

## The Experimental and Statistical Analysis of the Wood Strength against Pressure According to Different Wood Types, Sizes, and Coatings

**Authors :** Mustafa Altin, Gamze Fahriye Pehlivan, Sadiye Didem Boztepe Erkis, Sakir Tasdemir, Sevda Altin

**Abstract :** In this study, an experimental study was executed related to the strength of wooden materials which have been commonly used both in the past and present against pressure and whether fire retardant materials used against fire have any effects or not. Totally, 81 samples which included three different wood species, three different sizes, two different fire retardants and two unprocessed samples were prepared. Compressive pressure tests were applied to the prepared samples, their variance analyses were executed in accordance with the obtained results and it was aimed to determine the most convenient wooden materials and fire-retardant coating material. It was also determined that the species of wood and the species of coating caused the decrease and/or increase in the resistance against pressure.

**Keywords :** resistance of wood against pressure, species of wood, variance analysis, wood coating, wood fire safety

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