Bending and fatigue strength of mortise and tenon furniture joints made from oil palm lumber.

ABSTRACT

The bending and fatigue strengths of rectangular mortise and tenon furniture joints made from oil palm lumber and solid Rubberwood were compared. The results showed that the ultimate bending moment of the oil palm lumber joints were half of the strength value of Rubberwood joints. The results showed that for both materials the allowable design stresses for rectangular mortise and tenon joints could be set at 20% of its bending strength.

Keyword: Bending; Fatigue; Oil palm; Lumber.