

P. ICC - International Code Council (2003 International Codes).

1.04 DESIGN / PERFORMANCE REQUIREMENTS

A. A. Structural Performance: Provide handrails and railings systems, including top rail, end posts, intermediate posts, post anchors, post caps, cables, and cable hardware capable of withstanding the following structural loads without exceeding allowable design working stress of materials for handrails, railings, anchors and connections in conformance with applicable codes:

1. Top Rail of Guards: Shall withstand the following loads:
 - a. Concentrated load of 200 lbf (0.89kN) applied at any point and in any direction.
 - b. Uniform load of 50 lbf-ft (0.07kN-m) applied horizontally and concurrently with uniform load of 100 lbf-ft (0.14kN-m) applied vertically downward.
 - c. Concentrated and uniform loads above need not be assumed to act concurrently.
2. Hand rails Not Serving As Top Rails: Shall withstand the following loads:
 - a. Concentrated load of 200 lbf (0.89 kN) applied at any point and in any direction.
 - b. Uniform load of 50 lbf-ft (0.07kN-m) applied in any direction
 - c. Concentrated and uniform loads above need not be assumed to act concurrently.
3. Guard Infill Area: Shall withstand the following loads:
 - a. Concentrated horizontal load of 200 lbf (0.89 kN) applied to 1 sq ft at any point in system, including panels, intermediate rails, balusters, or other elements composing infill area. Loads need not be assumed to act concurrently with loads on top rails in determining stress on guard.

B. Corrosion Resistance: Separate incompatible materials to prevent galvanic corrosion.

1.05 SUBMITTALS

A. Submit under provisions of Section 01 13 40 – Shop Drawings, Product Data, and Samples.

B. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation instructions and methods.
4. Description of materials, components, fabrication, and finishes.
5. Structural test reports provided by the manufacturer evidencing compliance with the specifications.