

Development and Evaluation of Hollow Concrete Interlocking Block Masonry System

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Abstract:

This paper presents the conceptual design and development of a hollow interlocking concrete block masonry system (IITM-HILBLOCK), which conforms to the requirements of shape simplicity and ease of manufacture. The behavior of dry-stacked and thin-jointed unreinforced short masonry specimen (prism/wallette), both without and with grouting, is discussed for concentric and eccentric compression and flexural loading with bending parallel and perpendicular to bed joints, respectively. The study has shown that HILBLOCK masonry exhibited high structural efficiency similar to conventional mortar bedded concrete hollow block masonry.

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DOI: 10.70803/001c.130934

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