



## Fire Resistance Characteristics of Glued Laminated Timber Manufactured from Malaysian Tropical Hardwood Timber (Malangangai): Charring Rate and Fire Classification

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### Summary:

This paper reports the investigation on the one-dimensional charring rate of glued laminated timber manufactured from Malaysian Tropical Hardwood namely Malangangai (density, 800 kg/m<sup>3</sup>). The fire test was conducted at SP Wood Technology in Stockholm in accordance with EN 13381-7:2014 for determination of charring rate. The reaction-to-fire tests for fire classifications in terms of flame spread, smoke production and burning droplets were investigated at University of Stuttgart, Germany in accordance with the procedures given in EN 13 501-1 : 2010. The results show that the charring rate of glulam Malangangai is 0.6 mm/min. The fire behaviour of the glulam is in Class C with medium smoke generation and very little burning droplets.

Online Access: Free

### Resource Link

<http://hdl.handle.net/20.500.12708/172>