



Forest Products Laboratory research on
the fire performance of CLT

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Overall Goal

- Increase commercialization of CLT
- Demonstrating and increasing the hourly rating



The Library on The Dock; Photograph by Diana Snape

Collaborations



FPInnovations



CLEMSON[®]
UNIVERSITY



Total Specimens

- To date: 25
- By December 2015: 41



Variables



Machine Stress Rated - MSR

 SPIB® KD19HT (7)
2400f MSR 2.0E

Visually Graded



 AUDITED BY
TP® NO.1 KD HT
012 SYP

Variables

Melamine
Formaldehyde

Emulsion
Polymer
Isocyanate



Phenol
Resorcinol
Formaldehyde

Polyurethane

Variables



LCL

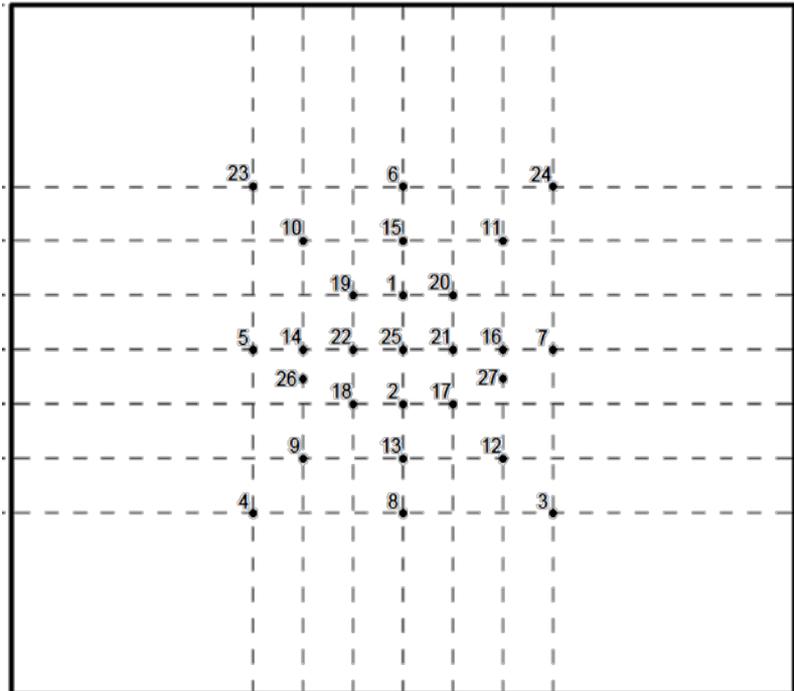


LLC

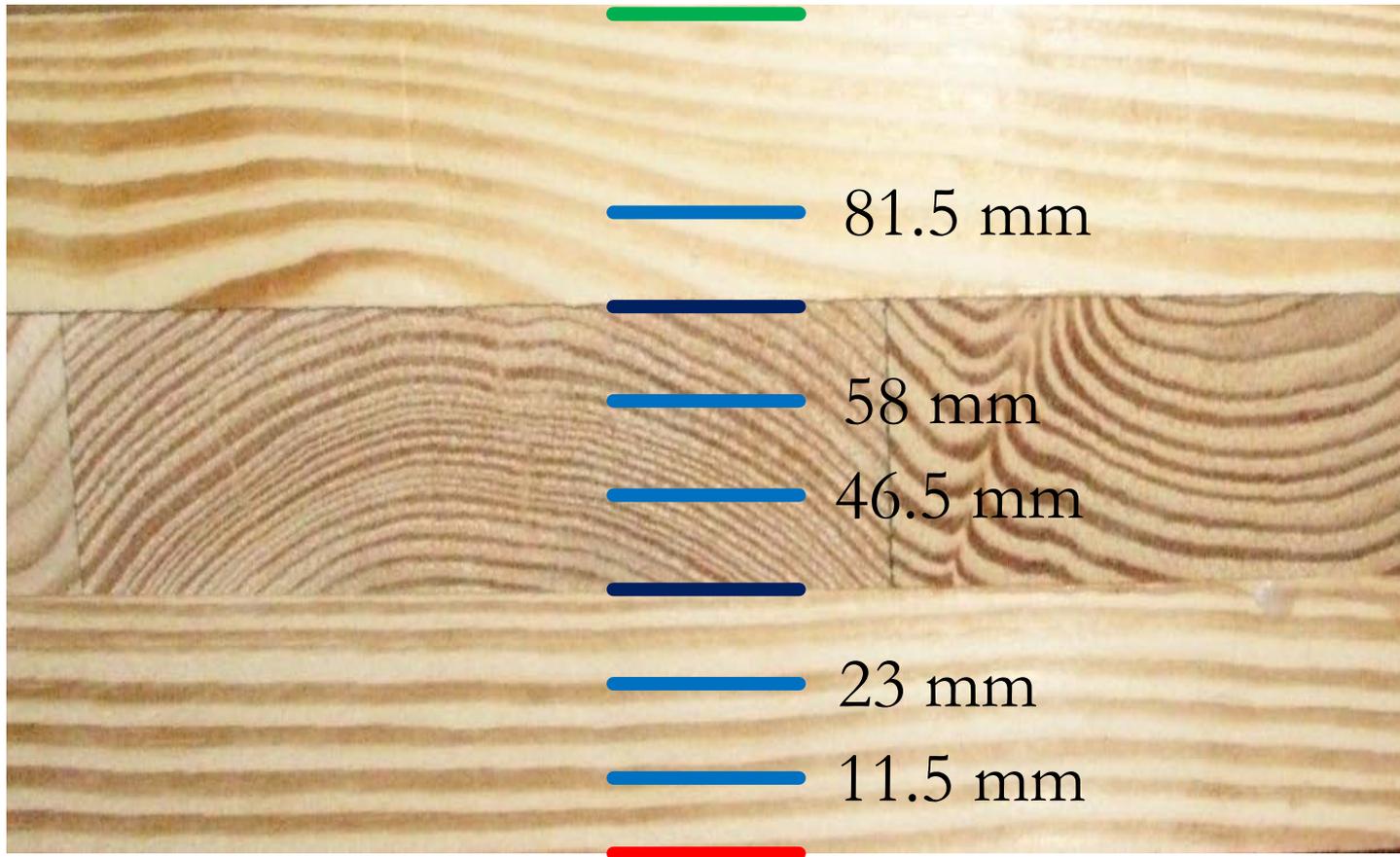
Variables



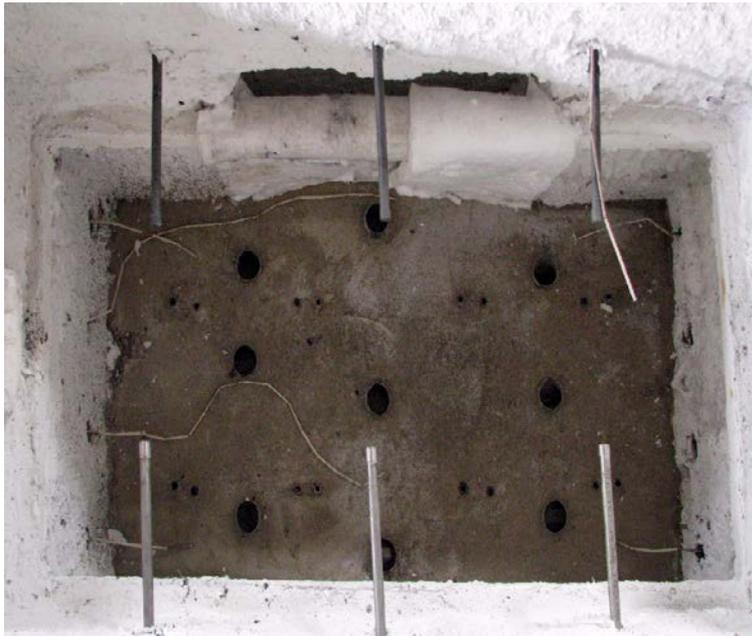
