

**THE PROPERTIES OF ORIENTED STRAND BOARD (OSB) MIX
ACACIA MANGIUM AND *MACARANGA HYPOLUECA* WITH DIFFERENT
GRAIN DIRECTION**

BY

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Abstract of final project presented to the Universiti Teknologi MARA fulfillment of the requirements for Diploma in Wood Industry

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Oriented Strand Board (OSB) is one of the composite boards that can be compared with plywood in the term of uses and strength. This study was conducted to see Acacia and Mahang suitable to be made into OSB and whether the mechanical, physical strength of the board made from combination of this two is good. The mechanical strength is from the arrangements of parallel and perpendicular for MOR and MOE. For physical strength, including internal bond, it is from percentage of thickness swelling and water absorption. This study is using 5% resin from Phenol Formaldehyde that act as binder between strands with density and the board can be compared with Europe Standard (EN310) whether is suitable to be commercialize or not.