Technical Preservation Services





InterpretingThe Secretary of the Interior's Standards for Rehabilitation

Subject: Modifying Historic Interior Railings to Meet Building Code

Applicable Standards:

- 2. Retention of Historic Character
- 5. Preservation of Distinctive Features, Finishes, and Craftsmanship
- 9. Compatible New Additions/Alterations
- 10. Reversibility of New Additions/Alterations

Issue: Interior railings in historic buildings often do not meet applicable modern building codes because they are too low. If, after consulting with code officials, a variance cannot be obtained, railings must be adapted to raise their height. Railings are important character-defining features of a historic building's interior. To meet the Secretary of the Interior's Standards for Rehabilitation, any modifications must be completed as sensitively as possible.

Application I (Incompatible treatment revised to meet the Standards): The interior of a circa 1900 bank building featured this

very elaborate stair railing. The railing initially proposed to comply with code requirements was too obtrusive and negatively impacted the delicate detailing of the historic railing.

Accordingly, a more compatible (and more refined) supplemental railing was designed consisting of only two, much thinner rails supported by posts capped with finials. The revised design meets the Standards.

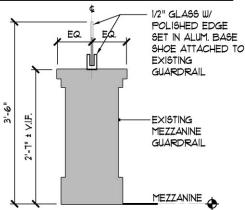
Left: Sample installation of railing modification first proposed did not meet the Secretary's Standards.

Right: Revised railing that better relates to historic design and meets the Standards.



Application 2 (Compatible treatment): The mezzanine railing in this circa 1924 auto showroom did not meet modern building code. To bring the project into compliance, a simple piece of structural glass was secured to the top of the rail. This treatment, which meets the Secretary's Standards, is minimally visible and compatible with the turned balustrades and infill panels below.





Left: Close-up view of structural glass added to the top of the mezzanine railing. Right: Detail of railing modification. Aluminum base is secured to top of rail and structural glass is inserted into frame.

Application 3 (*Compatible treatment*): This decorative metal railing is the most prominent interior feature of this 1890s former brewery. It was lower than allowed by code, so it was modified by welding both intermediate metal rings and a pipe rail to the top of the historic railing. Although this detail is slightly embellished by the addition of the rings, it does not compete with the elaborate design of the original railing and is clearly contemporary. This treatment is reversible and meets the Secretary's Standards.



Left: This sensitively executed modification provided the necessary height to this elaborate metal stair railing.

Right: Cast iron newel post alongside modified railing.



Application 4 (*Incompatible treatment*): Prior to rehabilitation, this finely-detailed wood railing in a 1890s Victorian house was lower than allowed by code. As a result, it was modified by attaching a new pipe-metal railing next to the original railing. This highly visible change does not meet the Secretary's Standards because it diminishes the character of this important interior feature.

Right: This railing modification is incompatible with the historic carved wooden railing.





Application 5 (*Compatible Treatment*): When this 1882 building was converted into a museum and offices, it was necessary to modify the height of an unusual wrought iron railing that encircled the atrium at the fourth floor level. To satisfy code requirements, an additional painted-metal railing was installed on the inner side that followed the contours of the historic railing. This appropriate design meets the Secretary's Standards.

Left: A compatible new painted-metal railing was inserted on the inner side of the historic railing.