



## An Analytical Model for Design of Reinforcement around Holes in Laminated Veneer Lumber (LVL) Beams

<https://research.thinkwood.com/en/permalink/catalogue135>

Author: Manoochehr Ardalany  
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Publisher: Springer Netherlands

Year of Publication: 2013

Country of Publication: Netherlands

Format: Journal Article

Material: LVL (Laminated Veneer Lumber)

Application: Beams

Topic: Design and Systems  
Mechanical Properties

Keywords: Failure  
Glued-In Rods  
Model  
Reinforcement  
Screws  
Tensile

Language: English

Research Status: Complete

Series: Materials and Structures

ISSN: 1871-6873

Online Access: Free

### Resource Link

[https://www.researchgate.net/profile/Massimo\\_Fragiaco/publication/257895961\\_An\\_analytical\\_model\\_for\\_design\\_of\\_reinforcement\\_around\\_holes\\_in\\_Laminated\\_Veneer\\_Lumber\\_LVL\\_beams/links/542a93010cf27e39fa8eb0e1/An-analytical-model-for-design-of-reinforcement-around-holes-in-Laminated-Veneer-Lumber-LVL-beams.pdf](https://www.researchgate.net/profile/Massimo_Fragiaco/publication/257895961_An_analytical_model_for_design_of_reinforcement_around_holes_in_Laminated_Veneer_Lumber_LVL_beams/links/542a93010cf27e39fa8eb0e1/An-analytical-model-for-design-of-reinforcement-around-holes-in-Laminated-Veneer-Lumber-LVL-beams.pdf)



# Application of a Translational Tuned Mass Damper Designed by Means of Genetic Algorithms on a Multistory Cross-Laminated Timber Building

<https://research.thinkwood.com/en/permalink/catalogue413>

Author: Guillaume Poh'sié  
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Massimo Fragiaco  
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Ario Ceccotti

Publisher: American Society of Civil Engineers

Year of Publication: 2015

Country of Publication: United States

Format: Journal Article

Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Seismic

Keywords: Translational Tuned Mass Damper  
Dynamic Analysis  
Multi-Story

Language: English

Research Status: Complete

Series: Journal of Structural Engineering

## Abstract:

This paper presents a numerical study conducted on a seven-story timber building made of cross-laminated (X-lam) panels, equipped with a linear translational tuned mass damper (TMD). The TMD is placed on the top of the building as a technique for reducin...

Online Access: Free

## Resource Link

[https://www.researchgate.net/profile/Giovanni\\_Rinaldin/publication/281692633\\_Application\\_of\\_a\\_Translational\\_Tuned\\_Mass\\_Damper\\_Designed\\_by\\_Means\\_of\\_Genetic\\_Algorithms\\_on\\_a\\_Multistory\\_Cross-Laminated\\_Timber\\_Building/links/5890ae90a6fdcc1b41452f81/Application-of-a-Translational-Tuned-Mass-Damper-Designed-by-Means-of-Genetic-Algorithms-on-a-Multistory-Cross-Laminated-Timber-Building.pdf](https://www.researchgate.net/profile/Giovanni_Rinaldin/publication/281692633_Application_of_a_Translational_Tuned_Mass_Damper_Designed_by_Means_of_Genetic_Algorithms_on_a_Multistory_Cross-Laminated_Timber_Building/links/5890ae90a6fdcc1b41452f81/Application-of-a-Translational-Tuned-Mass-Damper-Designed-by-Means-of-Genetic-Algorithms-on-a-Multistory-Cross-Laminated-Timber-Building.pdf)



## Behaviour of Cross-Laminated Timber Panels Under Cyclic Loads

<https://research.thinkwood.com/en/permalink/catalogue661>

Author: Igor Gavric  
Massimo Fragiaco  
Marjan Popovski  
Ario Ceccotti

Publisher: Springer, Dordrecht

Year of Publication: 2014

Country of Publication: Netherlands

Format: Book Section

Material: CLT (Cross-Laminated Timber)

Application: Walls

Topic: Design and Systems  
Seismic

Keywords: Cyclic Loads  
Failure Mechanisms  
Energy Dissipation  
seismic behaviour

Language: English

Research Status: Complete

Series: Materials and Joints in Timber Structures

ISBN: 978-94-007-7811-5

Online Access: Payment Required

### Resource Link

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[http://dx.doi.org/10.1007/978-94-007-7811-5\\_62](http://dx.doi.org/10.1007/978-94-007-7811-5_62)



## Design and Construction of Prestressed Timber Buildings for Seismic Areas

<https://research.thinkwood.com/en/permalink/catalogue1847>

Author: Tobias Smith  
Stefano Pampanin  
Massimo Fragiaco  
Andy Buchanan

Publisher: New Zealand Timber Design Society

Year of Publication: 2018

Country of Publication: New Zealand

Format: Journal Article

Material: LVL (Laminated Veneer Lumber)  
Glulam (Glue-Laminated Timber)

Application: Wood Building Systems  
General Application

Topic: Design and Systems

Keywords: Pre-Stressed  
Low-Rise  
Multi-Storey  
Earthquake Resistance  
Hybrid Structures

Language: English

Research Status: Complete

Series: New Zealand Timber Design Journal

Online Access: Free

### Resource Link

[http://www.timberdesign.org.nz/wp-content/uploads/2018/05/Smith\\_Prestressed\\_Buildings\\_Seismic\\_Areas.pdf](http://www.timberdesign.org.nz/wp-content/uploads/2018/05/Smith_Prestressed_Buildings_Seismic_Areas.pdf)



