## WETTABILITY OF ADHESIVE ON OIL PALM LUMBER SURFACE

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### CANDIDATE'S DECLARATION

I hereby declare that the thesis entitled "WETTABILITY OF ADHESIVE ON OIL PALM LUMBER SURFACE" submitted by Mohamad Azlie Bin Abd Rahim to University Technology Mara Pahang (UiTM) final year project to fulfillment of the requirement for the award the Bachelor of Science (Hons.) Furniture Technology in the Faculty OF applied Science s. A record of research work carried out by me under the guidance of my supervisor Mr. Amran Bin Shafie and advice from my advisor and course coordinator Professor Madya Said Bin Ahmad. I further declare that the work reported in this thesis is submitted to the university.

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#### **ABSTRACT**

## WETTABILITY OF ADHESIVE ON OIL PALM LUMBER SURFACE

This thesis discusses about the wettability of adhesive and on the oil palm lumber surface. The experiment was about the ability of three types of adhesive such as Urea Formaldehyde (UF), Phenol Formaldehyde (PF), and Polyvinyl Acetate (PVAc) to wet the surface of oil palm lumber. The testing method is by using different time at different sample of oil palm lumber such as in one minute and compare with five minutes. In addition, the contact angle on the surface of substrates is important to determine the strong bonding and attachment between two surfaces of bonding material. By using different adhesive we will know the ability difference based on the adhesive on the surface of oil palm lumber. When the result shows the best performance on the oil palm lumber it will be selected as the successful wetting angle and suitable for used on the oil palm lumber surface to assemble good product. The results shows that different types of adhesive and time give significant effect on the wettability on oil palm lumber surface.

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