



Investigation of Fire Performance of CLT Manufactured with Thin Laminates

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Summary:

Nowadays, the fire behavior of CLT panels made from solid-sawn lumber exposed to fire is well known and documented by a number of research organizations and universities. However, due to the desire to optimize how material is used in CLT, and ultimately lower manufacturing costs, CLT with thin laminations ranging from 19 to 25 mm in thickness has started to be produced in North America, which somewhat limits the applicability of some design provisions which were derived and validated from CLT made with 35-mm laminations. There is currently limited research on CLT manufactured with thin laminations, namely with respect to their fire behavior and specifically the effective charring rate.

In order to address the lack of consistency in the charring models of CLT with thin laminations, FPInnovations conducted a series of fire tests to further evaluate and document the impact on the charring rate from using thin laminations. The objective of this study is to evaluate the charring behavior of CLT manufactured in accordance with ANSI/APA PRG-320 with thin laminations of various thicknesses (less than 35 mm).

Online Access: Free

Resource Link

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