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**A STUDY ON DESIGN AND SAFETY ASPECT
OF BASEMENTS**

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OCTOBER 2008

ABSTRACT

This dissertation which titled **“A Study on Design and Safety Aspect of Basement”** is documented. The importance of design and safety aspect of basement is to define and clarify the problems of the basement. Otherwise, this research comprises the issues of design and safety aspect. For design are circulation of vehicles, parking space, type and level of basement. For safety aspect are flooding, ventilation, lighting and security system.

In this research including of 6 chapters to completed it. This dissertation based on objective. To achieve the objectives of this dissertation should be to study on design aspect of basement to achieve the goals of comfort and safe. For instance, to identify the safety aspect at the basement to prevent problems likes flooding, ventilation, lighting, and security system. Then, know the facilities management to overcome problems at the basement. Observation, interview session, and questionnaires to the respondents are methods in this dissertation. Case study on MARA Headquarter at Jalan Raja Laut, Kuala Lumpur were undertaken to highlight the details information especially at the basement. It is documented in chapter 4. Literature review consist in chapter 2 and 3 were more on topics design and safety aspect issues.

Data analyses for this research arise based on the observation, interview, and questionnaires. Interviews are direct to the Architect and Head of manager. Then, questionnaires consist of 50 respondents among MARA Headquarters.

Findings in this research that a study on design and safety aspect of basement in MARA Headquarters, Kuala Lumpur to be analyzed. From the findings, hopes the issues likes design and safety aspect will be noticed and to prevent the problems of the basement. Otherwise, facilities management is a part of this research.

To be concluded the design aspect likes circulation of vehicles, parking spaces, and level of basement have some problems was identified. Based on objectives, should be study on the design aspect of basement to achieve the goals of comfort and safe. So, the study must be proper to ensure the occupants at the basement feeling comfort and safe. There is circulation of vehicles that is one way in the basements. Then, have problems like parking spaces do not enough. In addition to this research, safety aspect likes issues of flooding, ventilation, lighting, and security system based on the objective of to identify the safety aspect of basement to prevent problems of that. Identify closely the types of safety aspect of basement to know the level of convenience system in the basements to ensure the system good in operating. Problems like sump pump do not function well, lack of installation services and other related in this research.

To recommended that the design and safety aspect of basement at MARA Headquarters, Kuala Lumpur should be improve. The items to be improving are repairing or new installation of lighting (fluorescent lamp) and mechanical ventilation at the basement. Otherwise, changes the sump pumps if do not operate properly and create new parking spaces. The recommendation is a solution to upgrade the quality at the MARA Headquarters basement.

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