

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

NATURAL AND ARTIFICIAL LIGHTING IN FOODCOURT

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**Academic Project submitted in partial fulfilment of the requirements
for the degree of
Bachelor of Building Surveying (Hons)
Centre of Studies for Building Surveying
Faculty of Architecture, Planning & Surveying**

December 2014

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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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Date : January 22nd , 2015

i. ACKNOWLEDGEMENT

I would like to express the deepest gratitude to everyone who helped to bring this research completion. First of all, I would like to thank my supervisor, Pn Julaida Bt Kaliwon, who had guide me to complete this research for my course during this past year. I am so deeply grateful for her help, professionalism, valuable guidance and time support throughout this project.

Second, I would like to thank UiTM Staff from Environment laboratory who cooperation while this research is made. Deep appreciations to this staff for giving permission to borrow equipment used to collect data and guidance from them on how to use the equipment correctly by minimize the error.

Third, I would like to express my gratitude to Management team for these three case studies for allow me to make an observation, data collection for this research paper.

Next, I would like to thank the public who give their cooperation and time to complete the questionnaire distributed in three different case studies which are Setia City Mall, IKEA Damansara and Alamanda Putrajaya and deepest appreciation to these 75 respondents.

Finally, I would like to thank my parents and friends for providing me with unfailing support and continuous encouragement throughout my years of study and through the process of researching and writing this research. Besides that, they also give financial support to ensure this research paper able to complete on time. This accomplishment would not have been possible without them. Thank you.

ii. ABSTRACT

Natural and Artificial lighting are two types of lighting that been used widely in food court area. The balancing usage of these two sources of light will contribute in energy efficiency for building. The energy efficiency will help in saving energy used and listed as Green Building. Energy efficiency is one of the criteria for rating that takes the energy saving for the building entitle as Green Building. High demand of shopping complex and rapid development in Malaysia cause excessive usage of energy in commercial building had drawn construction industries towards green building technology. The awareness of public about sustainability practice in food court for commercial building on natural and artificial lighting in Malaysia is still low. The activities held in these three case studies, location of opening and building itself had affected the light received in those areas. Data were collected by using observation on that area and distribution of questionnaire to public in those case studies. The illuminance of light in those case studies had determine by using equipment called lux meter. Together, these findings suggest that wide area of opening and numbers of opening installed in food court area to allow maximum amount of natural lighting penetrate and minimize the usage of energy. Besides that, level of awareness about the energy efficiency among public and industries increase through more exposure about Green Building.

Keyword: lighting, energy efficiency, awareness, illuminance, opening

CHAPTER 1: INTRODUCTION

1.1 STUDY OF BACKGROUND

The effort to make the earth a better place in the future had been explain in various ways. One of them is in construction industry. As we know, most of the country is facing a development phase including our country which is Malaysia. Therefore, green issue is one of the serious topics that must be discussed. In order to become a green country, they must imply the green technology.

In the construction industries, there are a few technology and indicator that help some organisation to evaluate the stage of green for a building. One of them is Green Building Index. Green Building Index is the rating system for the building in environmental aspects and it is been developed by PAM which is 'Pertubuhan Arkitek Malaysia' and ACEM which is 'The Association of Consulting Engineers Malaysia' ("Green Building Index," 2013)

Based on Greenbuildingindex Sdn Bhd (2013), there are six main criteria for the evaluation of Malaysian building's environmental design and performance. There are the energy efficiency, the indoor environment quality, the sustainable site planning and management, the materials and resources, the water efficiency and the innovation.

In the evaluation states, the building will be rate into four classes that represent the rate of green building according to Green Building Index which are platinum class