

Bamboo properties and suitability as a replacement for wood

ABSTRACT

The utilization of bamboo as a manufacturing material is becoming globally attractive in the wood and wood product industries today. This is due to the numerous industrial applications and uses of the bamboo plant from its fast growth, availability, unique appearance and strength. Bamboo has been popularly known for its traditional uses such as poultry cages, vegetable baskets, incense sticks, skewers and chopsticks, woven blinds and handicrafts. Very little has been done on the industrial processing of bamboo into boards. Several authors have studied and reported on the utilization, processing and the properties of this emerging material as an alternative to the increasing decline of wood in the forest. This review aims to compare and contrast some of the works done on the advancement in producing laminated bamboo timber. The properties of bamboo and its laminated products attest to its potency in substituting wood. Bamboo utilisation has increased significantly in the wood and wood product industries, with adequate retooling in most processing firms in the sector. In line with the development and use of bamboo-laminated timber for the purpose of wood in furniture production, the creation of bamboo plantations on degraded lands will meaningfully support production and mitigate the degradation of forest.

Keyword: Bamboo; Laminated bamboo timber; Physical properties; Mechanical properties