INTERNATIONAL CONFERENCE ON INTEGRATED URBAN PLANNING 2021 (ICIUP2021)

Housing and Settlement

Procuring Precast Components for Residential Projects in East Malaysia; Hurdles and Solutions during Covid 19

Ahmad Bin Abd Jalil, Shazwan Mohamed Shaari, Siti Syariazulfa binti Kamaruddin

ajahmad@unimas.my, msshazwan@unimas.my, kssyariazulfa@unimas.my

Abstract: In every Malaysia Plan (now Rancangan Malaysia Ke -12), shortages of housing has been key issue, including in East Malaysia, the state of Sarawak and Sabah. This has been worsened due to pandemic of Covid 19 where many residential projects had to be stopped or conduct with strict SOP due to outbreak prevention, and government enforcement towards illegal construction foreign workers. Since 1960s, Malaysia had launched many programs to improve better quality for residential and reduce dependency on foreign workers. One of the major steps taken was through the adoption of precast housing within the concept of industrialized building system (IBS). In East Malaysia region, the concept of precast housing had been applied but face many difficulties especially in procuring precast components, and when problems happen such as pandemic outbreak, coupled with scarce of foreign workers, precast housing face heavier burden. Unlike traditional method, precast housing has dissimilar process in term of fabrication, precision of components, installation, and logistics, but many developers treat this concept as similar to traditional construction. This study investigates the hurdles of procuring precast components for residential projects in East Malaysia and suggest solutions to overcome the difficulties. A number of respondents that consist of developers, contractors, IBS pre-casters and consultants had participated. This research use mixed method where the data comes from questionnaires and interviews with the expert. The findings revealed that the obstacles in procuring precast components are mostly on factors of transportation, term of agreement and higher cost and due to these unsolved issues, some pre-casters choose to stop delivery of the components causing delay to the project, while some prolong the disputes to court. This research contributes to the body of knowledge by enlisting the difficulties in procuring precast components and suggesting ways to solve those problems for housing projects in East Malaysia, especially when facing unexpected challenges such as pandemic.

Keywords: Industrialized building system, Housing and Settlement; IBS components; Housing projects East Malaysia.

INTRODUCTION