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Installation IBS Components in Malaysian Housing Projects; The Difficulties and Solutions

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Abstract. Most contractors choose to install IBS components without having supervision as this require additional fees, and due to their lack of expertise the installations likely facing defects problems. To adopt IBS require detail precision and proper process, if not, the IBS will not bring faster and cost effective but instead expose to spending more time to plan or rectify the defective works. Therefore, identifying the difficulties in conducting installation of IBS components is paramount, especially on the need for supervision work. Without proper supervision during installation, the IBS in housing projects will not only expose to delay, quality disputes, and design clashes but will also cause misconceptions and warranty issues. In this study, a questionnaire survey were designed to determine the challenges on installing IBS components with supervision and propose suggestions to solve them. After gaining the questionnaire result, the data were validated through semi-structured interviews, which aim to analyze the various views from all relevant stakeholders. The results reveals that the main challenges in installing IBS components are on the difficulty to find skillful supervision and installation team, cost for supervision fees, and the handling of IBS components. As for solution, respondents emphasized that the IBS installation can be improved if supervision during installation is regulated and make it as mandatory, provide clearer method statement and constant monitoring. While most previous research only focus to IBS process, supply chain, cost reduction, best practices etc., this research's major contribution to the body of knowledge is on highlighting the crucial issues and the needs for supervision during IBS components installation and suggest solutions to overcome the challenges.

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

1. Introduction

The government had launched numerous efforts to increase the performance of local construction and housing projects, including implementing industrialized building system (IBS). The housing sector is the most suitable because of its nature that having repetitive design, build for many units at one time, large scale, require fast construction within controlled budget and to fulfill the demand in a fixed period