



## Accommodating Movement in High-Rise Wood-Frame Building Construction

<https://research.thinkwood.com/en/permalink/catalogue1875>

Author: Howe, Richard  
Publisher: Forest Products Society  
Year of Publication: 2011  
Country of Publication: United States  
Format: Journal Article  
Material: Steel-Timber Composite  
Other Materials  
LVL (Laminated Veneer Lumber)  
Application: Wood Building Systems  
General Application  
Floors  
Walls  
Topic: Design and Systems  
Connections  
Keywords: Detailing  
Shrinkage  
Differential Movement  
Language: English  
Research Status: Complete  
Series: Wood Design Focus  
Online Access: Free

### Resource Link

<https://www.structuremag.org/wp-content/uploads/2014/08/C-ConstrIssues-Howe-June111.pdf>



# Accommodating Shrinkage in Multi-Story Wood-Frame Structures

<https://research.thinkwood.com/en/permalink/catalogue712>

Author: McLain, Richard  
Steimle, Doug

Organization: WoodWorks

Year of Publication: 2017

Country of Publication: United States

Format: Report

Material: Light Frame (Lumber+Panels)

Application: Wood Building Systems

Topic: Design and Systems  
Moisture

Keywords: Shrinkage  
Mid-Rise  
Multi-Story  
Moisture Content

Language: English

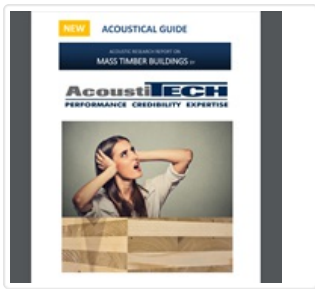
Research Status: Complete

Online Access: Free

## Resource Link

[https://www.woodworks.org/wp-content/uploads/wood\\_solution\\_paper-Accommodating-Shrinkage.pdf](https://www.woodworks.org/wp-content/uploads/wood_solution_paper-Accommodating-Shrinkage.pdf)





## Acoustical Guide: Acoustic Research Report on Mass Timber Buildings

<https://research.thinkwood.com/en/permalink/catalogue1839>

Organization:	AcoustiTECH
Editor:	Dompierre, David Garant, Samuel
Publisher:	AcoustiTECH
Year of Publication:	2018
Country of Publication:	Canada
Format:	Report
Material:	CLT (Cross-Laminated Timber) Other Materials
Application:	Floors
Topic:	Acoustics and Vibration
Keywords:	Mass Timber Sound Absorption Impact Sound Insulation
Language:	English
Research Status:	Complete
Online Access:	Free

### Resource Link

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<https://www.acousti-tech.com/Design/PDF/mass-timber-guide.pdf> 



## Acoustically-Tested Mass Timber Assemblies

<https://research.thinkwood.com/en/permalink/catalogue1874>

Organization: WoodWorks  
Year of Publication: 2019  
Country of Publication: United States  
Format: Report  
Material: CLT (Cross-Laminated Timber)  
NLT (Nail-Laminated Timber)  
Glulam (Glue-Laminated Timber)  
Application: Floors  
Walls  
Topic: Acoustics and Vibration  
Keywords: Mass Timber  
Sound Transmission Class  
Impact Isolation Class  
Assembly  
Language: English  
Research Status: Complete  
Online Access: Free

### Resource Link

<http://www.woodworks.org/wp-content/uploads/Acoustically-Tested-Mass-Timber-Assemblies-WoodWorks.pdf>



# Acoustic Emission of Bolt-Bearing Testing on Structural Composite Lumbers

<https://research.thinkwood.com/en/permalink/catalogue1443>

Author: Du, Yicheng  
Zhang, Jilei  
Shi, Sheldon

Publisher: Society of Wood Science and Technology

Year of Publication: 2014

Country of Publication: United States

Format: Journal Article

Material: LVL (Laminated Veneer Lumber)  
OSL (Oriented Strand Lumber)

Application: General Application

Topic: Acoustics and Vibration

Keywords: Acoustic Emission  
Bolted Connection

Language: English

Research Status: Complete

Series: Wood and Fiber Science

## Summary:

Acoustic emission (AE) characteristics of full-hole bolt-bearing testing on structural composite lumbers (SCL) including laminated veneer lumber (LVL) and oriented strand lumber (OSL) were investigated. The main conclusion is that AE cumulative...

