



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

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

Author: Xu, Feng  
Wang, Xiping  
Teder, Marko  
Liu, Yunfei

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

Research Status: Complete

Series: Holzforschung

ISSN: 1437-434X

Online Access: Free

### Resource Link

<https://www.fs.usda.gov/treesearch/pubs/download/55133.pdf> ↗



# Bonding Strength Test Method Assessment for Cross-Laminated Timber Derived Stressed-Skin Panels (CLT SSP)

<https://research.thinkwood.com/en/permalink/catalogue1404>

Author: Luengo, Emilio  
Hermoso, Eva  
Cabrero, Juan Carlos  
Arriaga, Francisco

Publisher: Springer Netherlands

Year of Publication: 2017

Country of Publication: Netherlands

Format: Journal Article

Material: CLT (Cross-Laminated Timber)

Application: General Application

Topic: Mechanical Properties

Keywords: Stressed-Skin Panels  
Shear Strength  
Glue Lines  
Shear Tests  
Bending Tests  
Bonding

Language: English

Research Status: Complete

Series: Materials and Structures

ISSN: 1871-6873

Online Access: Free

## Resource Link

[https://www.researchgate.net/profile/Eva\\_Hermoso/publication/318641605\\_Bonding\\_strength\\_test\\_method\\_assessment\\_for\\_Cross-Laminated\\_Timber\\_Derived\\_Stressed-Skin\\_Panels\\_CLT\\_SSP/links/59dc790aaca2728e201f79a9/Bonding-strength-test-method-assessment-for-Cross-Laminated-Timber-Derived-Stressed-Skin-Panels-CLT-SSP.pdf](https://www.researchgate.net/profile/Eva_Hermoso/publication/318641605_Bonding_strength_test_method_assessment_for_Cross-Laminated_Timber_Derived_Stressed-Skin_Panels_CLT_SSP/links/59dc790aaca2728e201f79a9/Bonding-strength-test-method-assessment-for-Cross-Laminated-Timber-Derived-Stressed-Skin-Panels-CLT-SSP.pdf)



# A Comparison of the Energy Saving and Carbon Reduction Performance between Reinforced Concrete and Cross-Laminated Timber Structures in Residential Buildings in the Severe Cold Region of China

<https://research.thinkwood.com/en/permalink/catalogue1207>

Author: Guo, Haibo  
Liu, Ying  
Meng, Yiping  
Huang, Haoyu  
Sun, Cheng  
Shao, Yu

Publisher: MDPI

Year of Publication: 2017

Country of Publication: Switzerland

Format: Journal Article

Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Energy Performance  
Environmental Impact

Keywords: Energy Consumption  
Carbon Emissions  
Residential  
Severe Cold Regions  
Simulation  
Reinforced Concrete  
Life-Cycle Assessment

Language: English

Research Status: Complete

Series: Sustainability

ISSN: 2071-1050

## Summary:

This paper aims to investigate the energy saving and carbon reduction performance of cross-laminated timber residential buildings in the severe cold region of China through a computational simulation approach. The authors selected Harbin as the simulation environment, designed reference residential...

Online Access: Free

## Resource Link

<https://doi.org/10.3390/su9081426> ↗



# Cross Laminated Timber Properties Including Effects of Non-Glued Edges and Additional Cracks

<https://research.thinkwood.com/en/permalink/catalogue1398>

Author: Nairn, John  
Publisher: Springer Berlin Heidelberg  
Year of Publication: 2017  
Country of Publication: Germany  
Format: Journal Article  
Material: CLT (Cross-Laminated Timber)  
Application: General Application  
Topic: Serviceability  
Moisture  
Keywords: Cracks  
Thermal Expansion  
Moisture Expansion  
In-Plane  
Language: English  
Research Status: Complete  
Series: European Journal of Wood and Wood Products  
ISSN: 1436-736X  
Online Access: Free

## Resource Link

[https://pubag.nal.usda.gov/?page=1435&per\\_page=100&search\\_field=all...&sort=date-desc](https://pubag.nal.usda.gov/?page=1435&per_page=100&search_field=all...&sort=date-desc)



# Description of Small and Large-Scale Cross Laminated Timber Fire Tests

<https://research.thinkwood.com/en/permalink/catalogue1339>

Author: Emberley, Richard  
Putynska, Carmen  
Bolanos, Aaron  
Lucherini, Andrea  
Solarte, Angela  
Soriguer, Diana  
Gonzalez, Mateo  
Humphreys, Kathryn  
Hidalgo, Juan  
Maluk, Cristian  
Law, Angus  
Torero, Jose

Publisher: ScienceDirect

Year of Publication: 2017

Country of Publication: Netherlands

Format: Journal Article

Material: CLT (Cross-Laminated Timber)

Application: Rooms  
Wood Building Systems

Topic: Fire

Keywords: Large Scale  
Small Scale  
Compartment Fire Test  
Heat Flux  
Temperature  
Self-Extinction

Language: English

Research Status: Complete

Series: Fire Safety Journal

Online Access: Free

## Resource Link

[http://discovery.ucl.ac.uk/10069562/7/Torero%20Cullen%20Submitted\\_pdf\\_.pdf](http://discovery.ucl.ac.uk/10069562/7/Torero%20Cullen%20Submitted_pdf_.pdf)



# Effect of Glue-line Thickness on Pull-Out Behavior of Glued-in GFRP Rods in LVL: Finite Element Analysis

<https://research.thinkwood.com/en/permalink/catalogue1331>

Author: Madhoushi, Mehrab  
Ansell, Martin  
Publisher: ScienceDirect  
Year of Publication: 2017  
Country of Publication: Netherlands  
Format: Journal Article  
Material: LVL (Laminated Veneer Lumber)  
Application: General Application  
Topic: Mechanical Properties  
Keywords: Finite Element Analysis  
Glue-line Thickness  
Pull-Out Behavior  
Modulus of Elasticity  
Glued-In Rods  
Language: English  
Research Status: Complete  
Series: Polymer Testing  
Online Access: Free

