

8. Experiment of Flat Plate Structure

-Part1 Horizontal Loading Tests-

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Free space composition is attained with flat plate structure without a beam, however, flat plate structure is used an earth resisting element together, since sufficient rigidity and strength are not securable to earthquake power. However, if the flat plate structure which can absorb a earthquake power can be used, other earth resisting element will be lessened as much as possible, and simple structure without a beam type can be realized.

In order to grasp the structure performance of flat plate structure receiving earthquake power, the horizontal loading tests was carried out. As a result, the following facts were confirmed, Bending strength of slab can be evaluated by design formula of Beams, Failure type of bodies for bending failure was as assumption, and, A rapid decrease of strength was not caused by reinforcement around column.

Key words : flat plate, reinforced concrete, slab, slab-column joint