DEPARTMENT OF BUILDING SURVEYING FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING MARA UNIVERSITY OF TECHNOLOGY SHAH ALAM

A STUDY OF THERMAL PERFORMANCE OF MEDIUM COST TERRACED HOUSES AT SHAH ALAM, SELANGOR

This dissertation is submitted in partial fulfillment of the requirement for the award of Bachelor of Building Surveying (Honours)

Prepared By : MD HANAFIAH AMIN BIN ABDULLAH Session : 2000/2002

-

DEPARTMENT OF BUILDING SURVEYING FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING MARA UNIVERSITY OF TECHNOLOGY SHAH ALAM

DISSERTATION BSV 695

APPROVAL OF DISSERTATION AMENDMENT

It is notified that this student has amendment his dissertation as ordered and therefore is given the permission to bind his dissertation

Student Name	: MD HANAFIAH AMIN BIN ABDULLAH
UiTM I/C Number	: 2000202860
Dissertation Topic	A STUDY OF THERMAL PERFORMANCE OF MEDIUM COST TERRACED HOUSES AT SHAH ALAM, SELANGOR
Session	NOV/APRIL 2002
Supervisor Name	PROF. MADYA SETI MARIAM BT. AYOP
Signature	•
	tone and B. 7. a patientale to the
Date	: 12/4/02

TABLE OF CONTENTS

A STUDY OF THERMAL PERFORMANCE OF MEDIUM COST TERRACE HOUSES AT SHAH ALAM, SELANGOR

	Page No.
Abstract	i
Acknowledgement	iii
Index	
i. List of Tables	viii
ii. List of Diagrams	ix
iii. List of Figures	XXXV
iv. List of Photos	
IV. List of Photos	xxxvi
CHAPTER 1 : INTRODUCTION	
1.1 Background	1
1.2 Problem statements	5
1.4 Objectives of the study	6
1.5 Methodology	7
1.6 Limitation of the study	11
1.7 Scopes of the study	11
CHAPTER 2 : CLIMATE AND HUMAN COMFORT	
2.1 Background	14
2.2 Influence of Culture and Technology to the	
Design of a House	15
2.3 Influence of Climate and Building Materials to the	
Design of a House	17

i

A STUDY OF THERMAL PERFORMANCET OF MEDIUM COST TERRACE HOUSES AT SHAH ALAM, SELANGOR

ABSTRACT

Thermal comfort can be defined as a subjective assessment to the conditions of environment. Therefore this dissertation will focus on thermal comfort performance in the residential houses as case studies, which related to building orientation and their design and microclimate or local environment. The study also consider weather the occupants of these houses are satisfied with thermal condition of the houses that they lived in by measured the actual parameters of the thermal conditions.

The study is important because the environment in many building, whatever domestic, commercial or industrial, is not at all satisfactory, is because the various problems that arise are not well understood. Many of the problems that may occur from the demand and followed by limitation of land, architect designs residential houses without taking into consideration sun movement, wind direction and other climatic elements that influence thermal comfort. Tall building, which obstructs the wind flowing into the house, blocks the residential houses.

Therefore, this dissertation will analyze and compare between three different locations at Shah Alam, which located at Section 7, Section 8 and Section 11. It is important to know the actual parameter of thermal conditions in the residential houses, which is thermally comfortable or not.

i

This dissertation also described about the design, materials, culture and technology, which may affect as a way to optimum thermal comfort to the indoor environment of the building with the proper controls techniques. So, research on micro-climate/ local climate, building orientation and building design to identified the outline of design considerations or procedures, in terms that it will be fully understood by building designer, building inspectors or building scientist to design the building during the design stage.

* Conditioning Sin Mr. Zon St.