinated and shown on the Architectural and/or Structural Drawings.

05 51 00.  METAL STAIRS:

.1 STAIR TREADS FOR PUBLIC-ACCESS STAIRWAYS shall be concrete with cast metal nosings. Nosings shall be shaped to a radius; square nosings are prohibited.

STUDENT LIFE: Metal stairs shall be stainless steel in high traffic or high visibility areas with concrete stair treads and cast metal nosing.

.2 STAIR TREADS FOR ROOF ACCESS, EQUIPMENT ROOM ACCESS, AND LADDERS shall be metal with each tread to be the full width of the stair or ladder. Alternating treads are prohibited.

.3 A MANUFACTURER’S CERTIFICATE of compliance with the Architectural Products Division of the National Association of Architectural Metal Manufacturer’s AMP 510 Metal Stairs Manual materials, construction and installation specification is required.

.4 Metal pan stair treads and landings filled with concrete, terrazzo, etc. shall be prohibited for exterior stairs. Special permission from the University Engineer is required for use of metal pan stair treads and landings for interior main entry stairs.

05 53 00.  GRATINGS: Ferrous gratings shall be hot-dip galvanized and designed to support a minimum live load of 100 pounds per square foot. Galvanized hardware cloth shall be installed under all areaway gratings.

.1 A MANUFACTURER’S CERTIFICATE of compliance with ANSI/NAAMM National Association of Architectural Metal Manufacturer’s MGB531 Metal Bar Grating Manual materials, construction and installation specification is required.

END OF DIVISION 05 – METALS