

**CENTRE OF STUDIES FOR BUILDING SURVEYING
FACULTY OF ARCHITECTURE, PLANNING AND
SURVEYING
UNIVERSITI TEKNOLOGI MARA**

**A STUDY OF THE PROBLEMS IN MAINTENANCE DUE TO
DESIGN**

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**“I hereby declare that this academic project is the result of my
own research except for the quotation and summary which have
been acknowledged”**

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CHAPTER 1

1.1 BACKGROUND STUDY

Malaysia is one of the fast growing countries as followed the vision of Wawasan 2020 which is to become a developed country with first class infrastructure (Mohamad, 1991). He also mentioned that in order to fullfil the vision, the facilities and assets were extremely rapid developed especially building construction and infrastructure due to the need of organisation and society. Every country has its own architectural feature and that is how Putrajaya was developed. For example, in Putrajaya, the design and the colour of the buildings also differ from those usually found in this country. This is due to the association of architecture behind the Putrajaya future plan.

In recent years, number of high rise building is rapidly increasing in Malaysia. In addition the demand of living space and shortage of land which due to the increasing of density population also contribute to this phenomenon. As the number of building increase, the need to use the new construction materials, designs and technologies are becoming more essential. It is because; these are main consideration that should be done in a new building construction in order to become a developed country with a first class infrastructure.

However, to fulfill the demand of the new design of building accessibility of the new maintenance access is often taken for granted. This accessibility is important for maintenance as all the buildings have life cycle,

and maintenance is significant for them. Poor and improper building maintenance will definitely cause more damages and will costly works if left unattended in the future and this will effects the life cycle of the building. As known in Malaysia, buildings are built in accordance with several requirements and guidelines, such as Uniform Building by Law. Faulty and lack of understanding of the requirement will delay the time building approval which will be measured by local authority.

This research will review the problems and issues of maintenance with regards to building design. Accessibility for maintenance of every part of the building is essential and this should be considered by the architect during the design stage.

1.2 PROBLEM STATEMENT

Generally, buildings are need to be maintained after they have been used. The question is should maintenance be an important consideration during the design stages of a building?

Many old buildings or structures are often inadequately maintained regardless private or public. The windows, doors and other building elements and facilities commonly are the proof of lacking in maintenance and repair. As the buildings are old, the selection of materials and design may contribute towards the maintenance problems.

“The efficiency, convenience, life span, economic viability and appearance of any building can be affected by decisions taken and actions performed at any time in the history of a building project, from its initial conception to its final demolition. Designers should be involved in all these decisions, and their relationships with the other participants are of vital importance,” (Mills, 1994).

The following have been formulated against a background of study and the review of related literature and general perceptions:

The first and foremost is the architect’s attitude in focusing on complexity of design without considering maintenance aspects. It is assumed that designers are concerned only with the aesthetics value of their buildings. This study investigates that architects are more concerned with the visual outcome of their buildings than with the practical implications of carrying out maintenance on the building.