Online Access: Free

## Resource Link

[https://www.researchgate.net/profile/Sheldon\\_Shi/publication/259801199\\_Acoustic\\_emission\\_of\\_bolt-bearing\\_testing\\_on\\_structural\\_composite\\_lumbers/links/53fb3e4e0cf27c365cf089cb/Acoustic-emission-of-bolt-bearing-testing-on-structural-composite-lumbers.pdf](https://www.researchgate.net/profile/Sheldon_Shi/publication/259801199_Acoustic_emission_of_bolt-bearing_testing_on_structural_composite_lumbers/links/53fb3e4e0cf27c365cf089cb/Acoustic-emission-of-bolt-bearing-testing-on-structural-composite-lumbers.pdf)



## 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

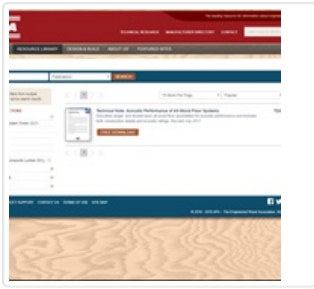
Series: Holzforschung

ISSN: 1437-434X

Online Access: Free

### Resource Link

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



## Acoustic Performance of All-Wood Floor Systems

<https://research.thinkwood.com/en/permalink/catalogue1931>

Organization: APA  
Year of Publication: 2017  
Country of Publication: United States  
Format: Report  
Material: Light Frame (Lumber+Panels)  
Application: Floors  
Topic: Acoustics and Vibration  
Keywords: Sound Transmission Class  
Impact Isolation Class  
Code  
Language: English  
Research Status: Complete  
Online Access: Free

### Resource Link

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<https://www.apawood.org/publication-search?q=T230&tid=1> [↗](#)



# Acoustic Performance of Timber and Timber-Concrete Composite Floors

<https://research.thinkwood.com/en/permalink/catalogue684>

Author: Schluessel, Marc  
Shrestha, Rijn  
Crews, Keith

Year of Publication: 2014

Country of Publication: Canada

Format: Conference Paper

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

Application: Floors

Topic: Acoustics and Vibration

Keywords: New Zealand  
Australia  
Building Code of Australia  
Sound Insulation

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

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

### Summary:

A major problem in light-weight timber floors is their insufficient performance coping with impact noise in low frequencies. There are no prefabricated solutions available in Australia and New Zealand. To rectify this and enable the implementation of lig...

Online Access: Free

### Resource Link

[http://schr.ws/hosted\\_files/wcte2014/68/ABS139\\_Crews\\_web.pdf](http://schr.ws/hosted_files/wcte2014/68/ABS139_Crews_web.pdf)





## Acoustics: Sound Insulation in Mid-Rise Wood Buildings

<https://research.thinkwood.com/en/permalink/catalogue37>

Author: Schoenwald, Stefan  
Zeitler, Berndt  
King, Frances  
Sabourin, Ivan

Organization: National Research Council of Canada

Year of Publication: 2014

Country of Publication: Canada

Format: Report

Material: CLT (Cross-Laminated Timber)  
Light Frame (Lumber+Panels)

Application: Floors  
Walls

Topic: Acoustics and Vibration

Keywords: Acoustics  
Mid-Rise  
Sound Insulation

Language: English

Research Status: Complete

Online Access: Free

### Resource Link

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<http://doi.org/10.4224/21274579>



## Acoustics Summary: Sound Insulation in Mid-Rise Wood Building

<https://research.thinkwood.com/en/permalink/catalogue750>

Author: Schoenwald, Stefan  
Zeitler, Berndt  
King, Frances  
Sabourin, Ivan

Organization: National Research Council of Canada

Year of Publication: 2014

Country of Publication: Canada

Format: Report

Material: CLT (Cross-Laminated Timber)  
Light Frame (Lumber+Panels)

Application: Wood Building Systems

Topic: Acoustics and Vibration  
Design and Systems

Keywords: Mid-Rise  
Sound Insulation  
Impact Sound Transmission  
Airborne Sound Transmission

Language: English

Research Status: Complete

Online Access: Free

### Resource Link

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<http://doi.org/10.4224/21274554> 