Some Properties of Steam Treated Compressed Panel Made from Oil Palm Trunk

Nurjannah Salim^{1,a)}, Syafiqah Muzakir¹, Anis Izzati Ibrahim¹, Yushada Abdullah¹, Rasidi Roslan¹

¹ Faculty of Industrial Sciences & Technology, Universiti Malaysia Pahang, Lebuhraya Tun Razak, 26300 Gambang, Kuantan, Pahang, Malaysia

^{a)}Corresponding author: <u>njannah@ump.edu.my</u>

Abstract. The objective of this research was to evaluate some of the properties of steamed treated and compressed oil palm (*Elaeis guineensis*) trunk samples. The specimens were steamed at a temperature of 130 0 C for 2 hours before they were compressed. Wettability of the samples were tested using contact angle method. Samples were exposed to outdoor conditions to evaluate their resistance against biological deterioration. It appears that steaming enhanced overall wettability of the specimen. Most of the chemical composition of the samples were also adversely influenced by steaming. Specimens which were not steamed did not have as high resistance as those steamed and compressed samples as a result of three months outdoor field exposure test. It can be concluded that steaming with combination of compression oil palm trunk would enhance the properties of compressed oil palm trunk.