

**UTILISATION OF VENEER WASTES IN PLYWOOD
CONSTRUCTION FROM KELEMPAYAN**

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**This Final Year Project Report Submitted in Partial Fulfilment
of The Requirements for The Degree Bachelor of Sciences
(Hons.) Furniture Technology in the Faculty of Applied
Sciences Universiti Teknologi MARA**

JULY 2016

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ABSTRACT

UTILISATION OF VENEER WASTES IN PLYWOOD CONSTRUCTION FROM KELEMPAYAN

The goal of the study is to determine the differences in mechanical and physical properties of plywood from veneer wastes. There are three arrangement of core veneer which are vertical, horizontal and normal. Kelempayan (*Neolamarckia Cadamba*) veneer wastes of 2.1mm thick were used in the production of 3-ply plywood, using phenol formaldehyde and urea formaldehyde as binders. The veneers was obtained from LKM Plywood Industry Sdn Bhd. The off cuts of the veneers and small strips of veneers were collected and attached by using a paper tape using veneer clipping method. The adhesive were spread onto the veneers and pressed with a cold and hot press at 120°C for 15 and 8 minutes respectively. The plywood was tested for their mechanical and physical properties using the Japanese Agricultural Standards for Plywood for bending and tensile test. The findings showed that type of arrangement and type of resin revealed a highly significant result with the highest strength in horizontally cut strips plywood.

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