Methods



Methods

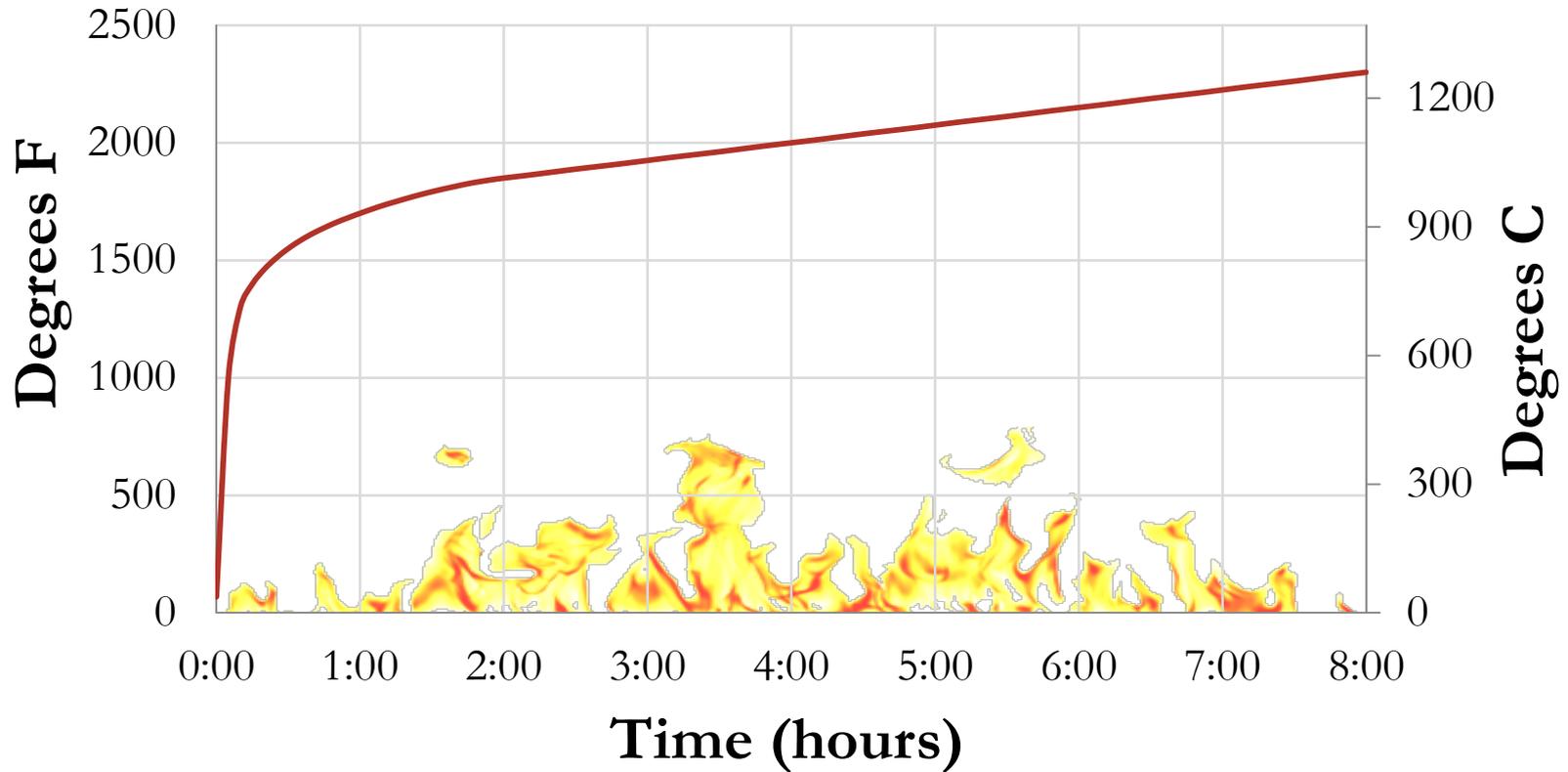


Methods

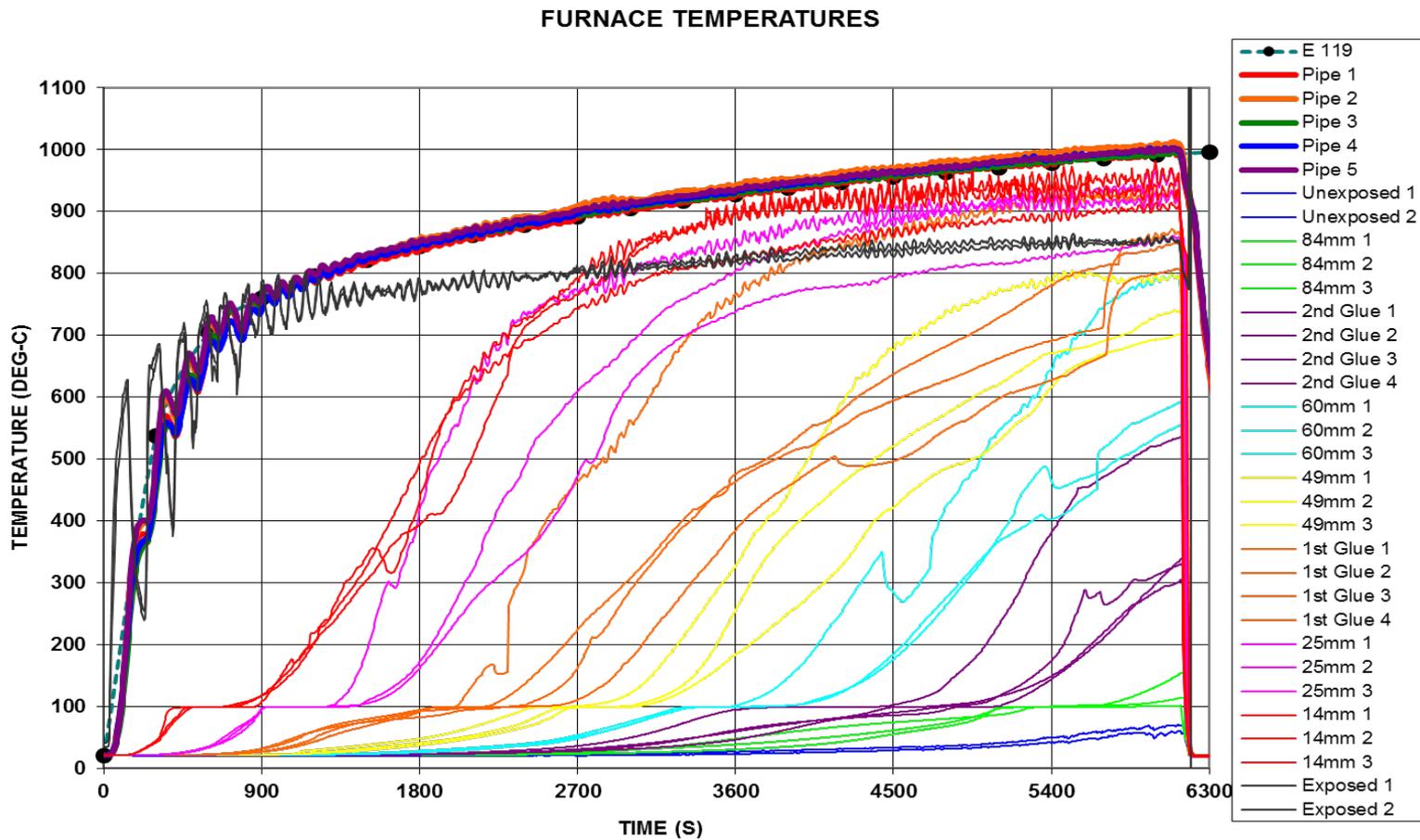


Methods

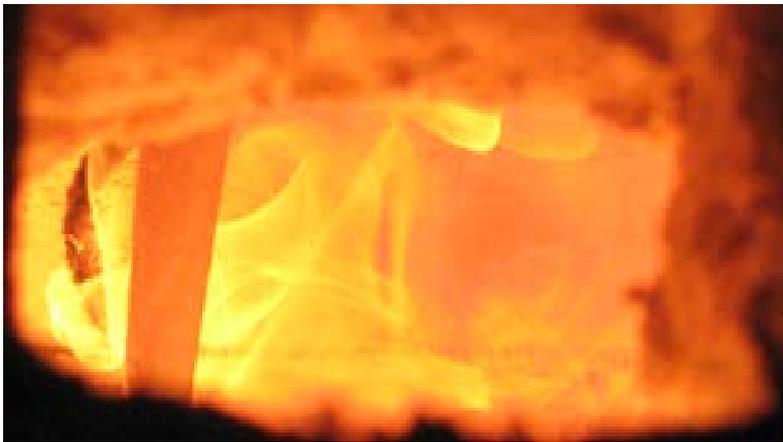
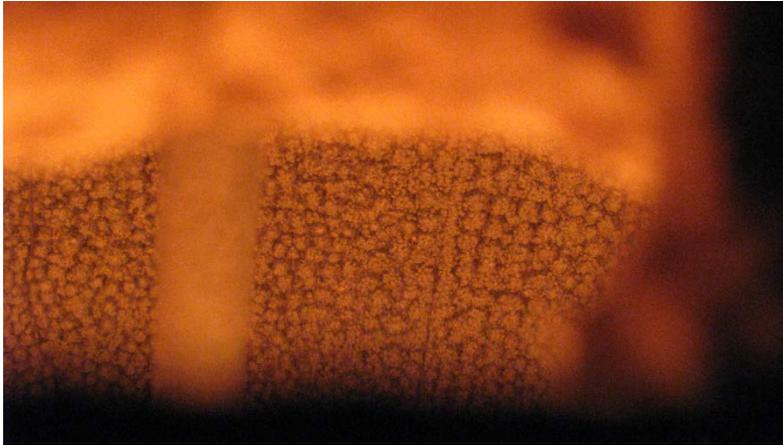
ASTM E 119 Time-Temperature Curve



