



Apparent Sound Insulation in Cross-Laminated Timber Buildings

<https://research.thinkwood.com/en/permalink/catalogue1276>

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Organization: National Research Council of Canada

Year of Publication: 2017

Country of Publication: Canada

Publication:

Format: Report

Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Acoustics and Vibration

Connections

Keywords: Airborne Sound Transmission

Adhesives

Language: English

Research Status: Complete

Online Access: Free

Resource Link

<http://doi.org/10.4224/23002009>



Connection and Performance of Two-Way CLT Plates Phase II

<https://research.thinkwood.com/en/permalink/catalogue2086>

Author: Zhang, Chao
Asselstine, Julian
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Lam, Frank

Organization: University of British Columbia

Year of Publication: 2019

Country of Publication: Canada

Format: Report

Material: CLT (Cross-Laminated Timber)
PSL (Parallel Strand Lumber)
LVL (Laminated Veneer Lumber)

Application: General Application

Topic: Mechanical Properties
Connections

Keywords: Deflection
Two-Way
Bending
Finite Element Method
Model

Language: English

Research Status: Complete

Abstract:

In Phase I of Developing Large Span Two Way CLT Floor System (2017-18) we studied the performance of a steel plate connection system for the minor direction of CLT plates. The connected specimens had higher stiffness and strength compared to intact members under bending. In Phase II (2018-19) we designed and tested another connector based on...

Online Access: Free

Resource Link

<http://team.sites.olt.ubc.ca/files/2019/04/TEAM-Report-2018-07-Phase-II-Connection-and-performance-of-Two-way-CLT-Plate.pdf>



Connections for Stackable Heavy Timber Modules in Midrise to Tall Wood Buildings

<https://research.thinkwood.com/en/permalink/catalogue2087>

Author: Zhang, Chao
Lee, George
Lam, Frank

Organization: University of British Columbia

Year of Publication: 2019

Country of Publication: Canada

Format: Report

Material: LVL (Laminated Veneer Lumber)
CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Connections
Design and Systems
Seismic

Keywords: Modular
Intra-module Connection
Inter-module Vertical Connection
Inter-module horizontal Connection
Mid-Rise
Tall Wood
Screws
Load Transfer
Steel Angle Bracket
Stiffness
Strength
Ductility

Language: English

Research Status: Complete

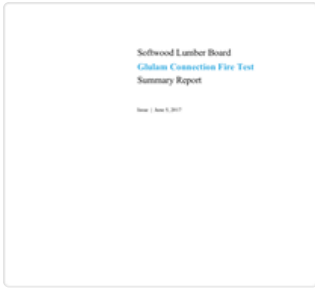
Abstract:

In Phase I (2018-19) of this project on Prefabricated Heavy Timber Modular Construction, three major types of connections used in a stackable modular building were studied: intramodule connection, inter-module vertical connection, and inter-module horizontal connection. The load requirement and major design criteria were identified...

Online Access: Free

Resource Link

<http://team.sites.olt.ubc.ca/files/2019/04/TEAM-Report-2018-08-Connections-for-Stackable-Heavy-Timber-Modules.pdf>



Softwood Lumber Board Glulam Connection Fire Test Summary Report

<https://research.thinkwood.com/en/permalink/catalogue700>

Organization: Arup USA
Softwood Lumber Board
MyTiCon
DR Johnson

Year of Publication: 2017

Country of Publication: United States

Format: Report

Material: CLT (Cross-Laminated Timber)
Glulam (Glue-Laminated Timber)

Application: Beams
Columns

Topic: Connections
Fire

Keywords: Beam-to-Column Connectors
Fire Resistance Rating
Full Scale

Language: English

Research Status: Complete

Abstract:

The Softwood Lumber Board, Arup, MyTiCon and DR Johnson have partnered to complete three full-scale fire tests for glulam beam to column connectors. The fire tests have been completed for “off-the-shelf” connectors for glulam beams, testing the conne...

Online Access: Free

Resource Link

<https://www.thinkwood.com/wp-content/uploads/2018/01/reThink-Wood-Arup-SLB-Connection-Fire-Testing-Summary-web.pdf>



Validation of Prediction Tools and Constructions – Grouping, Verification Measurements and Trend Analysis

<https://research.thinkwood.com/en/permalink/catalogue841>

Author: Homb, Anders
Guigou-Carter, Catherine
Hagberg, Klas
Späh, Moritz
Ferk, Heinz

Organization: Silent Timber Build

Year of Publication: 2017

Country of Publication: Sweden

Format: Report

Material: CLT (Cross-Laminated Timber)
Glulam (Glue-Laminated Timber)
Timber-Concrete Composite

Application: Floors

Topic: Design and Systems
Connections
Acoustics and Vibration

Keywords: Europe
Impact Sound Insulation
SEA
FEM

Language: English

Research Status: Complete

Online Access: Free

Resource Link

http://silent-timber-build.com/wp-content/uploads/sites/16/2018/01/wg2-report-anh_171226.pdf