## Resource Link

[https://www.researchgate.net/profile/Mehrab\\_Madhoushi/publication/318232230\\_Effect\\_of\\_glue-line\\_thickness\\_on\\_pull-out\\_behavior\\_of\\_glued-in\\_GFRP\\_rods\\_in\\_LVL\\_Finite\\_element\\_analysis/links/5b07bf68aca2725783e27457/Effect-of-glue-line-thickness-on-pull-out-behavior-of-glued-in-GFRP-rods-in-LVL-Finite-element-analysis.pdf](https://www.researchgate.net/profile/Mehrab_Madhoushi/publication/318232230_Effect_of_glue-line_thickness_on_pull-out_behavior_of_glued-in_GFRP_rods_in_LVL_Finite_element_analysis/links/5b07bf68aca2725783e27457/Effect-of-glue-line-thickness-on-pull-out-behavior-of-glued-in-GFRP-rods-in-LVL-Finite-element-analysis.pdf)



# Effect of Laminated Structure Design on the Mechanical Properties of Bamboo-Wood Hybrid Laminated Veneer Lumber

<https://research.thinkwood.com/en/permalink/catalogue1407>

Author: Chen, Fuming  
Deng, Jianchao  
Li, Xingjun  
Wang, Ge  
Smith, Lee  
Shi, Sheldon

Publisher: Springer Berlin Heidelberg

Year of Publication: 2017

Country of Publication: Germany

Format: Journal Article

Material: LVL (Laminated Veneer Lumber)  
Other Materials

Application: General Application

Topic: Mechanical Properties  
Design and Systems

Keywords: Bamboo  
Poplar  
Analytical Model  
Density  
MOE  
MOR  
Shear Strength  
Glue Lines  
Loading Tests

Language: English

Research Status: Complete

Series: European Journal of Wood and Wood Products

ISSN: 1436-736X

Online Access: Free

## Resource Link

[https://www.researchgate.net/profile/Fuming\\_Chen/project/bamboo-fiber-composite/attachment/579ff63e08ae4c2f64cb1aa4/AS:390446275678208@1470101054575/download/Eur.J.+wood+and+products%28fuming%29.pdf?context=ProjectUpdatesLog](https://www.researchgate.net/profile/Fuming_Chen/project/bamboo-fiber-composite/attachment/579ff63e08ae4c2f64cb1aa4/AS:390446275678208@1470101054575/download/Eur.J.+wood+and+products%28fuming%29.pdf?context=ProjectUpdatesLog)



# Effect of Manufacturing Parameters on Mechanical Properties of Southern Yellow Pine Cross Laminated Timbers

<https://research.thinkwood.com/en/permalink/catalogue1314>

Author: Sharifnia, Hour  
Hindman, Daniel

Publisher: ScienceDirect

Year of Publication: 2017

Country of Publication: Netherlands

Format: Journal Article

Material: CLT (Cross-Laminated Timber)

Application: General Application

Topic: Mechanical Properties

Keywords: Manufacturing  
Southern Yellow Pine  
Polyurethane  
Five Point Bending Test  
Bending Stiffness  
Bending Strength  
Shear Stiffness

Language: English

Research Status: Complete

Series: Construction and Building Materials

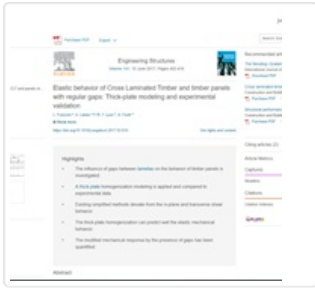
Online Access: Free

## Resource Link

[https://www.researchgate.net/profile/Hour\\_Sharifniay\\_Dizboni/publication/319977923\\_Effect\\_of\\_manufacturing\\_parameters\\_on\\_mechanical\\_properties\\_of\\_southern\\_yellow\\_pine\\_cross\\_laminated\\_timbers/links/5a2f48954585155b617a251b/Effect-of-manufacturing-parameters-on-mechanical-properties-of-southern-yellow-pine-cross-laminated-timbers.pdf](https://www.researchgate.net/profile/Hour_Sharifniay_Dizboni/publication/319977923_Effect_of_manufacturing_parameters_on_mechanical_properties_of_southern_yellow_pine_cross_laminated_timbers/links/5a2f48954585155b617a251b/Effect-of-manufacturing-parameters-on-mechanical-properties-of-southern-yellow-pine-cross-laminated-timbers.pdf)







# Elastic Behavior of Cross Laminated Timber and Timber Panels with Regular Gaps: Thick-Plate Modeling and Experimental Validation

<https://research.thinkwood.com/en/permalink/catalogue1341>

Author: Franzoni, Lorenzo  
Lebée, Arthur  
Lyon, Florent  
Forêt, Gilles

Publisher: ScienceDirect

Year of Publication: 2017

Country of Publication: Netherlands

Format: Journal Article

Material: CLT (Cross-Laminated Timber)

Application: General Application

Topic: Mechanical Properties

Keywords: Homogenization  
Gaps  
Elastic Behavior  
Bending Stiffness  
Thick Plates

Language: English

Research Status: Complete

Series: Engineering Structures

Online Access: Free

## Resource Link

[https://hal-enpc.archives-ouvertes.fr/hal-01691125/file/PaperSpacedCLT\\_PDF.pdf](https://hal-enpc.archives-ouvertes.fr/hal-01691125/file/PaperSpacedCLT_PDF.pdf)