

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

DIAMOND BUILDING IN ACHIEVING GREEN BUILDING CONCEPT

**SHAMSUL ASHRAF BIN SAMSUL BAHRI
(2011808622)**

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

July 2013

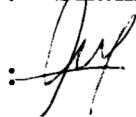
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Student's Name : Shamsul Ashraf bin Samsul Bahri

Signature

: 

UITM No. : 2011808622

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BSB 608 & BSB 658**

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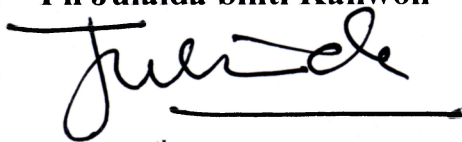
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Student's name : Shamsul Ashraf bin Samsul Bahri

UITM No. : 2011808622

**Title : Diamond Building In Achieving Green Building
Concept**

Supervisor's Name : Pn Julaida binti Kaliwon

Signature : 

Date : July 15th 2013

JULAIDA KALIWON
Pensyarah Kanan
Jabatan Ukur Bangunan
FSPU, UiTM, 40450 Shah Alam
Selangor Darul Ehsan.

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Name of author : Shamsul Ashraf bin Samsul Bahri
Authors I.D : 2011808622
Programme code : AP229
Faculty : Faculty of Architecture, Planning and Surveying
Dissertation title : Diamond Building in Achieving Green Building Concept

Signature of

Candidate

:  _____

Date

: July 15th 2013

ABSTRACT

The Energy Commission of Malaysia is a statutory body responsible for regulating the energy sector particularly the electricity supply and piped gas supply industries in Peninsular Malaysia and Sabah. The tasks of the Energy Commission is to ensures that the supply of electricity and piped gas to consumers is secure, reliable, safe and at reasonable prices. The Energy Commission headquarters is located at Precinct 2, Putrajaya adjacent to Taman Pancarona, and a public landscape garden. This building is inspired by the original form of the diamond, which form symbolises transparency, value and durability; characteristics which represent the Energy Commission's role and mission as a regulatory body. The diamond shape is found to be the most aerodynamic and effective form to prevent air infiltration through the advantage of tilted facade. The Atrium has been designed to optimise daylight utilisation with reflective panels and an automatic roller-blind system responsive to the intensity as well as the angle of the incident sunlight. In addition to providing a high quality indoor

The objectives of this research are to understand the general concept of green building which will be used as the guidelines; to study the green building criteria's in Diamond building as standardised in Green Building Index (GBI); to study the effectiveness of application of green building concepts in Diamond building and to study on the tools use for the diamond building to achieve the green building.

The methodology in conducting the study involves literature review, data collection by interview and case study and analysis results in a narrative method. The process of data collection involved obtaining primary data from the respondents by distributing two set of questionnaire, by interviewing the maintenance team and by taking the reading of lux in the Diamond building according to four zone namely zone A, zone B, zone C and zone D.

The results show that the concept of green building applied at Diamond building is achieved from the distribute questionnaire data, from interview data and from the lux reading data. In other hand, by applying green concept, it gives many benefits to all parties that involved not only to the owner and contractor only. Lastly, all the 6 elements of green building are being applied in the Diamond building and that make the Diamond building getting the Platinum rating of Green Building Index (GBI).