Singapore University develops invisible fireproof coating for wood

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An invisible coating that can make wood "fireproof" has been invented by scientists at NTU Singapore. With the popularity of mass engineered timber growing in the construction industry, one of the biggest challenges for wood is its flammability. When untreated, wood or timber can burn and combust easily. Source: Timberbiz

Over the last decade, mass engineered timber is gaining popularity due to lower costs and faster construction. However, current practices to protect the interior of wooden buildings from fires require the use of fire-retardant panels or paint-like coatings that conceals the natural wood grains of timber.

In comparison, the new invisible coating developed by NTU allows for natural beauty of timber to shine and yet can still provide a flame barrier when "activated" by fire. It is low-cost, easy to apply, effective in kerbing the spread of fire and generates very little smoke when burnt.

The innovation has a technology disclosure filed through NTUitive, NTU's innovation and enterprise company, and the commercialisation project was funded S\$250,000 through the NTUitive Gap Fund.

The NTU team is now in licensing talks with different companies. Venturer Timberwork is actively exploring the usage of this innovative coating to protect their mass engineered timber elements in one of their current projects.