STRENGTH PROPERTIES OF ORIENTED STRAND BOARD (OSB) FROM CINNAMOMUM INERS WITH DIFFERENT STRAND GEOMETRY, RESIN CONTENT AND DENSITY

By

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Final Project Submitted in Partial Fulfillment for the Diploma in Wood Industry,
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APRIL 2008

ACKNOWLEDGEMENT

Firstly, we would like to thanks to Allah because His Blessing give us spirit and healthy to finish this final project. We also want to express our special thanks to our advisor Miss Norashikin Binti Kamarudin whose patience and encouragement combined with a vast knowledge and skill at guiding without dictating made our experience priceless. We also like to thank Miss Siti Zalifah Binti Mahmud, for her help with evaluating the SPSS data.

Our proudest gratitude goes out to our family for their moral and financial support through the years of our study.

We would also like to thank all of our fellow friends. We would like to thank to our **beloved**, Aisa Amira Binti Mat Yusof (zukey), Hanani Binti Yuhaniz (zack) and Noor Hasyimah Binti Md Zain (mail). We also want to thank Zamru Bin Ajuhari, Mr. Shahril, Mr. Sardey and Mr. Khairil for all of the time they volunteered in helping us. Thanks also to other lecturer in Department of Wood Industry, who's helped us either direct or indirectly when we do this final project.

We would also like to thank our housemate, Kder, Azim, Kok, Man, Jijie, Pait, Apek, Toyeng, Ipin, Arip and **Man Utd fans** for their support and help. Lastly, we want to thank all our friends from ASD6TA and ASD6TB.

Thank you

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ABSTRACT

Structural strand composite literature often cites strand geometry, resin content and level of density as a factor controlling mechanical properties. This effect is quantified through strand width and length, to composite properties. The research presented here examines the effect of strand length and width separately by maintaining a single nominal thickness for three nominal strand lengths and widths, 74.80 mm and 8.67 for 8 mm size of strand and 75.67 mm and 27.33 mm for 15 mm size of strand respectively. The properties were assessed for both the parallel and transverse directions of each board. Besides that, this study about strength properties of Oriented Strand Board (OSB) from *Cinnamomum iners* at 600 kg/m³ density with 5% and 9% resin content. This study also show the properties of (OSB) at 500 kg/m³ and 700 kg/m³ with 5 % resin content and 15mm size of strands.