international DESIGN JOURNAL
Print ISSN 2090-9632
Online ISSN 2090-9640

Green Certification and Heritage Buildings: Approach for Sustainable Adaptive Reuse

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Abstract:

There are global efforts to combat environmental degradation intensify, green building standards such as LEED and BREEAM have gained widespread adoption. These frameworks emphasize energy efficiency, resource management, and environmental stewardship, yet their application to heritage buildings still requires additional efforts.. The central issue lies in preserving the architectural and cultural integrity of heritage sites while incorporating sustainable practices, a process that involves careful adaptation. The research problem concerns the deficiencies in applying sustainability standards to the reuse of heritage buildings, particularly in their maintenance and operation. as the Heritage buildings often pose significant challenges, due to outdated materials, construction techniques, and design approaches that do not align with modern sustainability standards. This research aims to address the knowledge gap by investigating how green building principles can be effectively implemented in heritage buildings without compromising their historical value. Through adopting a comparative descriptive analytical methodology to examine the differences in applying sustainability standards between new constructions and the adaptive reuse of heritage buildings, as well as analyzing existing Green Certifications, the study will provide recommendations that contribute to a more sustainable approach to the adaptive reuse of heritage buildings, supporting both environmental and cultural preservation objectives.

Paper History:

Paper received August 15, 2024Accepted October 28, 2024, Published on line January 1, 2025

Keywords:

Green Certification, sustainability, Reuse, heritage buildings

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CITATION Hassan ELDib (2025) Green Certification and Heritage Buildings: Approach for Sustainable Adaptive Reuse, International Design Journal, Vol. 14 No. 6, (January 2025) pp 195-206