PROPERTIES OF ORIENTED STRANDS BOARD MANUFACTURE FROM SAPPIUM BACCATUM AT DIFFERENT RESIN CONTENT

By

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ABSTRACT

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Oriented Strand Board (OSB) is a new type of wood composite, which is yet to be commercially produced in Malaysia or South East Asia region. It is made from long thin, and narrow wood strands bonded by resin and converted into a solid panel during the hot pressing operation. In this study, the wood strands oriented parallel to each other in each layer. Standard OSB normally consist of three layers in which each layer is perpendicular to another. In some cases ,the OSB can also can be produced in five or seven layers depending on type of application. Unlike plywood, OSB normally manufactured using small diameters logs regardless of any wood species. This type of board is considered an engineered product with great strength and dimensionally stables. This paper discusses the feasibility of using ludai spp (sappium baccatum) obtain from reserve forest of UiTM Jengka branch. The study showed that the OSB made at density,600 kg/m³ with different resin content (3%, 5%, 7%). Base on the physical and mechanical strength of OSB, it is expected that this type of wood based panel product may have a good potential to supplement the current shortage of plywood application in the future.