PARTICLEBOARD PROPERTIES FROM 2.0MM WOOD WASTE PARTICLE SIZE IN RELATION TO DIFFERENT BOARD DENSITY AND RESIN CONTENT

AHMAD HAFIZUDDIN BIN ASHA'ARI

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

JULY 2016

CANDIDATE'S DECLARATION

I declare that the work in this thesis dissertation was carried out in accordance with regulation of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicate or acknowledged as references work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Student's Signature	: 
Student Name	: Ahmad Hafizuddin bin Asha'ari
Student ID No.	: 2014893564
Programmed	: Bachelor of Science (Hons.) Furniture Technology
Faculty	: Faculty of Applied Sciences
Title	: **PARTICLEBOARD PROPERTIES FROM 2.0MM WOOD WASTE PARTICLE SIZE IN RELATION TO DIFFERENT BOARD DENSITY AND RESIN CONTENT**
Date	: July 2016

ABSTRACT

Particleboard Properties From 2.0 mm Wood Waste Particles Size in Relation to Different Board Density and Resin Content.

Arise of logging activities cause lowing preserve of soil and the habitat for flora and fauna been reduced due increased demand for wooden materials every year. Besides, one of the alternatives for solid wood furniture which quite popular materials have been used nowadays for exterior and interior was particleboard. In these studies, the main aim to determine mechanical and physical properties from wood waste had been used a raw material for particleboard manufacturing related to different density of board and resin content usage. Two different board densities were use; 650 kg/m^3 represented low density board and 750 kg/m^3 represented higher density board. 8%, 10% and 12% of resin content were used as another parameter with usage of Urea Formaldehyde as an adhesive. The result showed that particleboard with 750 kg/m^3 board density within 12% resin content have the higher value for bending strength and Internal bonding while thickness swelling and water absorption was the lowest values.

TABLE OF CONTENTS