

# **A Study on the Common Variation Occurring in the Residential Projects in Malaysia**

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## **ABSTRACT**

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Construction project encountered various problems. One of the issues faced by the construction project is the issuance of variation order. Variation order is now a common occurrence in all types of projects. Variation is a change or modification of the original scope of work to be made. The aim of this research is to investigate common the variation occurring in the residential projects throughout the Malaysia. To achieve the aim of the study, three objectives are identified. (1) To identify the factor causes the occurrence of variation order through the literature review. (2) To identify the most common variation that normally occurs on the residential building by conducting a questionnaire survey. (3) To identify effectiveness methods to minimise the occurrence of the variation order. In order to identify most common variation occur in the residential project, a questionnaire survey method was selected. The questionnaire was distributed to Developer, Consultant and Contractor firms within Klang Valley area. Collected data was analysed by using Microsoft Excel. The findings shown that top five of most common variation occurring on the residential project are 'change in design', 'changes in Specification by the Client', 'drawing errors and/or omission', 'design discrepancies' and 'changes in Specification by the Consultant'. Moreover, the result of the research showed that clear and thorough project brief is most effective method to control the occurrence of variation during Pre-Contract stage, whereas, continuous coordination and direct communications can be effective in minimizing the variation.