

THE OPTIMUM ESCAPE ROUTE DESIGN SPECIFICATION  
FOR HIGH-RISE HOTEL BUILDINGS

LING TZE YIENG

A thesis submitted in fulfillment of the  
requirements for the award of the degree of  
Bachelor of Science in Construction

Faculty of Built Environment  
Universiti Teknologi Malaysia

MAY 2011

## ACKNOWLEDGEMENT

First and foremost, I would like to express my sincere gratitude and appreciation to my research supervisor, Dr. Yahya Mohamad Yatim. Without his precious advice, guidance, and comments, this research would not be possible to complete. Thanks for his valuable time, advice and guidance shared with me. Apologize also goes to him for any inconvenience brought to him during the entire period of this research.

In addition, not forgot to thank all the hotels' owners for their cooperation and useful information given. I would also like to express my sincere gratitude especially to Department of Quantity Surveying, Faculty of Built Environment, Universiti Teknologi Malaysia for providing adequate facilities in supporting relevant literatures.

I would also like to take this opportunity to express my appreciation to my friends and seniors for their valuable advice and opinion. Unfortunately, it is not possible to list out all of them in this limited space. Finally, I wish to thank my beloved parents and family members who have been giving a great support and confidence to encourage me in carrying out the research. Million thanks to all.

## ABSTRACT

There are not much research was carried out in Malaysia concerning escape route design in high-rise hotel buildings. However, more and more high-rise hotels were constructed nowadays to fulfil the high demand of lodging by the tourists. The study investigated the escape route design specification in high-rise hotel buildings in Johor Bahru City Centre and Johor Bahru Tengah. The research objective was to evaluate the escape routes design on corridor and staircase specifications in high-rise hotel buildings by comparing to the specifications stated in Uniform Building By-Laws (UBBL) 1984. Five high-rise hotel buildings located in Johor Bahru City Centre and Johor Bahru Tengah have been observed. Data were collected using developed checklist and some photos of escape routes were taken for further analysis. From the analysis, it was found that the existing high-rise hotel buildings failed to comply with some specifications stated in UBBL in terms of escape route design such as the number of handrail provided in wide staircases and letting size in signage affixed on doors.

## ABSTRAK

Tidak banyak kajian telah dilakukan di Malaysia tentang rekabentuk laluan melarikan diri pada bangunan hotel aras tinggi. Namun, semakin hari semakin banyak pembinaan bangunan hotel aras tinggi untuk memenuhi permintaan penginapan para pelancong yang datang. Kajian ini menyelidik tentang spesifikasi rekabentuk laluan melarikan diri dalam bangunan hotel aras tinggi di Bandaraya Johor Bahru dan Johor Bahru Tengah. Objektif kajian ini adalah untuk menilaikan rekabentuk laluan melarikan diri pada spesifikasi koridor dan tangga dalam bangunan hotel aras tinggi dengan membandingkan spesifikasi dinyatakan dalam Undang-Undang Kecil Bangunan Seragam (UKBS) 1984. Penyelidikan telah dilaksanakan terhadap lima bangunan hotel yang terletak di dalam Bandaraya Johor Bahru dan Johor Bahru Tengah telah diselidiki. Data telah dikumpul dengan menggunakan senarai semak yang telah dibentuk dan beberapa keping gambar laluan melarikan diri juga diambil untuk dianalisis dengan lebih lanjut. Daripada analisis, didapati bahawa terdapat bangunan hotel aras tinggi telah gagal untuk memenuhi sesetengah spesifikasi yang dinyatakan dalam UKBS dari segi rekabentuk laluan melarikan diri seperti jumlah pegangan yang disediakan dalam tangga lebar dan juga saiz huruf dalam papan tanda yang ditampalkan pada pintu.