



Original scientific paper

The Impacts of Urban Morphology on Housing Indoor Thermal Condition in Hoi An City, Vietnam

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ABSTRACT



Assessing the impact of urban morphology on the indoor thermal condition of housing in a tourism city in central Vietnam — Hoi An City is the main objective of this study. The research process is carried out by a variety of methods including in situ surveys, measuring with temperature sensors, data analysis and map analysis. Four houses, located in two areas with different urban forms, were selected for measurement within one month to investigate the differences in housing indoor temperature. The impact of urban morphology on housing was thereafter determined. Temperature sensors were permanently installed in 4 houses; based on these empirical measurements and data collected, the paper addresses solutions to improve urban morphology and indoor thermal condition.

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1. Introduction

Hoi An City is located in central Vietnam, with severe weather amidst diverse natural disasters. Therefore, the life of the people there is very difficult. The city has an ancient town and in 1999, it was recognized as a world cultural heritage by UNESCO. Since then, Hoi An tourism has grown rapidly and it became an international tourism destination. The development of tourism has promoted this

unique heritage, but the city also faces potential risks due to rapid but poor-quality infrastructure development, incoherent and sporadic planning between old and new areas

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