

**STRENGTH PROPERTIES OF ORIENTED STRAND BOARD
FROM *ACACIA MANGIUM* AT 5% AND 7% RESIN
CONTENT WITH DENSITY OF 500 Kg/m³**

By

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Final Project Submitted in Partial Fulfillment for the Diploma in Wood Industry,
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MAC 2004

ACKNOWLEDGEMENT

First of all, I would like to take this opportunity to express my special thanks to the Almighty Allah S.W.T for His Blessing and Strength rendered to me to complete my final project paper on time.

I would like to offer my special thanks to my advisor. Mr. Wan Mohd Nazri Bin Wan Abdul Rahman, because of his guide and lesson and also helping me at every phase of the study. He is so generous in lending me helping hands and showing me correct ways of forming my tasks. I would like to express my most sincere thanks to him.

Also special thanks to Mr. Saimin b. Bashir and Mr. Jalali b. Saleh for their helping me to get some information to prepare my final project paper. My appreciation is also forwarded to Mr. Sardey for their help me to finish my final project.

Finally, I also to special thanks to my beloved friends and my group for their support to become my inspiration to finish this project. I also to extend my appreciation to those who are involved either directly of indirectly in completing this project. May Allah S.W.T bless you.

Thank you.

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ABSTRACT

Oriented Strand Board (OSB) is a new type of wood composite, which is yet to be commercially produced in Malaysia. It is made from long, thin and narrow wood strands bonded by a synthetic resin and converted into a solid panel during the hot pressing operation. This type of board is considered as an engineered product with a great strength and dimensionally stables. This paper discusses the strength properties of OSB made from *Acacia mangium*. The study showed that the specimen with resin content of 7% with density of 500 Kg/m³ show better result compared to specimens of 5% resin content which value of MOE, MOR, internal bonding, thickness swelling and water absorption meet the minimum requirement of the Malaysian Standard for medium duty (MS 544). It is conclude that density of 500 Kg/m³ with 7% resin content is the optimum treatment to make OSB from *Acacia Mangium* wood.