## INVESTIGATION ON THE PHYSICAL PROPERTIES

OF CLAY AND ENGINEERING BRICKS.

- BY:

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### CONTENTS

TITTLE			Page
ACKNOWLEDGEMENT			
SYNOPSIS			
CHAPT	rer o		
1.0	Genera	al	1
1.1	Objecti	ives	2
1.2	Scope	of works	2
	1.2.1	Non-Destructive test	2
	1.2.2	Destructive test	3
1.3	Dimensions		
	1.3.1	Work size	3
	1.3.2	Format size	3
1.4	Classification of bricks		
	1.4.1	Classification by variety	4 - 5
	1.4.2	Classification by quality	5
	1.4.3	Classification by type	6

# CHAPTER TWO : LITERATURE REVIEW .

2.0	General	7
2.1	Manufacture of bricks	
2.2	Wining and preparation	
	2.2.1 Forming	8
	2.2.2 Soft mud moulding	8
	2.2.3 Wire - cutting	9
	2.2.4 Pressing	9
	2.2.5 Drying and firing	9
	2.2.6 Firing or burning	10

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#### SYNOPSIS.

In developing country like Malaysia, the usage of bricks is very significant and wide range as construction material, commercial, recreational industrial. Bricks are local material which varies in properties from country to country. Bricks that are properly designed and constructed are one of our most durable materials that have never been in doubt.

The objectives of carrying out this study are to determine the compressive strength, flexural strength, the absorptability and permeability of bricks. The investigation on the strength behaviour of various types of locally produced bricks will be conducted. From the strength of bricks units, we can predict the strength of structural brickwork for use as load bearing wall.

### 1.0 General.

Bricks is one of the oldest building material. For hundreds of years, the word 'bricks' was exclusively associated with building units made of burnt clay. However in the modern usage, the words tends to be descriptive because bricks are now made from a variety of materials.

In the early day, bricks were made from mud, dried in the sun, then man discovered the strength and durability of bricks fired in a kiln. Through the nineteenth century, bricks were widely used in every kind of building and for wide range of engineering structure.

From the turn of the century to the present day, and despite the challenge from the other materials, brickwork has maintained its position as the leading structural medium. Although bricks is one of the oldest building materials, it is only in the past few decades that scientific principles have been successfully applied in the study on the physical properties of bricks, leading to the new concept of the brickwork design and construction.

This study is only concerned with the two most important types of brick which Clay Bricks and Engineering Bricks. The study is more on the properties.

1