

## CASE STUDY THE CRACKS IN BUILDING AT BLOCK G, KOLEJ VOKSIONAL MUAR, JOHOR

### Abstract:

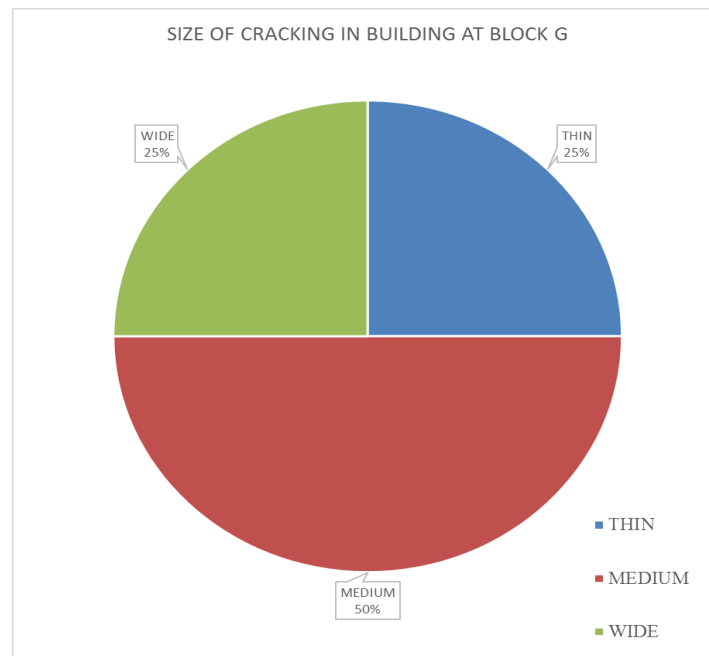
Cracks in a building are of common occurrence. A building component develops cracks whenever stress in the component exceeds its strength. Cracks are classified in to structural and non structural categories. The objective of this case study are to study the type of cracks of the building and to identify the awareness of students about the crack of the building. From data and analysis the method have been use on this case study are by identified and classified the type of cracks of the building and from questionnaire. The size of cracking in building at block G, Kolej Vokasional Muar and the highest size of cracks is medium size which is 50% while the thin and wide size are 25%. From this case study we can conclude that the building structure can be occupied and safe for the students and the teachers. Most of cracks are not serious. The cracks does not have to be maintenance in the short term. The most of cracks occur due to soft soil of the place. The building can be occupied for the long term. The crack width and orientation can be measured by using the crack width gauge. If the crack is continuously increase in certain period.

**Keyword:** Develops cracks, structural and non structural categories, building structure, crack width and orientation

### IP no:

### Finding:

The pie chart below shows the size of cracking in building at block G, Kolej Voksional Muar. The highest size of cracks is medium size which is 50% while the thin and wide size are 25%.



### **Suggestion for future work**

Based on the finding and conclusions of the study, here are several recommendations to be considered:

- i. The researcher must increase the research to make a concrete free from cracks.
- ii. Structural evaluation must be making every year to find out the current status of the buildings.
- iii. Check for predicted extreme temperature variance during the first 24 hours of expected placement.
- iv. Review the mix design to ensure the mix is using the lowest water content for workability/performance purposes. Excessive water in the mix may contribute to the possibility of shrinkage.
- v. Review the mix design to ensure the maximum size of coarse aggregate is used. This will help to minimize the water used in the mix.

### **Picture related to project**



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