

# Atria, Lightwells and Courtyards

One of the most significant changes that can occur to a building during a rehabilitation project is the introduction of a large new opening such as an atrium. There are essentially three types of openings that might be introduced within an existing building's envelope: atria, courtyards or lightwells. Each of these features has great potential for introducing new and incompatible elements into a historic building, and thus for altering its historic character or damaging significant historic fabric or features. Consequently, these work items should be approached with great caution.

It is always appropriate to consider why the feature is proposed. The need for light and ventilation in order to allow a new use—particularly for buildings whose historic use is now defunct—is likely to be a better justification for a new opening than a desire for a strong new design element.

The following definitions and criteria should be used in evaluating whether a new opening inserted in a historic structure will meet the Secretary of the Interior's Standards for Rehabilitation.

#### **Definitions:**

An atrium is an enclosed or "public use" space and is covered by a roof.

A **courtyard** is an unenclosed space. Courtyards possess an "outdoor" or exterior character and are not covered by roofs.

A **lightwell** is strictly a utilitarian space—not a useable space—and is intended to fulfill light and ventilation requirements. Typically, lightwells are quite small and not highly articulated or designed spaces. They are generally not covered.

#### Criteria:

- 1. Significance of the interior of the historic structure.
  - Historic fabric and features must be retained within the historic structure. The insertion of a new opening must not result in the removal of significant historic fabric or features, or the alteration of significant interior spaces. An atrium or other opening will be more likely to meet the Standards if historic fabric and features have been previously removed or if such fabric and features are simply detailed, as in the case of an open warehouse or parking garage. New openings are most acceptable in utilitarian or industrial buildings. Courtyards rarely meet the Standards and, even then, are typically only acceptable in buildings with very large floorplates.

• In order to preserve significant historic features, materials and spaces, a new opening may need to be limited to certain floors of a building.

### 2. Size, location and form of the new opening.

- A new opening's size must be kept to a minimum and must not dominate the historic interior space. Generally, the smaller the opening, the more compatible it will be with the historic character of the structure (e.g., an atrium that is 10 percent of the floor area and one bay wide has a better chance of meeting the Standards than one that is 25 percent of the floor area and three bays wide).
- The total number of floors in a building as compared to the number of floors proposed to be "cut" is an additional consideration. In general, the fewer floors cut, the better. For example, a new two-story atrium in a 12-story building is more likely to meet the Standards than a new two-story atrium in a two-story building.
- A new opening must be located in a secondary space and should not be located so as to be a physical or visual extension of an entrance lobby. Historic primary spaces, including entrance lobbies and principal hallways, are defined not only by their historic fabric, but also by the size and proportion of the spaces themselves, and their historic function. In any rehabilitation project, the essential proportion and size of the building's historic primary spaces must be retained.
- A new opening should not be located immediately inside primary exterior walls.
- A new opening must be internally located within the structure and must not be visible from the exterior.
- A new opening should not make one historic structure appear on the inside like two or more separate buildings, nor should an atrium connect or "bridge" multiple buildings so that the buildings' multiple interiors appear as a single interior space.

## 3. Design, materials and articulation of the new opening.

- A new atrium must be recognizable as having been derived from an interior space. Therefore, structural elements such as joists and beams should be retained and exposed within the new space, so as to indicate that the new space (atrium) is derived from a different, historic space (historic interior).
- An atrium must appear as an interior space, rather than an exterior one. A new opening introduced into a space that was historically enclosed and covered with a roof must remain as such in order to retain the historic "feel" of the space and to protect the historic materials. Due to their exterior character, courtyards are generally not appropriate for the interior of a historic building and will not meet the Standards. However, an atrium with open side walls at the roof edge (in order to provide natural ventilation) may meet the Standards, provided the open sidewalls are not visually prominent and historic materials within the building are protected from the weather.

- Where an atrium enclosure protrudes beyond the historic building envelope (e.g., a glass roof cover over an atrium), its visual impact on the outside of the building must also be taken into consideration. The covering must not be visible from the exterior.
- A new opening should be designed so as to retain or be compatible with the historic character of the building (e.g., industrial, commercial, etc.). Thus, new wall finishes, fenestration and features (such as railings) must also be compatible with the building's historic character.
- The configuration of a new opening must be compatible with the building's existing architecture and should follow the building's existing column lines. New openings should not introduce strong new design themes, e.g., a round shape within a "grid" of column lines in an industrial building.

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