



2021 Accessibility Question Of The Week

The 2017 A117.1 requires handrail gripping surfaces to be continuous, without interruption by newel posts, other construction elements, or obstructions. An exception states that balusters attached to the bottom surface of the handrail shall not be considered obstructions, provided that not more than 20 percent of the handrail length is obstructed. We have a handrail that is 20 feet long and has 39 spindles supporting it from beneath. Each spindle is 1.25 inches. Does this length of handrail meet this code provision?

- A) YES 
- B) NO



505.6 Gripping surface. Gripping surfaces shall be continuous, without interruption by newel posts, other construction elements, or obstructions.

Exceptions:

1. Handrail brackets or balusters attached to the bottom surface of the handrail shall not be considered obstructions, provided the brackets or balusters comply with the following criteria:

- 1.1. Not more than 20 percent of the handrail length is obstructed,

39 spindles x 1.25 inches each = 48.75 inches of obstruction beneath the gripping surface.

20 feet x 12 inches per foot = 240 inches—the total length of the handrail.

48.75 inches / 240 inches = **20.3 percent** of the handrail gripping surface that is obstructed.

20.3 percent can be rounded down to 20 percent per section 105.2, and therefore the handrail complies with the Section 505.6, Exception 1, item 1.1 limitation.

105.2 Calculation of percentages. Where the determination of the required size or dimension of an element or facility involves ratios or percentages, rounding down for values less than one half shall be permitted.