

**PROPERTIES OF NAIL WITHDRAWAL HOLDINGS
ON KELEMPAYAN TIMBER (*NEOLAMARCKIA CADAMBA*)**

By

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ABSTRACT

PROPERTIES OF NAIL WITHDRAWAL HOLDINGS ON KELEMPAYAN TIMBER (*Neolamarckia Cadamba*)

This research was to investigate the properties of nail withdrawal holdings on Kelampayan timber and were tested based on standard ASTM D1761-12 to determine the withdrawal strength of the nails. This research only have one parameter which is three types of nails (smooth shank nail, ring shank nail, screw shank nail). The testing were conducted in a room with temperature of 20°C and 65% of humidity of surroundings. There were about 6 nails for every type of nails were tested during the research conducted. The results show that the mean of maximum load for smooth shank nail is 1473.41N with standard deviation of 119.44N. For the ring shank nail and screw shank nail, it shows that the mean of maximum load are 1539.08N and 2570.03 with standard deviation 317.98N and 465.02N respectively. The withdrawal strength of the nails were recorded as 0.13MPa for the smooth shank nails, 0.14MPa for the ring shank nails, and 0.22MPa for the screw shank nails. This research conclude that screw shank nail had the highest withdrawal strength compared to the smooth shank nail and ring shank nail on the Kelampayan timber.

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