

THE EFFECT OF JOINTED DRY BOARD AND OVERLAPPED PROFILED
STEEL SHEET (PSS) IN PROFILED STEEL SHEET DRY BOARD (PSSDB)
WALLING WITH WINDOW OPENING

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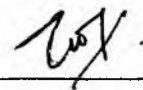
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DECLARATION

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

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ABSTRACT

The rapid progress of science and technology has led to an-increasing trend of shift in paradigm from the traditional utilization of materials to newer ones, resulting in constant introduction of newer construction techniques and materials to the building industry.

Profiled Steel Sheet Dry Board System is an innovative composite construction system. The system is a sandwich-like composite panel consisting of dry board layers (Cemboard) connected to profiled steel sheeting (Bondek II) by self-drilling, self-tapping screws. It can be exploited for a variety of structural purposes. It is very light and therefore easily transportable, and can be erected quickly by unskilled labour.

This project is to study the Effect of Jointed Dry board and Overlapped Profiled Steel Sheet in Profiled Steel Sheet Dry Board Walling Unit With Window Opening. The 3 samples were provided which is the size of sample were 1320 mm x 1000 mm. All of sample is tested in one-way in-plane action which the supported at top and bottom edges against lateral displacement. The samples were subjected to axial load. Openings in the panels represent typical window openings. Ultimate loads, cracking patterns and lateral deflections of the panels are studied. Comparison were made between the sample with jointed and without jointed dry board. The parameters measured were ultimate load capacity and deformation patterns. The ultimate load capacity for jointed sample was found to be 333.6 kN, 271.7 kN and 253.5 kN

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