

Middle-income Public Housing in Egypt, Evaluate and Improve to Reach a Sustainable Design

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Abstract

Housing is one of the major sectors of national development; it plays a vital role in such a developing country like Egypt. As comfortable home is a human target, housing considers as an important need in human life. Egyptian government deals with middle-income housing as a prototype can be located in any site without considering indoor thermal comfort recommendations. The aim of this paper is to evaluate a present middleincome housing prototype (case study) simultaneously, and improve it by using passive design strategies to reach a sustainable design. The performance of case study evaluated using computer simulation. This research process led to a strategy of improving public housing prototypes in Egypt. The research findings led also to performative design guidelines, achieved sustainability.

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