

Final Year Project
Advanced Diploma In Civil Engineering
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THE STUDY OF THE PERFORMANCE
OF JOINTING SYSTEM
IN THE PREFABRICATED BUILDINGS

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ABSTRACT

Prefabrication can speed up the construction time. In Malaysia this system was implemented since the beginning of the Fourth Malaysia Plan. Most of the prefabricated system adopted are of panel system involving walls and slabs. With the exceptional of water leakage and seepage through joint; these prefabricated buildings are performing satisfactorily. The problem of leakage and seepage is due to the jointing failure in resisting wetness and dampness. The culture of taking 'splash bath' by our society make the condition worse especially at the bathroom area. Following to that the existing prefabricated system is reviewed to determine the factors that lead to this problem. Improvements on the quality of the joint is required. This can be done by providing water tight sheet for the single joint or go for drained joint. At the same time the workmanship of joint construction on site must be controlled. It must be done in proper procedure to attain the standard required. Another alternative is to adopt tunnel system or box system whereby the joint problem at the corners and between slab and wall can be eliminated.

CHAPTER 1 - INTRODUCTION

1.1 GENERAL

Prefabrication or precast in reinforced concrete involves a mould shaped to the required form, in which reinforcement is placed and then casted with concrete. The essential feature is that the mould can be used many times; without modification. Such casting is done either in a factory or at a fixed location at the site. The completed elements are finally transported to the erection area.

Particular types of building systems with highly standardized arrangements for the architectural and structural designs have been developed for certain types of housing and for light industrial buildings. Thus it would be an economic approach if the structural parts are prefabricated and the interior items such as partitions; windows and doors are factory-made. They are delivered to each dwelling as a package to be installed on site. Such systems are referred to as industrialized building system.