

AAC-concrete light weight precast composite floor slab.

ABSTRACT

In this study, the use of Autoclaved Aerated Concrete (AAC) as an in fill material for semi precast panel is investigated experimentally. The effectiveness of proposed light weight slab is reached by comparing the behavior of specimens with that of conventional solid precast slab. The comparisons were based on structural performance and total weight reduction. The composite AAC slabs section chosen are one way slabs with a size of 1m × 3m × 0.130 m (Width × Length × Depth). The specimens vary in the AAC blocks layouts and total weight reduction ratio. The test results showed that the AAC composite precast panel provides reasonable weight reduction without sacrificing the structural capacity.

Keyword: Composite; Light weight slab; Aerated concrete; Ferrocement