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Full Length Research Paper

Housing and analysis of design defects: A post occupational evaluation of private housing in Malaysia

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Housing provision and quality housing are two issues, which remained the subject of research and interest to researchers' and designers'. Whenever a designer completes the project, they are not fully aware of consequences of their design. Only through post occupational survey, the designer usually realizes the shortfall they have made during the design process. Unfortunately, such unforeseen conditions are the part of daily life for the end user of residential buildings in developing regions. The main purpose of this research is to understand and identify the causes of design tribulations and their effects on residential buildings at post occupational stage. This research circumscribes the issues and problems faced by the users of private housing at post occupational stage, which results in because of deficient design. These problems affect the users through unplanned maintenance to major repairs leading to danger of collapse. In order to evaluate these effects on buildings, case studies were conducted in housing stock of metropolitan areas of the Klang Valley in Malaysia. The finding reveals that the housing is experiencing common building defects for housing such as dampness, facade deterioration and sanitation problem.

Key words: Building maintenance, building survey, design maintenance, design tribulation, material selection, post occupancy survey, user implication, workmanship

INTRODUCTION

The concentrations of planning and design solution are cradled for maintenance issues related to design faults in built forms. Maintenance which emerges from design faults indicates that design has not been practiced in the perception of building maintenance, or that the construction phase has remained unchecked by the field experts. Reviewing the maintenance problems in various built forms reveals that the housing sector is the most effective of these activities.

House is an enclosure which presents the perception of peaceful and protecting environment. A house is

supposed to be a place/enclosure which is capable enough to accommodate ideas of living and work. In prehistoric days, caves were used to fulfil that requirement of living space as well as protecting its user from extremes climatic conditions. With the passage of time and advent of technology, the perception of shelter has changed its form in modern day housing. Under developing countries which normally have an unplanned growth, development and law, transient in almost all spheres of life, particularly in urban centres. Alarming rate of population growth is another problem faced by these countries which ultimately creates the demand for increased number of housing facilities. In modern days, house is a basic icon of shelter where people can plan to live and work under a protected environment. House or

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