

A STUDY ON THE BEHAVIOUR OF LIFT CORE IN HIGHRISE

ASRI BIN MASPADE

**B.ENG (HONS) (CIVIL)
MARA UNIVERSITY OF TECHNOLOGY
2006**

A STUDY ON THE BEHAVIOUR OF LIFT CORE IN HIGHRISE

BY

ASRI BIN MASPADE

Report is submitted as
the requirement for the degree of
Bachelor Engineering (Hons) (Civil)

UNIVERSITI TEKNOLOGI MARA
MAY 2006

DECLARATION BY THE CANDIDATE

I Asri Bin Maspade, 2003194196 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

_____MAY 14, 2006

ACKNOWLEDGEMENTS

In the name of Allah the Almighty, The Most Beneficent and The Most Merciful, I would like to express my deepest sense of gratitude that I have managed to complete this project.

I gratefully recognizes the continual guidance received from my supervisor and lecturer in structure, En Mohd Zaini Bin Endut for his continues help, experiences, guidance unlimited advice persistent co-operation towards the accomplishment of this project.

I would like to take this opportunity to deliver my thanks to all my family and friend for their greeting understanding and morale support.

Last but not least, I wish to express my deepest appreciation to those who have contributed some way to carry out this project.

ABSTRACT

At the beginning, the evolution of radically new structural forms gave great stimulus to devising appropriate methods of analysis. In the early days, approximate techniques were being devised for specific; largely two dimensional, structural forms and the analysis of complex three dimensional systems represent a difficult challenge.

With regard to horizontal loading, a building is essentially a vertical cantilever. So it can be calculated simplified as traditional method. But the manual method that applied is not accurate approximately for the very complex building. The computer software will assist to produce the faster result.

The major part of this study thus concentrates the behaviour the lift core, one type of shear wall under various type of loading act to the building. A lot of outputs produce by the computer, but the main objective is to get the value based on the deflection, stresses and shear force. Real building structure is so complex that even an elaborate computational model will be a considerer able simplification, and the result from the analysis almost is approximate.

With the aid of the graphical output result, we will more understand the behaviour and critical position on the lift core. This study also will create the virtual load as the input stage to recognize what happen to the life core if any possible matters like the extreme earthquake.