

DIVISION 05 METALS

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Unless stated otherwise, the standards in this Facilities Design Manual (FDM) are directed to the Design Professional to incorporate into the Project.

Although the Owner encourages improved concept, method and product recommendations by the Design Professional, deviation from these standards, including product requests for “approved equivalent” status, requires written justification from the Design Professional and written approval from the Owner’s Representative before completion of Design Development Documents.

05 00 00 METALS

A. REFERENCE ABBREVIATIONS

1. ASTM ASTM International (formerly in the USA: American Society for Testing and Materials)

05 12 00 STRUCTURAL STEEL FRAMING

A. GENERAL

1. Specify compliance with all appropriate ASTM standards.
2. Specify fabrication and erection to conform to "Specifications for Structural Steel Buildings" published by the American Institute of Steel Construction (AISC).
3. Specify all loose lintels and other miscellaneous and related items.
4. Specify welding by qualified welders and in compliance with American Welding Society (AWS) requirements.
5. Except where encased in concrete or field welded, specify steel shop painted and then touch-up painted after erection.
6. Specify submission of complete shop drawings.
7. Indicate design stresses on the Structural Drawings.

05 21 19 OPEN WEB STEEL JOISTS

A. GENERAL

1. Specify compliance with Steel Joist Institute (SJI) standards.
2. Specify adequate bridging.
3. Specify shop paint and touch-up after erection.
4. Specify submission of complete shop drawings.

05 31 00 STEEL DECKING

A. GENERAL

1. Specify compliance with Steel Deck Institute (SDI) and American Iron and Steel Institute (AISI) standards.
2. Specify methods of erection, connections and fasteners.
3. Specify submission of complete shop drawings.

05 50 00 METAL FABRICATIONS

A. GENERAL

1. Specify shop drawings.
2. Specify necessary shop and field painting.
3. Where dissimilar metals are adjacent to each other, specify a separation or coating to prevent electrolytic action from damaging either material.

B. STAIRS

1. Show stairs fully designed and detailed on the Drawings.
2. Where treads are steel, specify a non-slip surface.
3. Where pan-type treads used to receive terrazzo or other fill material such as concrete, specify slip-resistant nosings.

C. LADDERS

1. Wherever possible, specify stairs instead of ladders for access between levels.
2. For standard ladder details, see FDM Part 1/Support for Div 03-13/Arch-ID Details/[Steel Ladder Details.pdf](#).

D. GUARDS AND HANDRAILS

1. Design and specify guards and handrails in compliance with the State Building Code.
 - a. Design handrails to project beyond top and bottom steps or ramps.
 - b. Design handrails with smooth contours and return ends to wall or support.
2. Design rigid and durable anchorage.

E. SECURITY SCREENS OR GRILLS

1. Consult with the Owner's Representative for security and esthetic requirements for each project.

05 70 00 DECORATIVE METAL

A. GUARDS AND HANDRAILS

1. Do not specify painted steel finish material for guards and handrails on public ramps, stairs, and balconies, unless approved by the Owner's Representative.

END OF DIVISION 05 METALS