Evaluation of Shear Strength of Reinforced Concrete Slabs Connected by Hinged Joints

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ABSTRACT

Lately outmoded and functionally obsolete buildings are often remodelled and restored. When existing reinforced concrete (RC) apartments are remodelled, one of main reasons of the remodelling is to expand dwelling space. The experimental or theoretical research on plane expansion of RC apartments is quite scarce. In this research, 9 RC slabs connected by hinged joints were tested. The test results indicated that the shear strength of the RC test slabs having various types of dowel bars was about twice that calculated by the ACI 318-02 code.