

UNIVERSITI TEKNOLOGI MARA

**ESTABLISHMENT OF BEST
PRACTICE FOR MEANS OF ESCAPE
IN GREEN BUILDING-ADAPTED
HOSPITAL**

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ABSTRACT

Hospital can be described as a complex concept of building. The safe evacuation to the occupants in case of fire to place of assembly is essential. However, excessive design of green elements adaptation in hospital building could lead to difficulty during evacuation. This research aim to establish the best practice of Means of Escape for green building-adapted hospital. There are three objectives of this research. First, to identify the fulfilment of the design criteria of Means of Escape required by Uniform Building By-Law and other building regulations in hospital building. Second, to determine the functionability of the building design towards the existence Means of Escape in hospital building. Third, to evaluate the effects of the integration between green elements and fire safety towards Means of Escape in hospital building. A comprehensive literatures review on the design criteria of means of escape, green elements and its effect towards fire safety in hospital building are carried out. A mixed-method approach is used with strategies that involved qualitative and quantitative data collection. The data collection is conducted in four phases. Three public green building-adapted hospitals in Malaysia are chosen as case studies and anonymously label due to privacy and confidentiality. The data collection is begin with preliminary studies, followed by Audit Checklist 1, Audit Checklist 2, and Audit Checklist 3. Data collected by using several methods which are archival documents, direct observation auditing, and open-ended interviews. The data collected are analyse using various tools, such as document analysis, ATLAS.ti, walkthrough journey experience, content analysis, weighting system and statistical analysis. Findings from this study found that among three hospital buildings (Hospital A, Hospital D, Hospital E), Means of Escape in Hospital A has achieved the best practice in Means of Escape as well as best practice for integration between green elements and fire safety. Besides, this research found that it is important to ensure the adaptation of green elements in a hospital building does not withdraw the important of fire safety specifically to means of escape.

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