

ABSTRACT

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Campus F8 4th Building Construction Project of Gunadarma University, Column Construction Method and Calculation of Rectangular Column Required Steel Reinforcement on 4th Floor.

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(XV + 72 + Attachment)

Campus F8 4th Building Construction Project of Gunadarma University were part of Campus F8 Medical Faculty Building Project. This project is located on RTM street, Tugu, Cimanggis, Depok, West Java. The 4th building was built on an area of 14.000 m² with a 5.977,73 m² building area. There are several types of work to be done on the upper structures, like column. The method used for this particular element of structure, column, is done by finishing several works such as marking, fabricating reinforcement steel, column shuttering, reinforcement steel placement, check list, shuttering placement, verticallity, concrete casting, deshuttering and lastly, curing. There are 3 types of columns used in this project, the K1A column with the dimension of 70 x 70 cm, K2A with the dimension of 60 x 60 cm, lastly K3 with the dimension 40 x 40 cm. The result based on the calculation shows that the amount of D22 rebar required for both upper and lower stirrups are 17, 25 piece of D13 rebar for middle stirrups and the total amount of rebar required for rectangular column reinforcement on 4th floor of this building is 252 rebars.

Keywords: Rectangular Column, Construction Method, Required Rebar Reinforcement