

FINAL YEAR PROJECT REPORT  
BACHELOR IN ENGINEERING (HONS)(CIVIL)  
UNIVERSITI TEKNOLOGI MARA  
SHAH ALAM

BEHAVIOR OF PROFILED STEEL SHEET DRY BOARD  
SYSTEM WITH WINDOW OPENING

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FEBRUARY 2002

## **DECLARATION**

Herein is being admitted that this report together with all the words, facts and relevant printed materials are fully on my own, except for material used, which have been duly acknowledged.

6 FEBRUARY 2002

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## **Abstract**

The increase of construction activities in our country gives a problem shortage of construction material in market. Another thing the resources of composite material are decrease due to high demands. To overcome these problems one alternative that can be chosen is using alternative composite structure in building construction where it can minimize the using of shortage material.

“Profiled Steel Sheet Dry Board System” is an innovative composite panel. The panel is formed by attaching dry boards to a core of profiled steel sheeting using mechanical connectors. It can be exploited for a variety of structural proposal.

The panel is very light and therefore easily transportable and can be erected quickly by unskilled labour.

Three specimens of panel were prepared and tested under uniformly distributed load. This experiment was divided into two, first the specimen of Profile Steel Sheet in normal condition. Second, the other two specimens of Profile Steel Sheet in overlap condition. The size of each specimen is 1000mm x 820mm and the window opening on the center of the specimen is 330mm x 400mm. The ultimate load for the first panel was 174 kN (non overlap) and that for the other two were 123 kN and 140 kN (overlap).

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