RESTORATION OF HERITAGE STRUCTURES

Heritage building restoration aims to bring back the architectural beauty and aesthetic charm that these buildings once possessed. Skilled craftsmen work meticulously to repair and replace damaged or deteriorated elements, using traditional techniques and materials whenever possible.

Building restoration describes a particular treatment approach and philosophy within the field of architectural conservation and historic preservation. It emphasizes the preservation of structures such as historic sites, houses, monuments, and other significant properties through careful maintenance.

Heritage buildings and sites are remnants of our predecessors, a reflection of our past and an essential source of information to trace the evolution of our society as a civilization

Due to this, the restoration of historic and cultural buildings is extremely important. This also involves a proper process of cleaning and adding several fixes to the structure or building itself. Firstly, the problem has to be addressed, followed by a solution that is apt to restore the building. Several factors are taken into account: building codes, the building's lifespan, the method of construction, the structural system and so on. The right materials also have to be used to increase the shelf life of the restored building.

A well thought approach has to be taken in the process of restoration. Experts such as architects and engineers conduct research in order to understand the project better. This is followed by proper documentation which involves collection of data and details that is helpful in the next stages. Finally, experts and firms that have specialized experience in restoration are put forward for the project.

Factors to be considered during restoration | Heritage Buildings

During the process of restoration, the building must not lose its original value. It must keep its conventional character intact. Restoration should be able to add additional features to its beauty and importance. In cases of old buildings, elements that are damaged should not be repaired instead they must be replaced. This will expand the shelf life of the building. In addition to this, while selecting the element's replacement or alternative, various parameters must be followed. Texture, color, material, shape and form etc. should be kept in mind while selecting the element.

Building codes is a factor that should be followed while making changes to an existing structure or building. This can also affect the safety and security of the structure. Historic buildings have their own set of codes, which must be modified to complement the current building codes.

Integrity has to be maintained throughout the process of making changes to the building. It must be true to the materiality, construction type and method of the existing building. The space should retain its originality with some additional features that were added during it being restored.

Case Study

One of the notable examples of restoration is that of Notre Dame Cathedral. The cathedral was destroyed due to an accidental fire that caused major damage to the building. The 850-year-old spire and roof of the cathedral were damaged. Several modifications were made to retain the structure. The copper statues that were placed on spires had to be removed. The renovation of Notre Dame has an approximate budget of 6 million euros.

The Cathedral was built in the 13th century and is considered one of the architectural icons, making it the most visited monument in Paris. The French president, Emmanuel Macron, commented, "Notre Dame is our history, it's our literature, it's our imagery. It's the place where we live our greatest moments, from wars to pandemics to liberations"



There are different methods through which buildings can be conserved.

Restoration

This approach revolves around retaining the original structure and character of the building. Any additional features added to the project must be highlighted and known to its users.

Preservation | Heritage Buildings

This approach focuses on maintaining the existing structure or building without adding or eliminating any of its elements or parts. It usually saves the building from any potential hazards and prevents its degradation.

Reconstruction

This approach is usually used when a building has one or more parts in case of natural disaster or fire hazard. Through research and development, the lost parts are rebuilt using the same techniques and materials. The reconstruction of Notre Dame Cathedral is a well-known example in the architectural world

Renovation

This approach revolves around updating and enhancing a building's character and type. This also involves modifying the building's look and feel to reflect the latest trends and standards.

Rehabilitation

This approach involves building a new function while respecting its original personality. This method follows a hybrid between preserving the old structure and adding new features to it. There should be a harmonious balance between the two. Interestingly, this method can also be used in a building where the outside facade is kept as is and the interiors are modified, or vice versa.

Adaptive Reuse

This approach revolves around changing the purpose and function of the building while saving it. An example would be transforming a factory into a retail store or museum.