Methods



Methods

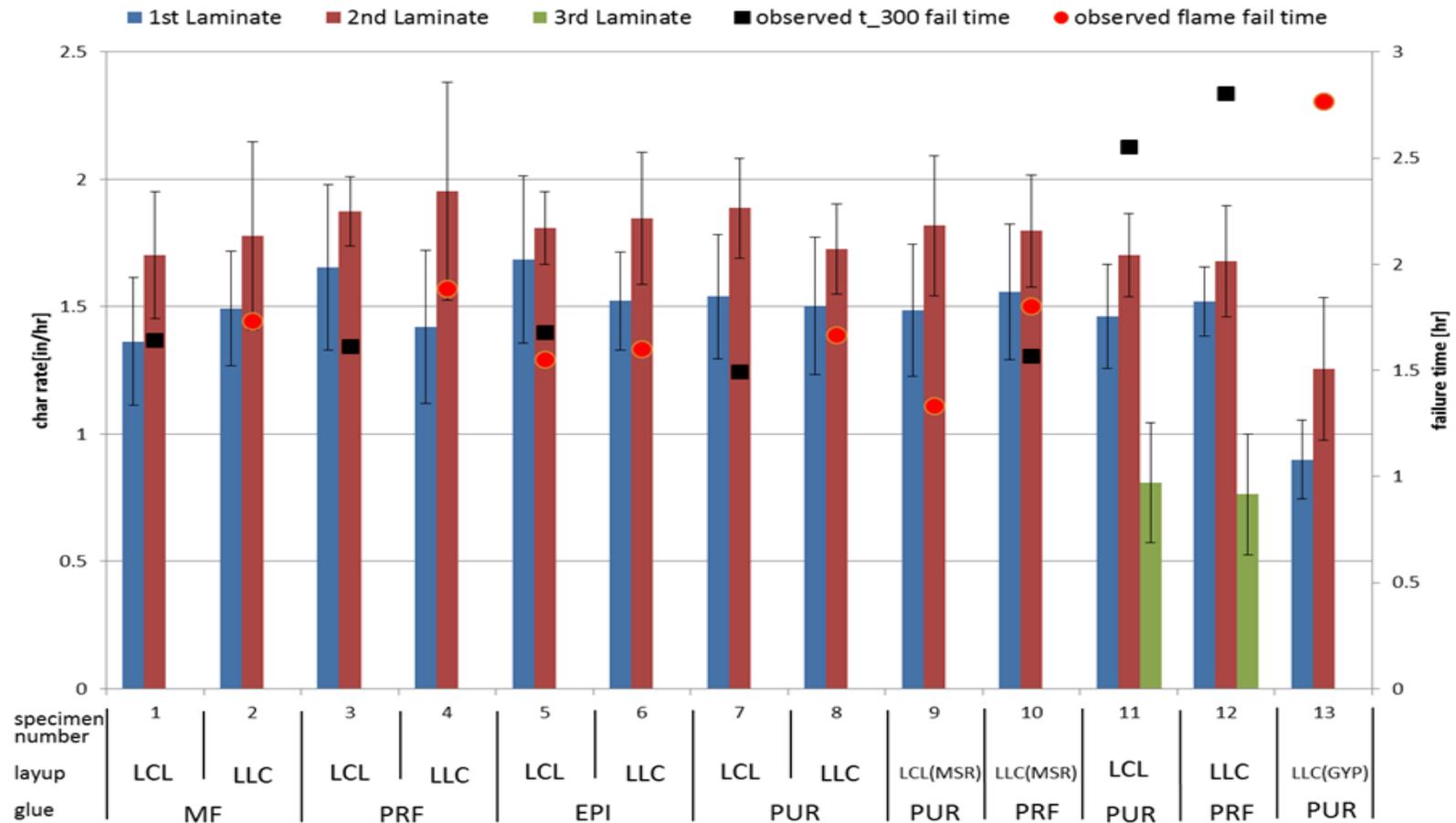


Methods

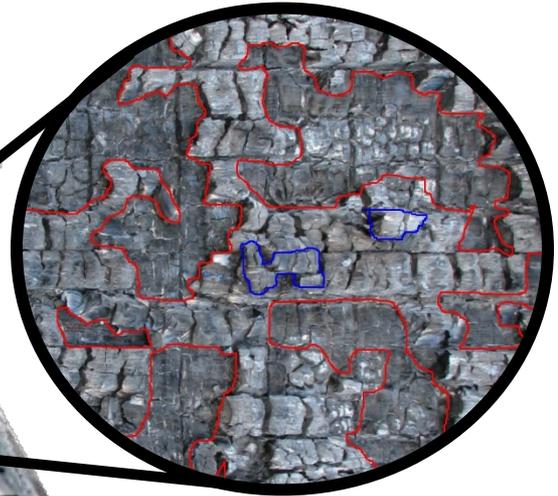


Results

Non-linear char rates and observed failure times



Results



Results



Questions?

