

ABSTRACT

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Apartemen Synthesis Residence Kemang Project. The Execution Method of Column and Reinforcement Material Calculation of Column Ground 18.

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(XIV+101+Attachment)

Apartemen Synthesis Residence Kemang located on Jl. Ampera Raya No. 1A, South Jakarta. This building built on a land area of $\pm 20.147 \text{ m}^2$, has 3 towers consist of 2 towers with 33 floors and 4 basements, and 1 tower with 33 floors and 5 basements. Owner of this project is PT. Synthesis Kreasi Bersama Group and the main contractor for this project is PT. Nusa Raya Cipta. This project using Lump Sump Fix Price contract type with a contract value IDR 488.000.000.000,00. This project has implementation period of 41 months. The construction of the building must be considered is the strength of the building structure as well as the method of execution currently used in the field. In the implementation of column should be appropriate procedure, because column is the upper structure with function od channelling the load from the beam to the foundation. The execution method of column includes understanding the shop drawing, marking and reinforcement column cuttings, column reinforcement fabrication, installation of reinforcement columns and concrete decking, kickers installation, reinforcement checking, formwork installation, concrete casting, formwork release, and curing. The calculation of required reinforcement materials is very important to determine its cost. The needs of the 18 floor column reinforcement is the reinforcement of the D25 of 6306,300 kg or 137 rods, for the reinforcement of the D22 of 750,960 kg or 21 rods, for a reinforcement of the D10 of 2786,732 kg or 377 rods.

Keyword: execution Methods, Column, Reinforcement Material Requirements