

COLUMN AND BEAM DESIGN BY COMPUTER

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ABSTRACT

Nowadays, most of the engineering design works are performed by computer program and it is recognized that the computer program has the most accurate and fastest way for engineering design works. Therefore, in this project, it will be shows that computer program is important for the design of engineering project.

In this project, column and beam are designed by the C++ program and base on BS 8110. The purpose of this computer program is to calculate the reinforcement required; the user of this program need only to key in the value of the loading on the beam or column and some values that are requested by the program. it will enable the work to be easier and faster if it compares with the manually calculated design steps by hand which are shows in the appendix of this project report.

Other than this, this project report will provide a flow chart of the computer program which will give a brief picture of the column or a beam program. From this flow chart, it clearly shows that the steps in designing a column or a beam and it also show how the program runs.