

## Structural Performance of Mass Timber Panel-Concrete Composite Floors with Notched Connections

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Mass timber panels (MTPs) such as cross-laminated timber, glue-laminated timber, and nail-laminated timber, are emerging construction materials in the building industry due to their high strength, great dimensional stability, and prefabrication. The combination of MTPs and concrete in the floor system offers many structural, economic, and ecological benefits. The structural performance of MTP-concrete composite floors is governed by the shear connection system between timber and concrete. This study investigated the structural performance of notch-connected composite floors through experimental, numerical, and analytical investigations. The study presented promising results in terms of the static and dynamic structural performance of notch-connected MTP-concrete composite floors. The proposed composite beam model provides useful tools to analyze the internal forces in notch-connected MTP-concrete composite floors.

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