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Project title:

[Improved fire design of engineered wood systems in buildings](#)

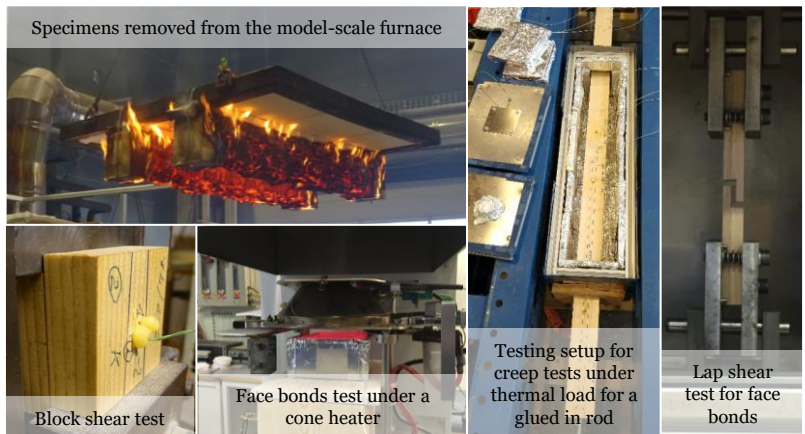
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RISE Fire Research AS

Based on the results of the conducted experiments, the improved design models, strategies for the optimization of engineered wood systems and their fire protection properties are presented. The experimentally investigated research focus was mainly on the improvement of fire design methods for the I-Joists, glued laminated timber, cross-laminated timber and connections with bonded-in rods. Due to the composition of the engineered wood systems, the focus of the investigations was related to the material properties and high-temperature behaviour of different types of adhesives in the bond lines.



In addition to improved design methods, small-scale test methods have also been developed in FIREWOOD to classify the tested adhesives for engineered wood structures according to their fire behaviour. This approach enables cost-efficient verification of adhesives and their safe applicability in timber buildings.

The outcome of FIREWOOD is presented and discussed at standardization committees CEN TC193 SC1 and CEN TC250 SC5. The results are taken as a basis for further standardization activities.

The results will be available as scientific articles and FIREWOOD reports.



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