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**BRICKWORK INSTALLATION
(LOAD-BEARING WALL)**

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ABSTRACT

Generally, brickwork is masonry created using bricks and mortar. Rows of bricks called courses are often put on top of one another to form a structure such as a brick wall. A building's walls are one of its most significant structural features. A wall serves several functions in the performance of a building, and these functions must be properly understood in required to design an appropriate and comfortable structure that also provides privacy and weather protection. Therefore, this report will discuss about brickwork installation for load-bearing wall. This report was conducted on one of a large-scale residential landed house area named Taman Nuri which is located at Durian Tunggal district in Melaka. The main objective of this report is to determine the method of wall bricklaying process of load-bearing wall. It will concentrate on a method use in wall construction and the way how it carried out. In addition, this report will emphasis on the overall bricklaying wall construction procedure. It also analyses the materials and tools needed in bricklaying wall construction techniques, as well as the problem and solution in wall building that would meet the load bearing wall specifications. At the end of this study, we can conclude that there are several methods that can be used in brickwork for load-bearing walls by using some mandatory materials such as mis of mortar and special tools used by the bricklayer while the process wall construction going on.

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CONTENTS

ACKNOWLEDGEMENT	i
ABSTRACT.....	ii
CONTENTS.....	iii
LIST OF TABLES	iv
LIST OF FIGURES	v
CHAPTER 1.0	1
1.1 Background of Study.....	1
1.2 Objective	3
1.3 Scope of Study	4
1.4 Methods of Study	7
CHAPTER 2.0	9
2.1 Introduction of Company	9
2.2 Company Profile	10
2.3 Company Organization Chart.....	12
2.4 List of Project.....	14
2.4.1 Completed Project	14
2.4.2 Project in Progress	16
CHAPTER 3.0	18
3.1 Introduction to Case Study	18
3.2 Methods of bricklaying wall process	22
3.3 Problems and solutions in brickwork installation of wall	31
3.4 Equipment and materials used in wall construction process.....	35
CHAPTER 4.0	41
REFERENCES	xlii

CHAPTER 1.0

INTRODUCTION

1.1 Background of Study

Housing or building is one of the most fundamental necessities for human life. Masonry is an unavoidable component of home construction. Brick masonry is one of the most frequently utilized types of masonry in our nation and worldwide due to its low cost, simple availability of raw materials, great strength, easy construction with little supervision, good sound and heat insulation qualities, and availability of labor (Peri Raghava,2015). Brick masonry is a composite material made up of systematically arranged brick pieces and mortar joints (Peri Raghava,2015).

A load-bearing wall, sometimes known as a 'bearing wall' is an active structural feature of a structure that sustains vertical load in addition to its own weight. Load bearing walls are used to transmit loads in a vertical manner. They often carry loads from a floor, beam, or roof structure to the ground. Load bearing walls, which are similar in principle to columns, simply transmit the load they are carrying by compression of the material they are constructed of (NFCC,2018). Load-bearing walls generally separate internal building areas and carry loads from other elements of the structure to the foundations (Load-bearing wall ,2019). A load-bearing wall often supports loads from the roof, any wall directly above it, and floors, which can occasionally be constructed into or rest on top of an interior wall. Concrete, blockwork, and/or brick are widely used to create load-bearing walls. The thickness of the load-bearing wall is determined by the kind of building, the number of levels that require support, the materials used to create the wall, and any other imposed loads (Load-bearing wall ,2019).

Failure of a load bearing wall is likely to result in the failure of one or more of the other structural elements, notably those listed above. Failure of part or all a load bearing column may also result in more of the overall weight of the building being shifted to other load