



UNIVERSITÉ
DE LORRAINE

Interreg 
North-West Europe
Adhesive Free Timber Buildings
European Regional Development Fund



Finite element modelling of the fire performance of cross-laminated timber panels assembled by different techniques

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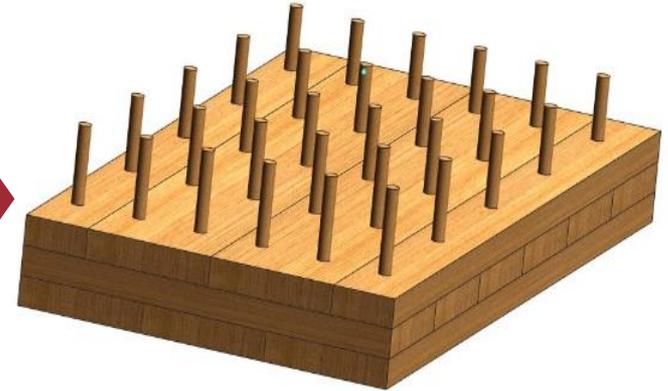


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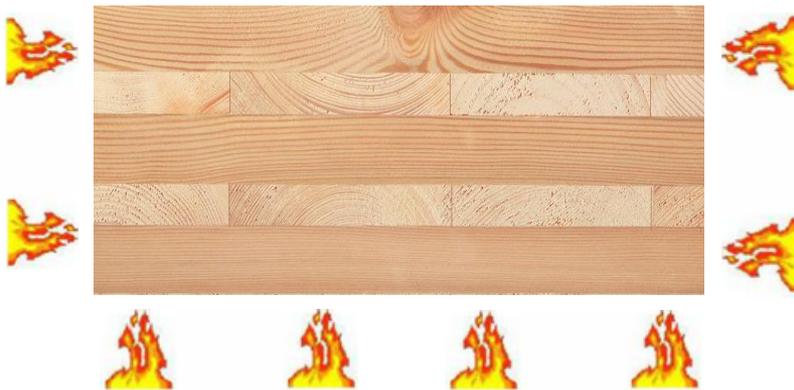
Introduction



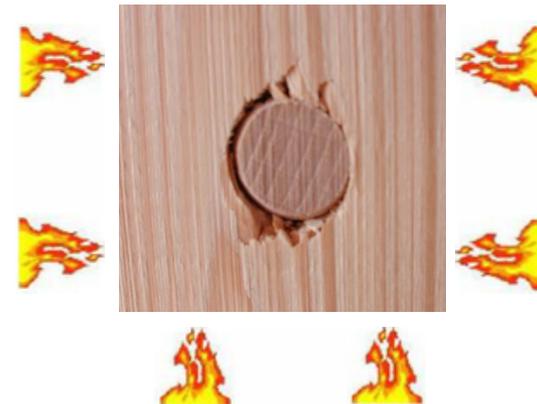
Glued cross-laminated timber panels (CLT)



Adhesive free cross-laminated timber panels



Conventional CLT exposed to fire



Joint made with CW dowels exposed to fire

The aim of this work is to develop a modeling approach to predict heat transfer within CLT panels assembled with different techniques when one or more faces are subjected to fire.

➔ 2D and 3D finite element models will be implemented in Abaqus software via a subroutine UMATHT to simulate few fire tests in our laboratory.

**Thanks For Your
Attention !**