

PENGUJIAN KUAT LENTUR LAMINASI BALOK KAYU KRUIING DAN KAYU JATI BELANDA

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ABSTRAK

Penelitian ini menggunakan kayu kruing dan kayu jati belanda dimana kayu kruing merupakan kayu dengan klas tinggi dan merupakan kayu dari Kalimantan sedangkan kayu jati merupakan kayu bekas impor dari luar negeri yang biasanya digunakan untuk bantalan barang dan masih bias digunakan. Penelitian ini bertujuan untuk mengetahui kuat lentur balok kayu laminasi campuran kruing dan jati belanda. Dilakukannya penelitian ini menggunakan eksperimental pengujian kadar air dan kuat lentur. Dimana 5 benda uji untuk kadar air dan 9 benda uji untuk kuat lentur. Dimana benda uji kuat lentur dibagi menjadi 3 balok laminasi kayu jati belanda, 3 balok laminasi kayu kruing, dan 3 balok laminasi kayu campuran. Dengan alat sambung lem berjenis Aliphatic Glue yang bermerek Crona. Dengan pengujian didapat persentase kadar air kayu laminasi jati belanda bernilai 12.1%, kayu solid jati belanda 16.6%, kayu laminasi kruing 22.2%, kayu solid kruing 25.4%, dan kayu laminasi campuran 44.9%. Dimana kadar air kayu solid dengan laminasi jutru turun dan kayu laminasi satu jenis dengan laminasi campuran naik tinggi. Pengujian nilai rata-rata kuat lentur kayu laminasi jati belanda 43.81 Mpa, kayu laminasi kruing 31.00 Mpa, dan kayu laminasi campuran 27.68 Mpa. Dimana pencam puran dua jenis kayu yang berbeda membuat kuat lentur kayu menjadi rendah.

Kata kunci: Kayu Kruing, Kayu Jati Belanda, Kuat Lentur.

BENDING STRENGTH TEST KRUING WOOD BEAM LAMINATION AND DUTCH TEAK WOOD

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ABSTRACT

This research uses kruing wood and Dutch teak wood where kruing wood is a high-class wood and is wood from Kalimantan, while teak is used wood imported from abroad which is usually used for bearing goods and can still be used. This study aims to determine the flexural strength of laminated wood beams mixed with kruing and Dutch teak. This research was conducted using experimental testing of water content and flexural strength. Where 5 specimens for water content and 9 specimens for flexural strength. The flexural strength test specimens were divided into 3 laminated beams of Dutch teak wood, 3 laminated beams of kruing wood, and 3 laminated beams of mixed wood with an Aliphatic Glue type glue joint with the Crona brand. Through testing, it was found that the percentage of water content of Dutch teak laminated wood was 12.1%, Dutch teak solid wood was 16.6%, kruing laminated wood was 22.2%, kruing solid wood was 25.4%, and mixed laminated wood was 44.9%. The moisture content of solid wood with low-down lamination and one-type laminated wood with high-rising mixed laminate. Testing the average value of flexural strength of Dutch teak laminated 43.81 Mpa, kruing laminated wood 31.00 Mpa, and mixed laminated wood 27.68 Mpa. The mixing of two different types of wood makes the flexural strength of the wood low.

Keywords: *Kruing Wood, Dutch Teak Wood, Flexural Strength.*