



Acoustic Impact Testing and Waveform Analysis for Damage Detection in Glued Laminated Timber

<https://research.thinkwood.com/en/permalink/catalogue771>

Author: Feng Xu
Xiping Wang
Marko Teder
Yunfei Liu

Publisher: De Gruyter

Year of Publication: 2017

Country of Publication: Germany

Format: Journal Article

Material: Glulam (Glue-Laminated Timber)

Application: General Application

Topic: Acoustics and Vibration
Serviceability

Keywords: Decay
Delamination
Damage Detection
Moment Analysis
Wavelet Transform
Acoustic Signals

Language: English

Series: Holzforschung

ISSN: 1437-434X

Online Access: Payment Required

Resource Link

<https://doi.org/10.1515/hf-2016-0237> ↗



Advanced Wood Product Manufacturing Study for Cross-Laminated Timber Acceleration in Oregon & SW Washington, 2017

<https://research.thinkwood.com/en/permalink/catalogue715>

Organization: Oregon BEST
Year of Publication: 2017
Country of Publication: United States
Format: Report
Material: CLT (Cross-Laminated Timber)
Application: General Application
Topic: Market and Adoption
Keywords: Market
US
Economic Impact
Language: English
Online Access: Free

Resource Link

http://oregonbest.org/fileadmin/media/Mass_Timber/Accelerating_CLT_Manufacturing_in_Oregon__SW_Washington__2017__Oregon_BEST_.pdf



Analysis of Shear Transfer and Gap Opening in Timber–Concrete Composite Members with Notched Connections

<https://research.thinkwood.com/en/permalink/catalogue1399>

Author: Lorenzo Boccadoro
René Steiger
Simon Zweidler
Andrea Frangi

Publisher: Springer Netherlands

Year of Publication: 2017

Country of Publication: Netherlands

Format: Journal Article

Material: Timber-Concrete Composite

Application: General Application

Topic: Connections
Mechanical Properties

Keywords: Notched Connections
Analytical Model
Shear Stress
Failure

Language: English

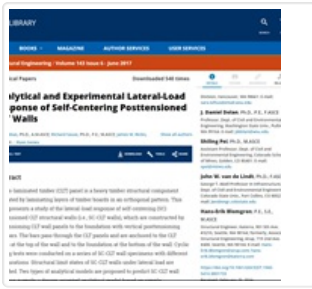
Series: Materials and Structures

ISSN: 1871-6873

Online Access: Payment Required

Resource Link

<https://doi.org/10.1617/s11527-017-1098-3>



Analytical and Experimental Lateral-Load Response of Self-Centering Posttensioned CLT Walls

<https://research.thinkwood.com/en/permalink/catalogue1248>

Author: Tugce Akbas
Richard Sause
James Ricles
Ryan Ganey
Jeffrey Berman
Sarah Loftus
Daniel Dolan
Shiling Pei
John van de Lindt
Hans-Erik Blomgren

Publisher: American Society of Civil Engineers

Year of Publication: 2017

Country of Publication: United States

Format: Journal Article

Material: CLT (Cross-Laminated Timber)

Application: Walls

Topic: Mechanical Properties

Keywords: Lateral Loads
Self-Centering
Post-Tensioned
Cyclic Loading Tests
Limit States
Numerical Model

Language: English

Series: Journal of Structural Engineering

Abstract:

A cross-laminated timber (CLT) panel is a heavy timber structural component fabricated by laminating layers of timber boards in an orthogonal pattern. This paper presents a study of the lateral-load response of self-centering (SC) posttensioned CLT structural walls (i.e., SC-CLT walls)...

