

RE-DESIGN SLENDER COLUMN ON *VERDE PROJECT TWO* CONDOMINIUM KUNINGAN SOUTH JAKARTA

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ABSTRACT

Slimming Column Planning on the verde two condominium Project of South Jakarta should be specially designed, because the slender column can cause increased bending stress resulting in buckling of the column, the addition of the moment on the slender column can make the number of reinforcement and the quality used will be greater, cost incurred. From the redesign of the slim column by eliminating its slimness factor will be compared with the initial column in terms of structural strength, cost analysis and room area in architectural terms.

This slim column redesign calculation analysis uses references to the Indonesian National Standards (SNI) and American Concrete Institute (ACI) with the help of computer software, which is a program used to analyze and design an Object Oriented Programing. Variables used are column slimness value, load eccentricity value and column reinforcement area.

From the calculation results show that the reinforcement and the quality used in the redesigned column is about 15% smaller than the slim column, but the cost of redesigned column tends to be greater about 23%, because the volume of concrete in the redesign column is bigger than the slim column and in terms of Architectural slim column is more efficient.

Keywords: slim column, redesigned column, verde two condominium