

DEPARTMENT OF BUILDING UNIVERSITI TEKNOLOGI MARA (PERAK)

CONSTRUCTION OF SINGLE STOREY BUNGALOW INTERLOCKING BRICK HOUSE

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ABSTRACT

Industrialised Building System (IBS) are also known as pre-fabrication that involve the manufacture of off-site components installation method has been introduced since 1960. Since 2003, the Malaysian government has been constantly encouraging the building sector to use the IBS method of construction through the Construction Industry Development Board (CIDB) to reduce the time consume when doing the construction. Each state in Malaysia is now assessing the IBS's progress and its ability to alleviate the country's housing shortages. The construction industry has begun to adopt IBS as a means of improving building quality and productivity, minimising occupational safety and health concerns, alleviating difficulties for trained employees and reducing reliance on manual foreign labour, and ultimately lowering total construction costs. IBS also contributes to have good progress in areas such as construction-site safety, as well as a cleaner, more convenient, and well-organized working environment. This study will focus on interlocking brick bungalow house at Al Ansar IBS PLT which is interlocking is one of the methods use in IBS. It will highlight the method use, identify the benefits and investigate the problem occurred with the solution that will be taken to solve the problems for interlocking brick house. The purpose of this research is to examine the evolution of interlocking brick and its structural behaviour. In conclusion, the interlocking system concept has been increasingly applied as a replacement for the conventional process, and it has been used as a load-bearing or non-load-bearing masonry system.

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CHAPTER 1.0

INTRODUCTION

1.1 Background of Study

The fast rise of today's construction sector has driven civil engineers to look for a new building technology that will provide even more advantages, be more efficient, and last longer than traditional brick. Furthermore, one of the factors driving the evolution of masonry traditional systems is the increasing demands for quick and low-cost construction systems among the customers. Industrialised Building System (IBS) has been introduced by Construction Industry Development Board (CIDB) Malaysia, one of the fastest ways for bungalow unit houses are suggested to use interlocking brick house as shown in Figure 1.1.



Figure 1.1 Interlocking Brick House (Source: <u>https://bangloibs.com/galeri-2/</u>)