

**DEPARTMENT OF BUILDING SURVEYING  
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING  
UNIVERSITY TECHNOLOGY MARA (UITM)**

**STUDY OF THE DEFECT IN PRE-CAST BUILDING**

**This dissertation was undertaken and completed  
as a requirement to obtain the Degree of Building Surveying (Hons.)  
from the Mara University of Technology, Shah Alam.**

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SESSION : FINAL YEAR (OCT 2004)**

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## **CHAPTER 1**

### **1.0 INTRODUCTION**

Industrialized building systems (IBS) are not new to the Malaysia construction industry. Over the years, there had been numerous efforts to introduce and encourage the use of IBS in Malaysia; ranging from the use of simple pre-cast of prefabricated components to integrated systems involving large scale production and installation systems.<sup>1</sup>

Industrialization in the construction industry will ensure higher productivity, reduce site works, ensure shorter construction time and improve quality, site safety and lower construction costs. According to one construction company, another plus point is labour efficiency as the pre-cast method use 30% less labour that the conventional method. With industrialization, a greater part of a building shall be made off-site and brought into site to be assembly.<sup>2</sup>

Industrialized building systems divide to modular system, prefabrication system and pre-cast concrete system. Pre-cast concrete system can be defined as the production away from the site of components traditionally constructed at the site. These components are known as pre-cast and they are produced by series in plants. In other words pre-cast is the opposite of cast-in-situ or conventional method. Discussing pre-cast will bring the industrialization of building into picture since pre-cast is the basis of industrialization of building is to achieve a maximum output with minimum construction time and cost.

<sup>1</sup> *Master Builder*. (Towards Industrialisation of the Construction Industry, 1<sup>st</sup> Quarter 2001, p 9)

<sup>2</sup> *Master Builders*. (Towards Industrialisation of the Construction Industry, 1<sup>st</sup> Quarter 2001, p 14).