



Building Surveying Department
Faculty of Architecture, Planning & Surveying
University of Technology MARA
Malaysia

Academic Project :

**DESIGN CONSIDERATION AND FACILITIES FOR FIRE PROTECTION
SYSTEM AT KUALA LUMPUR SENTRAL STATION**

Prepared By :

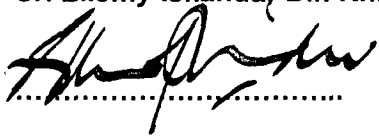
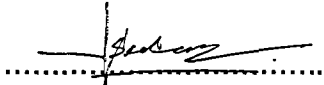
Mohamed Iskandar Gadaffi Bin Mohamed Hariri
Bach. of Building Surveying (Hons.)

November 2007

Building Surveying Department
Faculty of Architecture, Planning & Surveying
University of Technology MARA
Malaysia

**DESIGN CONSIDERATION AND FACILITIES FOR FIRE PROTECTION
SYSTEM AT KUALA LUMPUR SENTRAL STATION**

*"I declare that this Academic Project is the result of my own research and that all
sources are acknowledged in the references"*

Supervisor's Name : Sr. Ellemmy Iskandar Bin Khalid
Supervisor's Signature : 
Student's Name : Mohamed Iskandar Gadaffi Bin
Mohamed Hariri
Student's Signature : 
Date : 23rd November 2007

ACKNOWLEDGEMENT

First and foremost, thank you to Allah S.W.T for His blessings and bestow to me with patience, perseverance and high spirit.

I owe my special thanks to my supervisor, Sr. Ellemy Iskandar Bin Khalid for spending valuable time helping me to solve the problems that I had encountered during the academic project progress and always been very supportive person and with his guidance and advices, gave me many valuable lessons.

In this opportunity, I would like to convey a million thanks and appreciation to the management of Kuala Lumpur Sentral Station that is Semasa Sentral Sdn. Bhd., Keretapi Tanah Melayu Berhad (KTMB), Fire and Rescue Department Malaysia and to all the persons involved in helping and giving all the information related with the academic project studies.

Special thanks also to all my friends for their assistance and guidance throughout the duration of this academic project.

Finally, thank you to my beloved family especially to my parents who always have strong faith in me and provide me countless support in terms of time, materials and morals. Thank you so much.

ABSTRACT

Tragically on the scenario today, quite often without any mistake, the occupants fall victim to fire. Besides damage to their belongings and property, some occupants are burned to death for not knowing what they supposed to do in the event of fire. Public transportation building is one of the buildings that are not except of expose to the fire event. Building complex with terminal rapid transit station such as Kuala Lumpur Sentral Station is daily received large public users. Base from this situation, suddenly without doubt cause a questionable issue on how the design of this building is managed to evacuate occupant safely from the fire event and how effective is the operation of fire protection system on helping to save and reduce casualties of building users and occupants from the event of fire, if it is happen to Kuala Lumpur Sentral Station. Fire outbreaks occur as a result of human factors, such as carelessness, negligence or simply lack of fire safety awareness. In response to this, the study that has been done presents the results of investigation on design consideration and facilities for fire protection system at Kuala Lumpur Sentral Station. The objectives of the study at Kuala Lumpur Sentral Station are to study the design considerations in terms of fire safety and the operation of fire protection system implemented at the building including rapid transit station; to identify the aspects that influence an effective fire protection and facilities management system and the most critical weakness in terms of implementation; and finally is to identify the methods to enhance fire

safety of Kuala Lumpur Sentral Station. The methodology for conducting the study involved literature review, data collection and analysis of results using the Average Index Method, chart and graph. The process of data collection involved obtaining primary data from the respondents by conducting questionnaire surveys at the Kuala Lumpur Sentral Station. From this study, it is determined the three most critical aspects that influence an effective fire protection and facilities management system and the three best methods to enhance fire safety of Kuala Lumpur Sentral Station. It is hoped that this study will provide some useful insight on the important aspects that influence an effective fire protection and facilities management system at Kuala Lumpur Sentral Station and also help guide building users to safeguard both their and property if the fire event occur inside Kuala Lumpur Sentral Station.