

THE EFFECT OF OPENING IN SHEAR WALL

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By

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Report is submitted as
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DECLARERATION BY THE CANDIDATE

I (Apal Diana bt Othman, 2003339725) confirm that the work is my own and that appropriate credit has been given where references has been made to the work of others.

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(Apal Diana bt Othman)
NOV 2006

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ABSTRACT

Reinforced concrete shear wall is commonly use in high-rise building that can provide a major part of strength and stiffness in the building structure. Therefore, the engineer must be a responsible to make a safe design for the human comfort as well. Shear wall may have one and more openings for functional reasons. The number, location and sized of opening affects the behavior of a structure as well as stresses in shear wall. In this study, there are three model of shear wall with rectangular opening for different opening dimensions and different height of shear wall. The minimum and the maximum principle stresses obtained from the linear finite element analysis to determine the ultimate load that can be sustain for each model. The behavior of shear wall had been analyzed using LUSAS package version 13.5.