

Evaluation of shear strength of oil treated laminated bamboo

Abstract

Studies were carried out on heat treatment, of bamboo species *Gigantochloa scortechinii* Gamble using palm oil. The samples were laminated and glued. The adhesion results showed that the delamination of glue line increased as the temperature and duration of oil heat treatment increased. Maximum load and shear strength of the glue line reduced as the heat treatment become more severe. It was found that the palm oil used as the heating medium penetrated in some parts of the cell wall as well as in the cell lumen of the bamboo. (c) 2005 Elsevier Ltd. All rights reserved.