IMPROVED FIRE DESIGN OF ENGINEERED WOOD SYSTEMS IN BUILDINGS

https://risefr.com/services/research-and-assessments/firenwood
Background

- Development towards:
  - Environmentally friendly building materials
  - Taller and larger buildings

- New fire risks need to be addressed to support development and use of innovative wood systems in construction

The main goal in FIRENWOOD is to ensure fire safe use of innovative, engineered wood systems in taller and larger buildings.
Engineered wood systems and fire safety

- Addressing causes for technical and societal concerns related to fire safety.
- Strategies to reduce barriers for innovation, design and use.
Aim

- Fill knowledge gaps related to the fire technical properties of engineered wood construction elements at elevated temperatures and in fire conditions
  - Develop methods
    - Design models
    - Classification method
  - Disseminate/communicate/exploit
    - Adoption of relevant and economic procedures/guidelines/regulations
    - Public acceptance

Smotherer fire design of engineered wood systems for extended application areas, and thus a greater market potential
Experimental validation

- Fire performance of engineered wood systems
- Comprehensive test program, different scales of testing
  - Fire development
  - Fire properties
  - Mechanical properties at elevated temperatures
- Validation of design models
Partners

TAL TECH
ETH Zürich
Technical University of Munich
TUM
RISE
MPA Stuttgart
Materialprüfungsanstalt Universität Stuttgart
MASONITE BEAMS
SPLITKON
MOELVEN
FIRENWOOD
ForestValue
Project updates

Website:

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