A STUDY OF THE RESPONSE OF UNSYMMETRICAL SHEAR WALL FOR-HIGH RISE BUILDING

By

YUSHAIDA MUHD YUSOF

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

UNIVERSITI TEKNOLOGI MARA
NOVEMBER 2006

DECLARATION BY THE CANDIDATE

I Yushaida bte Muhd Yusof, 2003349470 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

_____ November, 2006

ACKNOWLEDGEMENT

I, Yushaida bte Muhd Yusof, from the depth of my heart, praise to Allah the almighty that is the most praise worthy. Nothing may take place without His leave. I express my heartiest indebtedness to my family for their tender care and affection.

I would like to take this opportunity to express of my greatest gratitude and appreciation to my supervisor, En Rohamezan Rohim for advises guidance, patience, encouragement, cooperation and enthusiastic support in the duration of thesis preparation until completed.

I am also would like to take this opportunity to deliver my thanks to all my friends in giving their encouragement and moral supports to make the completion of this project possible.

Not forgotten thanks to my beloved mother Ishah bte Che Lah for never ending support, great understanding and encouragement through out the years has contributed to success of my studies.

May The Almighty One shower His blessing upon all of us and make this small effort useful and beneficial for others for future reference.

ABSTRACT

A study of the response of unsymmetrical shear wall and its analysis is a topic that is unfamiliar to many engineers. This research is to try something new to the unsymmetrical shear wall with the different orientation. This research is very important in order to avoid any possible matter for high rise building in the future especially when the shear wall just focus to the framing of building. Therefore, by providing data information and analysis, the professional and decision maker can design the unsymmetrical shear wall with better strength besides considering the cost. This research focuses for the response of unsymmetrical shear wall in high rise building and the strength behavior of unsymmetrical shear wall for the building of 45m height. The three new samples have been analyzed by LUSAS software and by analysis; the loading for three new samples was lesser than the original sample plan. The outputs from the software were displacement, shear stress and sway digram of the building. From the comparison between the original sample and three other samples, shows the design of the original sample is better than design of three new samples because the shear wall of the three new samples just focus on the framing of the building.

TABLE OF CONTENTS