

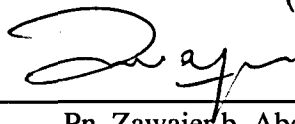
**ELECTRICAL ENERGY CONSUMPTION FOR DOUBLE STOREY
RESIDENTIAL BUILDINGS IN SHAH ALAM**

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**Final Year Project Report Submitted in
Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science (Hons.) Physics
in the Faculty of Applied Sciences
Universiti Teknologi MARA**

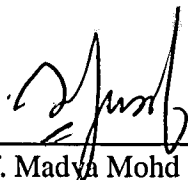
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This Final Year Project Report entitled “**Electrical Energy Consumption for Double Storey Residential Buildings in Shah Alam**” was submitted by Norkhairul Faizi Bin Hasan Basri, in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Physics, in the Faculty of Applied Sciences, and was approved by



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ABSTRACT

This paper presents the result of the electrical energy consumption double storey residential building. The residential location is at Seksyen 24 and TTDI Jaya, Shah Alam. Six houses have been selected to conduct this project. The electrical energy consumption was measured using self design electrical energy consumption kit. Database for every electrical appliances were collected to scale the logger as well as to determine the maximum value of current load supported by every energy kit. The kit contain of current sensor and HOBO data logger. The equipment was placed in the family room, living room and kitchen. The energy consumption by electrical appliances was measured for 14 days with one minute interval to log the data of current used by the appliances. The data was collected every one week due to limited memory of data logger. Four set of the energy kit was placed in every house. The data measured were downloaded into computer and analyzed using HOBOWare software and Microsoft Office Excel software. The data collected was analyzed and separate between the spaces. Each space has different electrical appliances. All the measurement has shown in the pie chart to differentiate consumption of every appliance. From the measurement done, it can be conclude that refrigerator used almost half of the energy in the house. Appliances in the kitchen are using most of the energy in the house, so kitchen is the highest energy consumption compared to other spaces.