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**Building Crack Pattern at University Technology Mara
Shah Alam**

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ABSTRACT

This research is all about the crack pattern of a building in University Technology Mara Shah Alam. Many defect can be found in buildings but crack defect that is more danger and this type of defect can cause building collapse. For more understand about the crack pattern, the inspection will be carry out to know what is the real pattern of crack of a building itself. During the inspection, photograph is taken to be use during the data analysis after the inspection on site is carry out. The objective of the study is the main key to this study to know what is the finding that we will get.

This study is important because of the people expectation and realization on crack problems in Malaysia is at the lower rating. This study is help people to know what is the pattern of crack can be found and to make people familiar with the crack pattern. The case study is choose because UiTM Shah Alam have many problem on crack. The crack is easily can be found at every building facades in the case study.

Form the data analysis and finding, the conclusion is make from the result of the finding. The overall conclusion is make so the recommendation on that problem of crack can be find directly.

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Finally I hope this dissertation will be guidance and reference to the related organization towards the future.

ABSTRACT

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1.0 INTRODUCTION

This topic is all about the crack pattern of Academic Institution buildings which University Technology Mara Shah Alam. Many defect can be found in buildings but crack defect that is more danger and this type of defect can cause building collapse.

Crack is categorize as building defect of building structure, it always relate to the poor workmanship, improper method and quality of material use in a construction. Some people are not aware about the surrounding environment especially the building that they

live and work everyday. For example the crack of an academic institution building structure may cause dangerous to the occupant in the building. People in this building threatened to the potential of buildings collapse if the crack is at the critical part of the buildings such as column and beam.

The reason why this research is important in relation to take the preventive action in avoiding the crack that cause by the failure of a construction. They can also occur due to thermal movements, chemical reactions, elastic deformations or shrinkage etc. They can damage plaster of walls, ceilings, destroy the structure and can also be dangerous to occupant.

The crack pattern of some academic institution buildings is because the failure of column, beam, wall, pillar and etc. Moreover, the stress distribution within the load-