

PENGUJIAN KUAT LENTUR KAYU BALOK LAMINASI SENGON DAN MAHONI

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ABSTRAK

Penelitian ini yang digunakan adalah kayu Mahoni dan Sengon. Kayu Mahoni dan Sengon memiliki kapasitas yang mudah ditemukan di pasaran dan harganya jauh lebih murah dibanding dengan kayu Jati dan lain- lain yang dikenal sebagai bahan konstruksi yang cukup berkualitas baik. Penelitian ini bertujuan untuk mengetahui nilai kuat lentur balok kayu laminasi kayu mahoni dan sengon guna mengetahui besaran kuat lentur kayu .Penelitian ini dilakukan dengan metode eksperimental, yaitu dilakukan pengujian kadar air dan berat jenis. Kemudian pengujian kuat lentur dengan jumlah benda uji 9 buah balok kayu laminasi sengon dan mahoni yang terdiri dari, 3 balok kayu laminasi campuran mahoni dan sengon, 3 balok kayu laminasi sengon dan 3 balok kayu laminasi mahoni.Berdasarkan hasil pengujian diperoleh nilai kuat lentur rata-rata benda uji balok kayu Laminasi Campuran mahoni dan sengon adalah 29,90 Mpa dengan Modulus elastisitas 5207.59Mpa, nilai kuat lentur rata-rata balok kayu laminasi sengon adalah 22,52 Mpa dengan Modulus elastisitas 4987.46 Mpa, nilai kuat lentur rata-rata balok kayu laminasi mahoni adalah 24,63 Mpa dengan Modulus elastisitas 5181.08 Mpa.

Kata Kunci : *Balok Laminasi, Kuat Lentur, Kayu Sengon, Kayu Mahoni.*

TESTING THE FLEXURAL STRENGTH OF SENGON AND MAHOGANY LAMINATED BEAMS

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ABSTRACT

Research using Mahogany and Sengon wood. Mahogany and Sengon are easily found in the market and the price is much cheaper than Teak wood and others which are known as construction materials of good quality. This study aims to determine the value of the flexural strength of laminated mahogany and sengon wood beams in order to determine the magnitude of the flexural strength of wood . This research was conducted using an experimental method, namely testing water content and specific gravity. Flexural strength testing with the number of specimens 9 pieces of laminated wood beams sengon and mahogany consisting of, 3 blocks of laminated wood mixture of mahogany and sengon, 3 blocks of laminated sengon and 3 blocks of laminated mahogany. Based on the test results, the average flexural strength value of the laminated wood beams with a mixture of mahogany and sengon is 29.90 MPa with a modulus of elasticity 5207.59 Mpa, the average flexural strength value of sengon laminated wood beams is 22.52 Mpa with a modulus of elasticity 4987.46 Mpa. , the average flexural strength of the laminated mahogany beam is 24.63 Mpa with a modulus of elasticity of 5181.08 Mpa.

Keywords: *Laminated Beams, Flexural Strength, Sengon Wood, Mahogany.*