PROPERTIES OF ORIENTED STRAND BOARD (OSB) FROM YAMANI (*Gmeliana arborea*) and SENTANG (*Azadirachta excelsa*)

By

KASMAN BIN SUDIN

AHYAT FAUZAN BIN ABDUL GHANI

AHMAD SHARAFUDDINULHAQ BIN AHMAD PUAD

AZIZUL ARIFIN BIN ABDULLAH KHIR

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Faculty of Applied Sciences Universiti Teknologi MARA

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ABSTRACT

THE PROPERTIES OF OSB THAT MADE FROM THE YAMANI(*GMELIANA ARBOREA*) AND SENTANG (*AZADIRACHTA EXCELSA*) STRANDS

By

KASMAN BIN SUDIN

AHYAT FAUZAN BIN ABD GHANI

AZIZUL ARIFIN BIN ABDULLAH KHIR

AHMAD SHARAFUDDINULHAQ BIN AHMAD PUAD

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Oriented Strand Board (OSB) evolved from the product called 'wafer board'. OSB is made from strands of wood sliced from small diameter logs. OSB usually made of strand from lightwood or softwood to become high strength properties of board than before. The strands were arranged alternately to each layer. For this study, we used Sentang (*Azadirachta excelsa*) and Yamani (*Gmeliana arborea*). We also mix this two of species and used to produce the OSB with the density of 700 kg/m^3 at 10% UF resin content. Sentang and Yamani have potential for commercialize in OSB productions. OSB from Sentang and Yamani are also has the high value of MOE and MOR in bending test. Sentang in OSB shows the high percentage of thickness swelling. Base on mechanical strength, this panel product is able to improve their properties and have a good potential to substitute other panel product such as Particleboard and MDF.