PROPERTIES OF ORIENTED STRAND BOARD (OSB) FROM *ACACIA MANGIUM* (AKASIA) AND *GMELINA ARBOREA* (YAMANI)

BY

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Final Project Submitted in Partial Fulfillment for the Diploma in Wood Industries,

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Alhamdulillah.....

Grateful for the divine grace of which we can prepare our final year project entitled "Properties of Oriented Strand Board (OSB) from Acacia mangium (Akasia) and Gmelina arborea(Yamani)."

For Dr. Wan Nazri Bin Wan Abdul Rahman, as our advisor to provide guidance to us in the process of completing this project. Last but not least, their families, staff and friends - friends who also provide support and assistance to us.

Thank you…

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Abstract of final project presented to the Universiti Teknologi Mara fulfillment of the requirement for the Diploma in Wood Industry

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Advisor: **Dr. Wan Mohd Nazri Bin Wan Abdul Rahman**

Faculty: **Applied Science**

Oriented Strand Board (OSB) from *A.mangium* and *G.arborea* are one of wood composite panel.OSB is the similar strength properties with plywood. The strength properties was include modules of elasticity (MOE),modulus of rupture (MOR),internal bonding (IB),percent of thickness swelling and also percent of water absortion.The main study and the main purpose of this study is to determine mechanical and physical properties of OSB using *A.mangium* and *G.arborea* as a raw material. All of the specific density that was targeted is 700kg/m^3.This properties to know whether *A.mangium* and *G.arborea* are suitable are not in a production of OSB.The trial resin content is 10% using urea formaldehyde. It is to make comparable with Malaysian Standard whether suitable to commercialize or not.