



A Comparison of the Energy Saving and Carbon Reduction Performance between Reinforced Concrete and Cross-Laminated Timber Structures in Residential Buildings in the Severe Cold Region of China

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Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Energy Performance
Environmental Impact

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Abstract:

This paper aims to investigate the energy saving and carbon reduction performance of cross-laminated timber residential buildings in the severe cold region of China through a computational simulation approach. The authors selected Harbin as the simulation environment, designed reference residential...

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Energy Saving and Carbon Reduction in the Operation Stage of Cross Laminated Timber Residential Buildings in China

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Abstract:

This paper focused on energy consumption and carbon emission for heating and cooling during a building's operation stage, and examined the energy effects of using Cross Laminated Timber (CLT) as an alternative building material to reinforced concrete (RC) in China's 31 key cities located in different climate zones...

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