Online Access: Payment Required

Resource Link

[https://doi.org/10.1061/\(ASCE\)ST.1943-541X.0001733](https://doi.org/10.1061/(ASCE)ST.1943-541X.0001733)



An Analytical Formulation of Q-Factor for Mid-Rise CLT Buildings based on Parametric Numerical Analyses

<https://research.thinkwood.com/en/permalink/catalogue1408>

Author: Luca Pozza
Davide Trutalli

Publisher: Springer Netherlands

Year of Publication: 2017

Country of Publication: Netherlands

Format: Journal Article

Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Seismic

Keywords: Dissipative Capacity
Q Factor
Geometry
Assembly
Dynamic Analysis
Parametric Study

Language: English

Series: Bulletin of Earthquake Engineering

ISSN: 1573-1456

Online Access: Payment Required

Resource Link

<https://doi.org/10.1007/s10518-016-0047-9>



An Approach to CLT Diaphragm Modeling for Seismic Design with Application to a U.S. High-Rise Project

<https://research.thinkwood.com/en/permalink/catalogue1710>

Author: Scott Breneman
Eric McDonnell
Reid Zimmerman

Organization: WoodWorks

Year of Publication: 2017

Country of Publication: United States

Format: Report

Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems
Floors

Topic: Design and Systems
Seismic

Keywords: US
Model
Diaphragm
High-Rise

Language: English

Online Access: Free

Resource Link

<http://www.woodworks.org/wp-content/uploads/Approach-to-CLT-Diaphragm-Modeling-for-Seismic-WoodWorks-Jan-2017.pdf>



An Empirical Model for Predicting the Mechanical Properties Degradation of Bamboo Bundle Laminated Veneer Lumber (BLVL) by Hygrothermal Aging Treatment

<https://research.thinkwood.com/en/permalink/catalogue1405>

Author: Haidong Li
Fuming Chen
Yu Xian
Jianchao Deng
Ge Wang
Haitao Cheng

Publisher: Springer Berlin Heidelberg

Year of Publication: 2017

Country of Publication: Germany

Format: Journal Article

Material: Other Materials

Application: General Application

Topic: Serviceability
Mechanical Properties

Keywords: Degradation
Computed Tomography
MOE
MOR
Temperature
Failure
Bamboo

Language: English

Series: European Journal of Wood and Wood Products

ISSN: 1436-736X

Online Access: Payment Required

Resource Link

<https://doi.org/10.1007/s00107-016-1100-8>



Apparent Sound Insulation in Cross-Laminated Timber Buildings

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

Author: Christoph Hoeller
Jeffrey Mahn
Dave Quirt
Stefan Schoenwald
Berndt Zeitler

Organization: National Research Council of Canada

Year of Publication: 2017

Country of Publication: Canada

Format: Report

Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Acoustics and Vibration
Connections

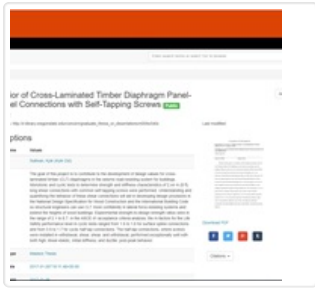
Keywords: Airborne Sound Transmission
Adhesives

Language: English

Online Access: Free

Resource Link

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



Behavior of Cross-Laminated Timber Diaphragm Panel-to-Panel Connections with Self-Tapping Screws

<https://research.thinkwood.com/en/permalink/catalogue1422>

Author: Kyle Sullivan
Organization: Oregon State University
Year of Publication: 2017
Country of Publication: United States
Format: Thesis
Material: CLT (Cross-Laminated Timber)
Application: Wood Building Systems
Topic: Seismic
Keywords: Lateral Load Resisting System
Monotonic Tests
Cyclic Tests
Strength
Stiffness
Self-Tapping Screws
International Building Code
Language: English
Online Access: Free

Resource Link

http://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/n009w540c



Bending Tests on Timber-Concrete Composite Members Made of Beech Laminated Veneer Lumber with Notched Connection

<https://research.thinkwood.com/en/permalink/catalogue1349>

Author: Lorenzo Boccadoro
Simon Zweidler
René Steiger
Andrea Frangi

Publisher: ScienceDirect

Year of Publication: 2017

Country of Publication: Netherlands

Format: Journal Article

Material: Timber-Concrete Composite
LVL (Laminated Veneer Lumber)

Application: General Application

Topic: Mechanical Properties

Keywords: Notched Connections
Analytical Model
Vertical Load
Ductility
Compressive Failure
Bending Test

Language: English

Series: Engineering Structures

Online Access: Payment Required

Resource Link

<https://doi.org/10.1016/j.engstruct.2016.11.029>