

DIVISION 05—METALS

FORMAT

1. Technical specifications content and numbering system shall be based on 2004 CSI Masterformat.

BASIS OF DESIGN

1. BGSU Design standards shall not replace fully developed, project and market specific technical specification. Associate shall utilize the Standards as a benchmark to guide the design process and execution in the field. Exceptions to these standards are allowed provided by are approved by Design & Construction.
2. In instances where fewer than 3 manufacturers are indicated, the Associate shall insert "or approved equal" in the Products section of the technical specifications.
3. All submitted substitute products shall be brought to the attention of Design & Construction, prior to approval.

GENERAL PROVISIONS

1. Lintels for plumbing, HVAC & Electrical: Specify that the General Contractor shall 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.
2. Domestic Steel Requirements: all steel used for load-bearing structural purposes shall be manufactured in the United States, per Ohio Revised Code 153.011. All certifications shall be included in project documentation.

051200—STRUCTURAL STEEL FRAMING

1. Include a complete section in the specifications for this part of the work, in addition to the Structural Consultant notes on the drawings.
2. The Associate is responsible for complete coordination of statements in the specifications and the notes on drawings.

052100—STEEL JOIST FRAMING

1. FACTORY PRIMING will be considered adequate for joists, except where subjected to moisture or where exposed to view.

053100—STEEL DECKING

1. FACTORY PRIMING will be considered adequate for metal decks, except where subjected to moisture or where exposed to view.

054000—COLD-FORMED METAL FRAMING

1. COLD-FORMED METAL STUD SYSTEM: Studs and furring strips shall be a minimum 20 gauge, spaced maximum 16 inches on center. Studs and furring strips subjected to moisture shall be galvanized.

055000—METAL FABRICATIONS

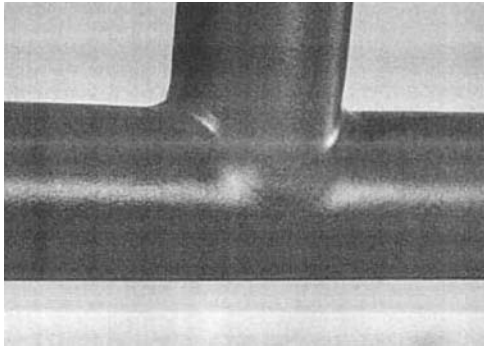
1. GALVANIZING REQUIREMENTS: All exterior ferrous metals shall be hot-dip galvanized after fabrication.

055100—METAL STAIRS

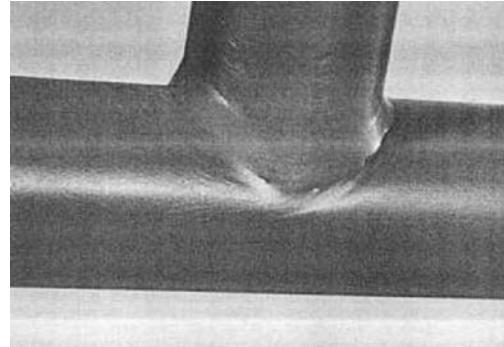
1. STAIR TREADS FOR PUBLIC-ACCESS STAIRWAYS shall be concrete with cast metal nosings. Nosings shall be shaped to a radius; square nosings are prohibited.

057300—DECORATIVE METAL RAILINGS

1. Obtain handrails and railing components from a single railing fabricator to be specified from the following:
 - a. Hayes Bros. Ornamental Iron Works, Inc.
1830 N. Reynolds Rd.
Toledo, OH 43615
Telephone: 419 531-1491
Fax: 419 531-1492
2. Fabricator shall have sole responsibility for fabricating, fitting, coring, installing and setting all railing and railing components. In no instance shall the prime (if railing fabricator is a sub) fabricate, fit, bore, install or set the railing.
3. Tube shall be 1 ½" outside diameter, schedule 40, hot-dip galvanized.
 - a. Hot-dip galvanizing vent holes shall be installed in the underside inside corners; be no larger than 3/8", drilled, filed or ground smooth; for a neat clean appearance. Holes shall not be cut with a torch.
4. Railing shall be shop fabricated and assembled per approved shop drawings to the greatest extent possible.
5. Welds shall be Finish 1 or Finish 2 finishes, based on National Ornamental & Miscellaneous Metals Association (NOMMA), per the image below:



Finish #1—No evidence of a weld joint



Finish #2—Completely sanded joint,
some undercutting and pinholes okay

6. Change in direction shall be made by mitering and welding, **not** by bending.
7. When possible, the edge of the coring shall be a minimum 6" from the edge of the concrete.
8. Finish shall be powder coated polyurethane meeting AAMA 603 requirements.
9. Field splices to be minimized as much as possible. Field splices are to be made with internal splice sleeves, field welded and ground smooth.
10. Field splices shall be primed and painted to match powder coating with paint supplied by powder coater.
11. Railing shall be set at a minimum of 12" in non-shrink, non-metallic grout.

End of Section