PREFABRICATED WOOD I-JOIST FROM KERUING (*Dipterocarpus spp.*) FLANGES AND ORIENTED STRAND BOARD (OSB) WEB

MOHD ROSDY BIN FAUZI

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ENGINEERED WOOD I-JOIST FROM *Dipterocarpus ssp.* FLANGES AND ORIENTED STRANG BOARD (OSB) WEB

By

MOHD ROSDY BIN FAUZI

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I-joist component is using the system that involve the using of flanges Keruing and web from OSB. Both component are combined and must work together. The strength will be same with solid wood. The purpose of this testing is to test the strength of I-joist that made from the combination between solid wood as flanges and Oriented Strand Board (OSB) with L-shape as web. The sample of I-joist that have the highest modulus of rupture value was sample (KO-1) 28.38 MPa and the lowest modulus of rupture value was sample two (KO-2) with 21.04 MPa. Furthermore, the testing was to test the modulus of elasticity true. Test result shows the highest value was sample two (KO-2) with 15,988 MPa and the lowest modulus of elasticity value was sample (KO-3) with 10,826 MPa. As a conclusion to this study, flange and web components act together and perform as a system of I-joist.