

Special Research Studies Title	The Development of a Computer Program for Vertical Formwork System Design and Cost Estimate for High Rise Building
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Abstract

Nowadays, there are several type of vertical formwork systems for the core lift wall. The selection of a vertical formwork system is very complicated in nature.

This research aims at studying the design and estimation of 4 widely used vertical formwork systems including : Conventional Wood System, Conventional Steel System, Slipform System and Climbform System. A computer program namely V-Form has been developed to assist the user in the design and estimation of the formwork for the core lift wall. V-Form is easy to use. It provides graphical presentation of the detail of the proposed formwork systems.

A comparative study of costs for the 4 formwork system is also conduct. The results indicate that The Conventional Steel type is most economical for the 30 storey building or less with an area per floor not exceeding 500 square meter. For the taller building, Slipform is found to be more economical than other types.

Keywords : Vertical Formwork System / Formwork Design / Simulation