

**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**

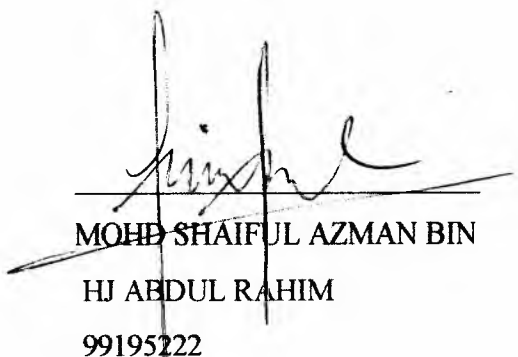
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DECLARATION

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.

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ABSTRACT

A study on the behavior of Profile Steel Sheet Dry Board (PSSDB) with Window Opening was carried out experimentally. Profiled steel sheeting dry board system is a composite system that can be constructed as load bearing structures building system. This panel system consists of two dry boards (cemboard) attached to profiled steel sheet (Bondek II) using mechanical connectors (self-drill screws) to form a core panel.

PSSDB is a new innovative composite construction system with potential to be expended in application as an alternative to flooring, wall unit and roofing system. This research included some aspects including the testing apparatus, testing method and the analysis of the results. The specimens tested were of the Profiled Steel Sheet Dryboard with window opening. There were 3 samples tested in this research. The first two samples consist of overlap PSS and the other sample was non-overlapped. The size of each specimen is 1000mm x 600mm and the window opening at the center of the specimen is 400mm x 240mm. The specimens were subjected to axial load. Comparisons were made between the specimen with overlap and that without overlap. The parameters measured were ultimate load capacity and deformation patterns. The ultimate load capacity for overlap sample was found to be 180.5kN and 173.3kN and 68.4 kN for non-overlap

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