



Fire Safety Challenges of Tall Wood Buildings – Phase 2: Task 2 & 3 – Cross Laminated Timber Compartment Fire Tests

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Summary:

Recent architectural trends include the design and construction of increasingly tall buildings with structural components comprised of engineered wood referred to by names including; cross laminated timber (CLT), laminated veneer lumber (LVL), or glued laminated timber (Glulam). These buildings are cited for their advantages in sustainability resulting from the use of wood as a renewable construction material. Previous research has shown that timber elements contribute to the fuel load in buildings and can increase the initial fire growth rate – potentially overwhelming fire protection system and creating more severe conditions for occupants, emergency responders, and nearby properties.

The overarching goal of this project Fire Safety Challenges of Tall Wood Buildings Phase 2 (involving five tasks) is to quantify the contribution of CLT building elements (wall and/or floor-ceiling assemblies) in compartment fires and provide data to allow comparison of the performance of CLT systems against other building systems commonly used in tall buildings.

Online Access: Free

Resource Link

<https://www.nfpa.org/News-and-Research/Data-research-and-tools/Building-and-Life-Safety/Fire-Safety-Challenges-of-Tall-Wood-Buildings-Phase-2/Fire-Safety-Challenges-of-Tall-Wood-Buildings-Phase-2-Tasks-2-and-3>