DEPARTMENT OF BUILDING SURVEYING FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING UNIVERSITY TECHNOLOGY OF MARA SERI ISKANDAR PERAK

NIGHT VENTILATION FOR PASSIVE INDOOR COOLING IN RESIDENTIAL HOUSE

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SUPERVISOR'S DECLARATION

Academic Project Title:

NIGHT VENTILATION FOR PASSIVE INDOOR COOLING IN RESIDENTIAL HOUSE

"I hereby that satisfied read this report and from my opinion it has fulfilled all the requirement and it qualified for the purpose of conferment of Bachelor of Building Surveying"

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ABSTRACT

Night ventilation is very important to achieve passive indoor cooling in the building and also give huge impact to human comfort. However, poor ventilation can contribute to several issues involving health issue caused by air pollutant inside the house is not removed properly. This report is focused on the effectiveness of passive cooling in residential house through effect of night ventilation. Several case studies was conducted at Seri Iskandar, Perak that can be classified into three (3) different types of residential houses design and layout which is single storey terrace house, double storey terrace house and single storey terrace house with air well. Finding revealed that the design and layout of the building affect the effectiveness of the passive indoor cooling in residential houses. Therefore, this report will discuss on the identifying the air velocity and relative humidity rate by using Velocicalc Plus Air Velocity Meter. The data collected had been analyzed to recognize which type of layout was the significant to achieve passive indoor cooling in the residential house.

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