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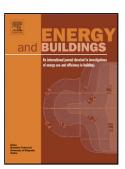
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A Generalized Thermal Perception Approach

for Indoor Thermal Comfort Assessment

in the Humid Tropics of Malaysia

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Abstract

Thermal comfort is one of the many aspects that affect human well-being and productivity.

There is an increasing interest in understanding occupants' requirements for maintaining the

indoor comfort range while minimizing energy wastage. In this paper, a thermal perception map

was developed for residential buildings in the humid tropics of Malaysia using logistic

regression. Sharma and Ali's [1] concept was used for the elaboration of the thermal comfort

map. This map helps in exploring the effect of climate changes on subjects' thermal perceptions

at various indoor air temperatures. The thermal comfort map should be useful for researchers

in order to accurately estimate the required energy for maintenance of comfortable

temperature.

Keywords: Thermal Comfort, Energy Saving, Concept, Methodology, Humid Tropics.

1. Introduction

In the past few years several articles have been published regarding the global demand

for energy. This body of literature has raised the issue of the increase in the emissions of

carbon dioxide due to energy consumption. Consequently, the average global temperature in

the global environment has elevated [2-5]. However, little is known about the impact of the

1

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