# DEPARTMENT OF BUILDING SURVEYING FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING UNIVERSITI TEKNOLOGI MARA

1.	A STUDY	ON BUILDIN	NG DEFEC	TS PATTI	ERN
OF GO	VERNMEN'	Г OFFICE В	UILDING (	NEGERI	SEMBILAN)

"I hereby declare that this academic project is the result of my own research except for the quotation and summary which have been acknowledged"

Student's Name

Siti Safura Binti Jamaludin

**UiTM Student No** 

2008398091

Signature

ature

Date : January 2012

#### **ABSTRACT**

Building defect is a phenomenon common to most buildings. The variations arise in expressions of deliberate or rapid rate of defects occur. CIB 1993 interpreted defect as non-conformity with standard or shortfall in performance while ISO 15686-1:2000 define crack known as a fault or deviation from the intended performance of the building or its part. Repetition form of defects often occurs in the building such as Crack, Dampness, Fungus Stains and Harmful growth, Corrosion and Insect or animal attack.

The research method by carried out interviews session and observation from building condition survey to gain Building Defect Pattern data and details about Category of Building Defect Failure.

The data collection and analysis has shown the Building Defects Pattern and Category of Building Defect Failure that will be a reference to Government bodies before construct any office building that could reduce cost and risk of performance failure.

#### **ACKNOWLEDGEMENT**

In the name of ALLAH S.W.T, MOST BENEVOLENT and MOST MERCIFUL,

Selawat dan Salam to the PROPHET MUHAMMAD S.A.W

#### Assalamualaikum W.B.T

I would to express my appreciation to all those who helps and support in giving information, advise and by acting as sounding boards during the course of this dissertation.

Foremost, I would like to express my thanks to supervisor Sr. Ellemy Iskandar Khalid for giving technique and advising me to complete this research. Under his guidance there is no main problem arise.

In particular, my thanks go to all people at site (government office building) that help me during building survey/inspection conducted without them there is no data collection gained.

Finally, my gratitude goes to my beloved family and colleague for their supports and encouragement throughout all these years.

### TABLE OF CONTENTS

Description					
	Abstract	ì			
	Acknowledgement				
	Tables of Contents				
	List of Tables				
	Lifts of Charts				
	Lists of Figures	ix			
	Lists of Photos	x			
Chapter One : Introduction to the Topic					
1.1	Introduction	1			
1.2	Problems Statement	5			
1.3	Objective of Study	5			
1.4	Scope of Study	5			
1.5	Research Methodology	7			
1.6	Conclusion	11			

Chapter Arrangement of Dissertation

1.7

12

## Chapter Two: Literature Review

2.1	Introd	Introduction			
2.2	Type	Type and Causes of Defects			
	2.2.1	Crack	15		
	2.2.2	Fungus Stain And Harmful Growth	21		
	2.2.3	Dampness or excess moisture	22		
	2.2.4	Paints Defect	23		
	2.2.5	Corrosion	27		
	2.2.6	Defective Plastered Renderings	27		
	2.2.7	Defective Rainwater Goods	28		
	2.2.8	Insect or Termite Attacks	28		
	2.2.9	Concrete Defects	29		
2.3 Cate		ories of Building Defect Causes	40		
	2.3.1	Poor Building Material	40		
	2.3.2	Poor and Incorrect Workmanship	41		
	2.3.3	Wear and Tear	42		
	2.3.4	Design Failure	42		
	2.3.5	Construction Fault	45		
	2.3.6	Lack of Protection	45		
	2.3.7	Poor User Handling and Vandalism	46		