ABSTRACT

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Indonesia is a country prone to earthquakes because it is passed by the meeting of 3 tectonic plates. Tangerang Selatan City is classified into seismic design category D. The purpose of the planning carried out is to obtain an earthquake-resistant reinforced concrete building structure. The planned building structure uses the special moment bearing frame system (SRPMK) method. Planning begins with literature study, data collection, dimensioning of structural elements, loading, repetition, foundation planning, and calculation of the cost budget plan (RAB). The structural elements reviewed in this plan include floor slabs, main beams, sub beams, and columns. The thickness of the floor slab used is 150 mm, the main beam with dimensions of 400/650 mm, the sub beam with dimensions of 300/650 mm, and the column with dimensions of 750/1650 mm. The type of foundation used is a bored pile foundation with a pile diameter of 70 cm and a pile length of 30 m. The total budget plan can Rp21.411.648.681,00.

Keywords: SRPMK, Apartment, Reinforced Concrete, Building Structure, Earthquake

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