## **Technical Preservation Services**



## ITS Number 43

## Interpreting The Secretary of the Interior's Standards for Rehabilitation

Subject: Converting Fire Escapes into Balconies in Mill Complexes

**Applicable Standards:** 

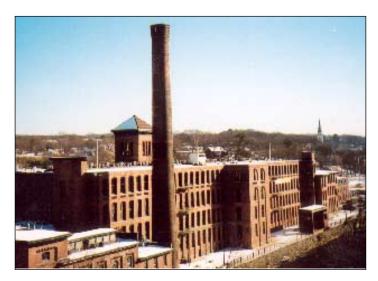
- 2. Retention of Historic Character
- 5. Preservation of Distinctive Features
- 9. Compatible New Additions/Alterations

**Issue:** Metal fire escapes have been an important feature in mill complexes since the early years of the industrial age. With the constant threat of fires in mill operations, an accessible means of escape for workers was imperative. Many historic mill buildings that are being converted for residential use still retain these fire escapes. Historic fire escapes are generally character-defining elements of mill buildings and, accordingly, they should be retained in a rehabilitation project.

Although most historic fire escapes are usually considered obsolete in terms of contemporary egress requirements, they represent an opportunity to provide balconies which are often so desirable in a residential conversion project. Adapting historic fire escapes into balconies offers a new use for them that does not alter the historic character of the exterior of a mill building. Even though the stairs themselves are usually removed for safety and security reasons, retaining the fire escape landing and railing to serve as the balcony is a treatment that meets the Secretary of the Interior's Standards for Rehabilitation. If the existing landing and railing are too deteriorated to repair, they should be replaced in kind with new skeletal assemblies to match the historic feature.

Adding new balconies to a historic mill building is more problematic. Since fire escapes augmented enclosed stair towers which were the principal means of emergency egress, the fire escapes traditionally were placed a set distance apart, typically an equal distance between two stair towers or between a stair tower and the end of the building. Their placement resulted in a distinctive rhythm on a façade. Inserting new single or paired vertical rows of balconies near stair towers or next to historic fire escapes converted to balconies, can negatively impact this character-defining rhythm of a mill building façade. Adding new balconies on a mill building usually requires that windows be enlarged to convert them into doors for access to the balconies which can further interfere with the historic character of the façade.

**Application 1** (*Compatible treatment*): A large, 1868 brick mill complex was recently converted to housing with 207 market-rate and 42 low- to moderate-income units using federal historic preservation tax credits. There were two sets of historic fire escapes on both the east and west elevations of the four-story main complex. As part of the rehabilitation, the fire escape landings and railings were retained and converted into balconies after they were sandblasted, primed and painted. The fire escape stairs were removed for safety and security reasons. This treatment meets the Standards.



Many historic mill buildings that are being converted for residential use retain their historic fire escapes.





Left: Detail of the fire escape before rehabilitation. Right: Detail of the fire escape after its conversion to a balcony during rehabilitation.

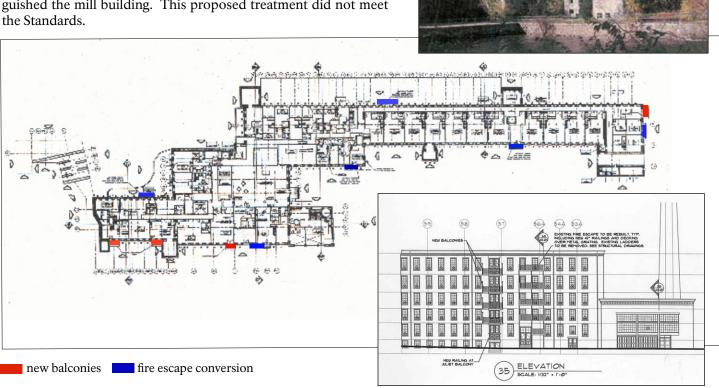




Far left: Mill building with fire escape after rehabilitation. Left: Section detail of new balconies converted from historic fire escapes.

**Application 2** (*Incompatible treatment*): This 1814 mill complex was planned to be converted for housing consisting of 273 market-rate units and related service areas. The five-story, 450 feet long, main building constructed of rubble stone has an irregular footprint with multiple stair towers and numerous ells. It also features several tiers of fire escapes. The developer

proposed to adapt the existing fire escapes into balconies, but also to add multi-story columns of new balconies of a different height and much deeper than the fire escape landings. Adding these new balconies would have changed the historic appearance of the exterior of the mill building. But, equally important, because the new balconies would have been lower than the landings of the fire escapes, existing historic windows would have had to be lengthened into doors to access the balconies. The combination of adding new balconies and making so many windows into doors would have negatively impacted the character-defining fenestration that distinguished the mill building. This proposed treatment did not meet the Standards.



Kaaren Staveteig, Technical Preservation Services, National Park Service