World Academy of Science, Engineering and Technology International Journal of Architectural and Environmental Engineering Vol:15, No:12, 2021

Amphibious Architecture: A Benchmark for Mitigating Flood Risk

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Abstract : This article aims to define strategies for applying innovative technology so that housing in regions subject to floods can be more resilient to disasters. Based on case studies of seven amphibious and floating projects, it proposes design guidelines to implement this practice. Its originality consists of transposing a technology developed for fluctuating buildings for housing types in regions affected by flood disasters. The proposal could be replicated in other contexts, endowing vulnerable households with the ability to resist rising water levels after a flood. The results of this study are design guidelines to adapt for houses in areas subject to flooding, contributing to the mitigation of this disaster.

Keywords: amphibious housing, disaster resilience, floating architecture, flood mitigation, post-disaster reconstruction **Conference Title:** ICAADE 2021: International Conference on Amphibious Architecture, Design and Engineering

Conference Location : Sydney, Australia **Conference Dates :** December 02-03, 2021