ABSTRACT

STRUCTURAL ANALYSIS OF SLAB
AT HOTEL SANTIKA BATAM

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Thin structure consisting of reinforced steel reinforced concrete, with horizontal plane direction and perpendicular to the load received. So that it can withstand the compressive and tensile forces that come from dead loads and live loads which will then be distributed to vertical elements such as columns called reinforced concrete slabs.

Reinforced concrete reinforcement systems can be divided into 2, namely, 1-way reinforcement systems and 2-way reinforcement systems. This is determined by the x and y spans of the slab. If ly / lx ≤ 2 it is called a 2-way plate.

Based on the results of the analysis of the floor structure of the Santika Batam Hotel Building which has been calculated by the author, the reinforcement system used is safe and can withstand the moment bending force with iron in the x span using D10-150 mm as the base reinforcement and D10-150 mm as the reinforcement. And for the stretch y, use D10-150 mm iron as reinforcement principal and D10-200 mm iron as reinforcing bar.

Keywords: Reinforced Concrete Plates, Plate Structure, Plate Analysis.