FINITE ELEMENT ANALYSIS OF SHEAR WALL

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DECLARATION BY THE CANDIDATE

I Irwan J Ibrahim, 2003366909 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

_____ December 1, 2006

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ABSTRACT

Engineers now routinely have access to highly capable 3D analysis packages often including the ability to use finite element. More and more structures are being analyzed in 3D and various method of modeling. We are certainly being faced with increasingly frequently asked question relating to the modeling of shear and core wall systems using existing modeling method. It seems that there are many texts dealing with the theoretical aspects of finite elements analysis, there are almost none that provide practical advice to engineers wishing to make use of this technology. This research will touch the idealization modeling aspect for shear wall by using LUSAS program. Shear wall will be modeled through column analogy method, plane stress method and 3-dimensional method. By referring to the comparison of the 3 models, it can be shown that 3-dimensional model is the best model between the three models.