THERMAL COMFORT IN CLASSROOMS AT UITM JENGKA PAHANG, MALAYSIA.

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ABSTRACT

THERMAL COMFORT IN CLASSROOMS AT UITM JENGKA PAHANG, MALAYSIA

Thermal comfort is defined as " that condition of mind, which expresses satisfaction with the thermal environment" (ISO Standard 7730 in 1994).This thesis presents an investigation into the parameters that affected thermal comfort level for in classrooms at Infra Sainstek UiTM JENGKA, PAHANG. This study only examines the effect of major variables influencing thermal performance on human being (students) such as air temperature, humidity, clothing, health condition and metabolic rate. The location of Malaysia, especially Jengka, Pahang, close to the equator, with the tropical region, it has a warm and humid climate, with high air temperature and high humidity level throughout the year.

The research was done using the Extech EA80 and recorded in the table following the parameters. Classrooms are chosen randomly. Students were randomly selected to answer the questionnaires. The number of students in classrooms range from 15 people to 30 people. Only 5 students will be selected to answer the questionnaires for every class involved. Students answer the questionnaires just before the end of the class period to ensure no effect due to acclimatization and more uniform metabolic rate. The result show that the questionnaire have been able to identify the parameter that affect the thermal comfort level in classrooms at Infra Sainstek , UiTM JENGKA PAHANG . Also know the optimum range of temperature setting for air conditioners in classrooms at Infra Sainstek, UiTM JENGKA PAHANG.

The study showed that the optimum temperature setting for air conditioners should be at 24°C. The study also proved that parameters such as air temperature, humidity, clothing and air quality do affect thermal comfort of occupants of a room.