## **ABSTRACT**

## STRUCTURE ANALYZE OF TYPE 120 RESIDENTAL HOUSE CANTILEVER SLAB PARAGON HILL BATAM PT. SARANA BANGUN SEJATI

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Data analysis of cantilever plates with a length of 3.5 m and width of 1 m with 110 mm thick concrete slabs using K-225 quality concrete with 10 mm diameter steel reinforcement in the work of floor slabs obtained results that met the standards for the construction of cantilever plate structures in the Paragon project Hill Residence with the ability to withstand a dead load of  $13.125 \, \text{kN} \, / \, \text{m}$  'and a live load of  $7 \, \text{kN} \, / \, \text{m}$ ' with a negative moment of  $13.475 \, \text{kNm}$ .

Calculations that do get results that are not much different from the application in the construction of using 10 mm diameter steel reinforcement with a distance of 160 mm which is installed at the top with 1 layer.

The calculation is based on SNI 03-2847-2013 regulations. The cantilever slab structure that is planned meets the working loadings.

Based on the calculation results, the structure of the floor plate with a floor plate thickness of 110 mm, which uses reinforcement steel with a diameter of 10 mm with a distance of 300 mm which is installed 2 layers safe to be applied in construction.