PHYSICAL AND MECHANICAL PROPERTIES OF SANDWICH BOARD USING PARTICLEBOARD (OIL PALM TRUNK) AS A CORE AND LAMINATED WITH SELECTED WOOD VENEER SPECIES (KEDONDONG, MERANTI AND SIMPOH SPP) ON FURNITURE APPLICATION.

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JULY 2017

CANDIDATE'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulation of Universiti Teknologi MARA. It is original and is the results of my work, unless otherwise indicate or acknowledged as reference work. This thesis has not been submitted to any academic institution on non-academic institution for any other degree or qualification.

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ABSTRACT

PHYSICAL AND MECHANICAL PROPERTIES OF SANDWICH BOARD USING PARTICLEBOARD (OIL PALM TRUNK) AS A CORE AND LAMINATED WITH SELECTED WOOD VENEER SPECIES (KEDONDONG, MERANTI DAN SIMPOH SPP) ON FURNITURE APPLICATION.

The world is slowly turning into a global village and borders that once stood between cultures now serve as bridges for the enjoyment of diversity between people of different races and ethnicities. At the forefront of this change are technology and commercialisation of new raw materials, which stands as the global medium to create invention especially in furniture industries. Oil palm trunk is one of a species that not well being known by people about its potential to be marketable in this modern renaissance of human interaction. This study propose is to bring out the properties of OPT in terms of utilisation, economics and trade. Sandwich board made from Meranti spp. veneer shows better performance in strength (MOR, MOE, and IB). Kedondong spp. veneer also has good performance strength properties. Even the strength seems to be equally the same with Meranti spp. veneer. Simpoh spp. do have great strength properties. However, the texture of Simpoh spp. is not suitable for bonding process as it has coarse and uneven texture. Simpoh spp. might be suitable for other application such as, railway sleepers, paneling and many more.

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