DEPARTMENT OF BUILDING

UNIVERSITI TEKNOLOGI MARA

(PERAK)

INDUSTRIALISED BUILDING SYSTEM INSTALLATION FOR SINGLE STOREY HOUSE

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ABSTRACT

IBS was initiated since the 1960s here in Malaysia and therefore the IBS proved to be a great success. Not only it is improving the standard and affordability of the projects but it also efficient in accelerating the development of housing projects. The objective of this report is to provide readers with a summary of experiences and learning to date associated with the IBS construction of 1 storey residential house. The implementation of IBS has encouraged production of fine quality materials within a shorter period of time, with lower material and labour cost. The property of homes is consistent and reliable, helping ensure homes with a protracted duration. Growth in adoption will accelerate economies of scale, meaning greater savings will be unlocked in future. To sum up, IBS implementation is able to maintain a consistent level of quality in construction projects by meeting the demands of contractors and clients. The three main benefits of IBS implementation that were identified through the course of this study are, increasing construction site productivity; reducing the time for in-situ concrete mixing activities; and reducing the overall construction duration. The common denominator among these three main benefits is the capability of IBS implementation to reduce the time frame for construction product completion. At the same time, IBS implementation is also be able to create an advance construction site working environment, as there would no longer be massive in-situ wet concrete works.

CONTENT

CHAPTER 1.0

INTRODUCTION

1.1 Background of study

In Malaysia, the IBS was initiated since the 1960s here in Malaysia and therefore the IBS to has been proven great success. Not only it improve the standard and affordability of the projects but it also efficiently in accelerating the development of housing projects. The popularity gained in IBS has made it to be accepted by most construction firms. Returning to the whole concept of IBS, it's simply considered as a construction process within which components are manufactured during a controlled environment either on or off-site. These are transported, positioned and assembled into a structure with the minimum of additional site work

Figure 1. 1: An example of house with IBS method

The components of the IBS are materials that are supplied in factories. Building components which are often utilized in the IBS projects include walls, floors, beams and staircases. The IBS construction method can minimize the wastage after construction were done besides providing good quality results for consumers. The construction method of this kind is a process within the building components are designed, transported to the construction site and at last erected according to plans