Technology Blending as an Innovative Construction Mechanism in the Global South

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Abstract : This paper aims to discover the best ways to improve production efficiency, cost efficiency, community cohesion, and long-term sustainability in Ghana's housing delivery. Advanced Construction Technologies (ACTs) are set to become the sustainable mainstay of the construction industry due to the demand for innovative housing solutions. Advances in material science, building component production, and assembly technologies are leading to the development of next-generation materials such as polymeric-fiber-based products, light-metal alloys, and eco-materials. Modular housing construction has become more efficient and cost-effective than traditional building methods and is becoming increasingly popular for commercial, industrial, and residential projects. Effective project management and logistics will be imperative in the future speed and cost of modular construction housing.

Keywords: technology blending, sustainability, housing, Ghana

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