

What is a “TYPE II” Handrail?

A **TYPE II** handrail has been designed such that it is *equivalently graspable* to the grip that can be achieved on a two inch round rail (allowed in all US codes) without requiring an unnatural wrapping of the bottom of the rail with the hand.

A **TYPE II** handrail allows the user to maintain a *consistently secure natural grasp* on the handrail in use on stairs without twisting the fingers under the rail where necessary attachments to a wall or guard require release.

A **TYPE II** handrail allows for *freedom of design* within the criteria and profiles as wide as 2-3/4”. This flexibility allows the possibility to design larger shapes that do not require a “power grip” for those that are impaired and cannot close their hand around smaller round profiles similar to “hard to open bottle caps” now allowed by the code.

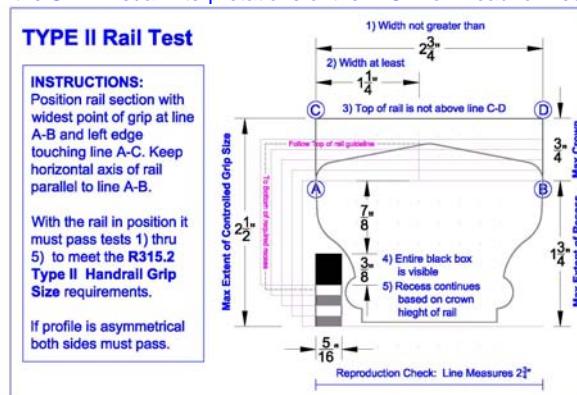
A **TYPE II** handrail has a regulated *functional shape* with a perimeter (complete distance around its profile) that is larger than 6-1/4” such that the grip required for safe use does not need to wrap the bottom of the rail.

A **TYPE II** handrail profile has been designed with specific criteria that *regulate the grip size* and the shape of the required graspable recesses. This criteria has been *scientifically proven* in use on stairs under the most extreme conditions of arresting a fall.

Type II Code Regulation (as it has been adopted by the IRC and proposed for IBC adoption)

Type II. Handrails with a perimeter greater than 6-1/4 inches (160 mm) shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the profile. This required depth shall continue for at least 3/8 inch (10mm) to a level that is not less than 1-3/4 inches (45 mm) below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1-1/4 inches (32 mm) to a maximum of 2-3/4 inches (70 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).

This test is full size in the SMA Visual Interpretations of the IRC. Download for free at www.stairways.org



TYPE II RAILS

Equivalently graspable, Consistently secure natural grasp, Freedom of design, Functional shapes, Regulated grip size, Scientifically proven