## Design of a Four-Story Cross Laminated Timber Building in Northern Italy

<https://research.thinkwood.com/en/permalink/catalogue1886>

Author: Davide Vassallo  
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Publisher: Forest Products Society

Year of Publication: 2013

Country of Publication: United States

Format: Journal Article

Material: CLT (Cross-Laminated Timber)

Application: General Application

Topic: Design and Systems

Keywords: Low-Rise  
Mid-Rise  
Seismic Design  
Building Code

Language: English

Research Status: Complete

Series: Wood Design Focus

Notes: p 36-44

Online Access: Free

### Resource Link

<http://www.forestprod.org/assets/wdf/Archive/Wood%20Design%20Focus%202023-4.pdf>



## Design of Timber-Concrete Composite Structures

<https://research.thinkwood.com/en/permalink/catalogue1936>

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Frank Kupferle  
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Wendel Sebastian  
Kristian Sogel

Editor: Alfredo Dias  
Jörg Schänzlin  
Philipp Dietsch

Publisher: COST (European Cooperation in Science and Technology)

Year of Publication: 2018

Country of Publication: Germany

Format: Book

Material: Timber-Concrete Composite

Application: General Application

Topic: Mechanical Properties  
Connections  
Serviceability  
Design and Systems

Keywords: Internal Loads  
External Loads  
Dowel Type Fastener  
Notches  
Stiffness  
Strength  
Ductility  
Eurocode 5  
Load Carrying Capacity

Language: English

Research Status: Complete

ISBN: 978-3-8440-6145-1

ISSN: 0945-067X

Online Access: Free

#### Resource Link

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<https://www.cost.eu/wp-content/uploads/2018/11/Design-of-Timber-Concrete-Composite-Structures.pdf>



# Dynamic and Static Lateral Load Tests on Full-Sized 3-Storey CLT Construction for Seismic Design

<https://research.thinkwood.com/en/permalink/catalogue481>

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Hiroshi Isoda  
Chihiro Tsuda  
Sota Miura  
Satoshi Murakami  
Takafumi Nakagawa

Year of Publication: 2014

Country of Publication: Canada

Format: Conference Paper

Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Seismic

Keywords: Shake Table Test

Lateral Load Test

Shear Displacement

Joint Deformation

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 10-14, 2014, Quebec City, Canada

Abstract:

In order to consider the seismic design method, the shaking table tests and static lateral load tests were conducted to the modeled CLT panel construction. As a result, it was clarified that the shear displacement and joint deformation under the seismic...

Online Access: Free

## Resource Link

[http://schr.ws/hosted\\_files/wcte2014/b5/ABS572\\_Tsuchimoto.pdf](http://schr.ws/hosted_files/wcte2014/b5/ABS572_Tsuchimoto.pdf)



# Estimation of Bending Stiffness, Moment Carrying Capacity and Internal Shear Force of Sugi CLT Panel

<https://research.thinkwood.com/en/permalink/catalogue622>

Author: Minoru Okabe  
Motoi Yasumura  
Kenji Kobayashi

Year of Publication: 2014

Country of Publication: Canada

Format: Conference Paper

Material: CLT (Cross-Laminated Timber)

Application: Floors

Topic: Mechanical Properties

Keywords: Internal Shear Strength  
Bending Strength  
Moment Carrying Capacity  
Monte Carlo

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 10-14, 2014, Quebec City, Canada

**Abstract:**

CLT panels consist of several layers of lumber stacked crosswise and glued together on their faces. Prototype Sugi CLT floor panels were manufactured and bending and internal shear tests were carried out under the different parameters of lumber MOE, numb...

Online Access: Free

**Resource Link**

[http://scho.wshosted\\_files/wcte2014/d0/ABS307\\_Okabe.pdf](http://scho.wshosted_files/wcte2014/d0/ABS307_Okabe.pdf)





# Experimental-Numerical Analyses of the Seismic Behaviour of Cross-Laminated Wall Systems

<https://research.thinkwood.com/en/permalink/catalogue56>

Author: Igor Gavric  
Giovanni Rinaldin  
Claudio Amadio  
Massimo Fragiacomò  
Ario Ceccotti

Year of Publication: 2012

Country of Publication: Portugal

Format: Conference Paper

Material: CLT (Cross-Laminated Timber)

Application: Walls

Topic: Seismic  
Energy Performance

Keywords: Finite Element Model  
Abaqus  
Experimental  
Numerical  
Full Scale  
Cyclic Testing

Language: English

Conference: World Conference on Earthquake Engineering

Research Status: Complete

Notes: September 24-28, 2012, Lisbon, Portugal

Online Access: Free

## Resource Link

[http://www.iitk.ac.in/nicee/wcee/article/WCEE2012\\_2749.pdf](http://www.iitk.ac.in/nicee/wcee/article/WCEE2012_2749.pdf)



# Experimental Seismic Behavior of a Two-Story CLT Platform Building: Shake Table Testing Results

<https://research.thinkwood.com/en/permalink/catalogue2052>

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Andre Barbosa  
Philip Line  
Douglas Rammer  
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Year of Publication: 2018

Country of Publication: South Korea

Format: Conference Paper

Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Seismic  
Mechanical Properties

Keywords: Shake Table Tests  
Full Scale  
Service Level Earthquake  
Design Base Earthquake  
Maximum Considered Earthquake  
Seismic Force Resisting System

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Online Access: Free

## Resource Link

<https://indico.conference4me.psnr.pl/event/171/session/372/contribution/261/material/paper/1.pdf>