SCREW WITHDRAWAL PROPERTIES OF GLUE-LAMINATED TIMBER MADE FROM KELAMPAYAN AND SESENDOK

By

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ABSTRACT

SCREW WITHDRAWAL PROPERTIES OF GLUE-LAMINATED TIMBER MADE FROM KELAMPAYAN AND SESENDUK

Glue-laminated timbers were produced using two species, Kelampayan and Sesendok. Polyvinyl Acetate (PVAc) were used as binder for glue-laminated timber manufacturing. The screws with same diameter and length that were 3.5mm and 50mm respectively but have different angle and distance of pitch were used. The test position was selected at the surface, front and side. According to test result, it was found that both of pitches of screws are suitable for Kelampayan species. In side position, Kelampayan species showed the best screw holding strength and this result is followed by Sesendok species. In surface position, Pitch 2 has highest withdrawal strength on the Kelampayan species. In all position, Pitch 1 is suitable for Sesendok species and Pitch 2 is suitable for Kelampayan species. In both of pitch, Kelampayan got higher withdrawal strength compared to Sesendok.

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