Development of a Standardization Methodology Assessing the Comfort Performance for Hanok

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Abstract: Korean traditional residences have been built with deep design issues for various values such as social, cultural, and environmental influences to be started from a few thousand years ago, but its meaning is being vanished due to the different lifestyles these days. It is necessary, therefore, to grasp the meaning of the Korea traditional building called Hanok and to get Korean people understand its real advantages. The purpose of this study is to propose a standardization methodology for evaluating comfort features towards Korean traditional houses. This paper is also trying to build an official standard evaluation system and to integrate aesthetic and psychological values induced from Hanok. Its comfort performance values could be divided into two large categories that are physical and psychological, and fourteen methods have been defined as the Korean Standards (KS). For this research, field survey data from representative Hanok types were collected for each method. This study also contains a qualitative in-depth analysis of the Hanok comfort index by the professions using AHP (Analytical Hierarchy Process) and has examined the effect of the methods. As a result, this paper could define what methods can provide trustful outcomes and how to evaluate the own strengths in aspects of spatial comfort of Hanok using suggested procedures towards the spatial configuration of the traditional dwellings. This study has finally proposed an integrated development of a standardization methodology assessing the comfort performance for Korean traditional residences, and it is expected that they could evaluate inhabitants of the residents and interior environmental conditions especially structured by wood materials like Hanok.

Keywords: Hanok, comfort performance, human condition, analytical hierarchy process

Conference Title: ICASEDEA 2018: International Conference on Architecture, Sustainable Environmental Design and

Engineering Applications

Conference Location : Lisbon, Portugal **Conference Dates :** April 16-17, 2018