## DESIGN & CONSTRUCTION GUIDELINES

### DIVISION 05 METALS

<table>
<thead>
<tr>
<th>Division</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIVISION 05 METALS</td>
<td></td>
</tr>
<tr>
<td>SECTION 05 10 00</td>
<td>2</td>
</tr>
<tr>
<td>Structural Metal Framing</td>
<td></td>
</tr>
<tr>
<td>SECTION 05 20 00</td>
<td>3</td>
</tr>
<tr>
<td>Metal Joists</td>
<td></td>
</tr>
<tr>
<td>SECTION 05 30 00</td>
<td>4</td>
</tr>
<tr>
<td>Metal Decking</td>
<td></td>
</tr>
<tr>
<td>SECTION 05 40 00</td>
<td>5</td>
</tr>
<tr>
<td>Cold-Formed Metal Framing</td>
<td></td>
</tr>
<tr>
<td>SECTION 05 50 00</td>
<td>6</td>
</tr>
<tr>
<td>Metal Fabrications</td>
<td></td>
</tr>
<tr>
<td>SECTION 05 51 00</td>
<td>7</td>
</tr>
<tr>
<td>Metal Stairs</td>
<td></td>
</tr>
<tr>
<td>SECTION 05 52 00</td>
<td>8</td>
</tr>
<tr>
<td>Handrails and Railings</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 05 10 00 STRUCTURAL METAL FRAMING

1.1 STRUCTURAL STEEL
A. Include a complete section in the specifications for this part of the work, in addition to the Structural Consultant notes on the drawings. The Consultant is responsible for complete coordination of statements in the specifications and the notes on drawings. Structural steel shall comply with the American Institute of Steel Construction (AISC), "Code of Standard Practice for Steel Buildings and Bridges."

1.2 AFFIDAVIT FROM ERECTOR
A. 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.
SECTION 05 20 00 METAL JOISTS

1.1 MANUFACTURER’S CERTIFICATE
   A. Manufacturer’s certificate of compliance with Steel Joist Institute (SJI) Specifications is required.

1.2 PAINTING
   A. Prime coat and touch-up painting complying with SJI Specifications will be considered adequate for joists, except where subjected to moisture or where exposed to view.

END OF SECTION 05 20 00
SECTION 05 30 00 METAL DECKING

1.1 MANUFACTURER’S CERTIFICATE
   A. Manufacturer’s certificate of compliance with SJI Specifications is required.

1.1 PAINTING
   A. Prime coat and touch-up painting will be considered adequate for metal deck, except where subjected to moisture or where exposed to view. Use galvanized metal deck for all roof applications.

1.2 VENTED METAL DECKING
   A. Vented metal decking shall be used, when topped with insulating concrete roof decks.

END OF SECTION 05 30 00
SECTION 05 40 00 COLD-FORMED METAL FRAMING

1.1 COLD-FORMED METAL STUD SYSTEM
   A. "C" shaped load bearing steel studs and furring strips shall be spaced 16 inches on center, maximum. Wind load calculations by a State of Florida registered structural engineer is required for exterior wall application. Wire tying of framing components is not permitted. Use qualified welders and comply with the American Welding Society (AWS).

END OF SECTION 05 40 00
SECTION 05 50 00 METAL FABRICATIONS

1.1  WELDER CERTIFICATION
A. The General Contractor or Construction Manager is responsible for obtaining and retaining welder certifications for any person performing on-site welded steel fabrication or erection. The certifications must be current and validated by welding logs or certification test(s) conducted with the last two (2) years.

1.2  GALVANIZING REQUIREMENTS
A. All exterior ferrous metals shall be hot-dip galvanized after fabrication.

1.3  MISCELLANEOUS METAL FRAMING FOR ELECTRICAL SUPPORT SYSTEMS
A. If electrical equipment is attached to support framing, the Electrical Contractor will provide and install that metal framing.

1.4  USE OF INK MARKING PENS ON SURFACES
A. 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.

1.5  LINTELS FOR PLUMBING, HVAC, AND ELECTRICAL INSTALLATIONS
A. 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 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.

END OF SECTION 05 50 00
SECTION 05 51 00 METAL STAIRS

1.1 STAIR TREADS
   A. Stair treads for public access stairways shall be concrete with cast metal nosing.
   B. USF prohibits the use of concrete filled metal stair pans for stairs located on the exterior of buildings.

END OF SECTION 05 51 00
SECTION 05 52 00  HANDRAILS AND RAILINGS

1.1 AMERICANS WITH DISABILITIES ACT

1.2 HANDRAILS
   A. Handrails to be of aluminum construction.

1.3 GRATINGS
   A. Ferrous gratings shall be hot-dip galvanized. Galvanized hardware cloth shall be installed under all areaway gratings.

1.4 STAIR TREADS AND NOSINGS
   A. Steps shall conform to existing step formulas but shall not have risers that exceed 7 inches or treads that exceed 11 inches. Nosing shall not extend past the face of the riser.

END OF SECTION 05 52 00