

# ***ICRMBEE2021: THE 5th INTERNATIONAL CONFERENCE ON RESEARCH METHODOLOGY FOR BUILT ENVIRONMENT AND ENGINEERING 2021***

## **Exploring the Hurdles and Solutions in Procuring IBS Components for Malaysian Housing Projects**

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**Abstract.** The adoption of industrialized building system (IBS) needs different method to cope with its dissimilar with traditional construction as it requires different process on design, installation and precision, but yet IBS always been treated the same as conventional projects. This cause problems and thus, this study provide a questionnaire survey comprising 24 questions delivered to experienced professionals who involved in Malaysian IBS housing projects. The aim is to ascertain the challenges and suggest solutions on procuring the IBS components focusing for Malaysian IBS housing. The collected result was then verified through several semi-structured interviews with experienced professionals from various field involve in IBS. This study finds that the main challenges in procuring IBS components are surround by factors on price, logistical barriers, and inadequacy on terms of agreement, The result also revealed in most IBS housing projects, the contract agreement between IBS manufacturers and main contractors were often breached especially on payment mechanism, amount and delivery time. Due to payment problems, some IBS manufacturers take unilateral action by stop delivery the IBS components, causing delay to the project, while others pursue the case to court, which also prolong into litigation. Contribution of this research is on the highlighting several urgent issues in the context of procuring IBS components for Malaysian housing. The findings reveal due to the unsolved issues, IBS targets to reduce cost and faster completion is hard to achieve, while exposing the project to end with delay or litigation.

**Keywords:** Industrialized building system, Procuring IBS components; IBS components; IBS Installation; Housing projects Malaysia.

### **1. Introduction**

The adoption of IBS in housing projects had been widely practiced worldwide especially in developed countries. For example, since after World War 2, IBS had became the top priority for the United Kingdom government in encouraging innovations for better housing construction (Nadim & Goulding, 2010). Besides UK, other countries such as Australia, Sweden, Denmark, Singapore, France and Hong Kong also followed the same practice (Nawi et al., 2018).