## **DESIGN CRITERIA**

- 1. Related Sections: Division 05 Section Metal Stairs.
- 2. This Section specifies pipe railings fabricated from steel.
- 3. Exterior pipe railings are required at receiving area retaining walls, raised trash platforms, and stairs. Roof mounted pipe railings are required adjacent to mechanical equipment located within 10' from the edge of the building or raised equipment platform. DeCA standard requires exterior pipe railings to be hot-dip galvanized and not painted, for reduced maintenance. Some military installations require that exterior pipe railings be painted in accordance with the IDG and other Base standards. Provide painted finish if required by installation.
- 4. Interior pipe railings are required at mezzanines open to a floor below and at stairs. Interior pipe railings are prime painted immediately following fabrication and finish painted immediately following installation. Indicate primer and finish paint in accordance with Division 09 Section Painting and Coating.
- 5. In addition to the above locations indicate guards along open-sided walking surfaces, mezzanines, equipment platforms, stairways, ramps, and landings which are located more than 30" above the floor or grade below.
- 6. Where severe corrosion conditions exist, such as heavy industrial atmospheres or marine (salt water) environments, specify Type 316 or Type 317 stainless steel. Refer to designer handbooks "Design Guidelines for the Selection and Use of Stainless Steel" and "Stainless Steel Architectural Facts" available from the Specialty Steel Industry of North America.
- 7. The design of pipe railings shall comply with applicable building/life safety codes and OSHA requirements. Because commissary receiving areas are not open to the public, the 2018 IBC (Paragraph 1015.4) only requires that balusters, horizontal intermediate rails or other construction be designed so that a sphere with a diameter of 21 inches cannot pass through any opening.
- 8. In accordance with the IBC all projects are assigned to a Seismic Design Category. Where required by project location, add applicable requirements of the IBC and referenced codes and standards.
- 9. Testing and Inspection: Although the IBC requires special inspections be performed by special inspectors who are engaged by the Owner or the design professional, this Section specifies the Contractor shall engage the special inspectors.

**END OF SECTION** 

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