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CONSTRUCTION OF CLAY BRICKWALL

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ABSTRACT

Brickwall is a very important thing to elaborate, therefore this report will discuss about clay brickwall for the building envelope. This report was conducted for the building envelope at new Hospital Parit Buntar Perak construction. The objective of this report is to gain knowledge and information about clay brickwall and how far it fulfills the requirements in the guideline. It will focus on the method construction of clay brickwall and the equipments and materials used to construct a clay brickwall. This report also will discuss about the advantages and disadvantages of clay brickwall. Every objective will achieve with the own observation and interview with the worker of this construction site.

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CHAPTER 1.0

INTRODUCTION

1.1 Background of Study

Wall is a structure element used to divide or enclose a room in the building to form the periphery of a room or a building (Britannica, 2011). Traditional masonry construction required exterior walls to support the weight of floors and roofs, but modern steel and reinforced concrete frames, as well as heavy timber and other skeletal structures, only require walls for shelter and may dispense with them entirely on the ground floor to allow for easier access (Britannica, 2011). There are many type of walls such as load bearing wall, non-load bearing walls, shear walls, and brick masonry wall.

Load bearing wall is a wall that support own load and structural load and transfer it to the foundations (R. Chudley and R. Greeno, p.572, 2008). In General, the loads from slab transfer to the beams. After that, the load from the beams will transfer to the columns and then from the column, it will transfer to the foundation (Krishna, 2007).

Beside, Non load bearing wall is a wall that only support own load and do not accept any structural loads (R. Chudley and R. Greeno, p.572, 2008). Partition walls inside the building are the best example of it because the wall are constructed only to divide the rooms. This wall can be removed from the building without affecting the building structure (Krishna, 2007).

Shear wall is the wall that build around the water sump, lift pit, or staircase to retain the soil. Any shear wall is divided into 2 pressures: wind pressure and soil pressure, or wind pressure and water pressure. To counteract these forces, a shear wall is used. These walls are used to support the lateral force applied to the structure by wind, earthquake, or any other lateral load. (Krishna, 2007).

In addition, brick masonry wall is a wall that constructed with the bricks. Based on the building construction handbook seventh edition by R. Chudley and R. Greeno, there are four type of bonding such as english bond, flemish bond, special bonds and stack bond (R. Chudley and R. Greeno, p.307, 2008).