



Affordances of Complexity: Evaluation of a Robotic Production Process for Segmented Timber Shell Structures

<https://research.thinkwood.com/en/permalink/catalogue1913>

Author: Oliver David Krieg
Simon Bechert
Abel Groenewolt
Rafael Horn
Jan Knippers
Achim Menges

Publisher: Intergrated Digital Conference (INDICO)

Year of Publication: 2018

Country of Publication: Korea

Format: Conference Paper

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

Application: Shell Structures

Topic: Design and Systems

Keywords: Robotic Fabrication
Computational Design

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 20-23, 2018, Seoul, Republic of Korea

Online Access: Free

Resource Link

<https://indico.conference4me.psnec.pl/event/171/session/367/contribution/239/material/paper/1.pdf>



Assessing the Complexity of Timber Gridshells in Architecture through Shape, Structure, and Material Classification

<https://research.thinkwood.com/en/permalink/catalogue1876>

Author: Philippe Charest
André Potvin
Claude Demers
Sylvain Ménard

Publisher: North Carolina State University

Year of Publication: 2019

Country of Publication: United States

Format: Journal Article

Application: Shell Structures

Topic: Design and Systems

Keywords: Timber gridshells
Free-Form
Architectural Complexity
Non-Standard Grids
Natural Composite Materials

Language: English

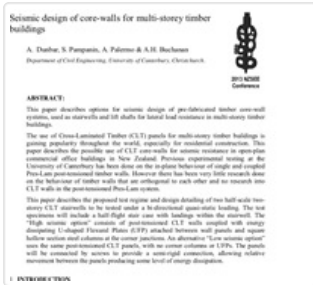
Research Status: Complete

Series: BioResources

Online Access: Free

Resource Link

http://ojs.cnr.ncsu.edu/index.php/BioRes/article/view/BioRes_14_1_1364_Charest_Complexity_Timber_Gridshells



Seismic Design of Core-Walls for Multi-Storey Timber Buildings

<https://research.thinkwood.com/en/permalink/catalogue134>

Author: Andrew Dunbar
Stefano Pampanin
Alessandro Palermo
Andrew Buchanan

Year of Publication: 2013

Country of Publication: New Zealand

Format: Conference Paper

Material: CLT (Cross-Laminated Timber)

Application: Shafts and Chases

Topic: Design and Systems
Seismic

Keywords: Multi-Storey
Prefabrication
Pres-Lam
Residential
Quasi-Static Loading
Energy Dissipation
U-Shaped Flexural Plates

Language: English

Conference: New Zealand Society for Earthquake Engineering Conference

Research Status: Complete

Notes: April 26-28, 2013, Wellington, New Zealand

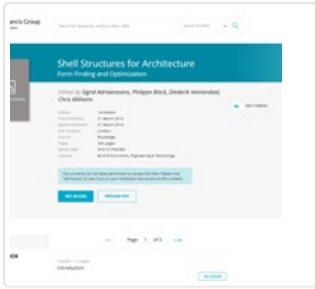
Abstract:

This paper describes options for seismic design of pre-fabricated timber core-wall systems, used as stairwells and lift shafts for lateral load resistance in multi-storey timber buildings. The use of Cross-Laminated Timber (CLT) panels for multi-storey timber buildings is gaining popularity throughout the world, especially for residential construction...

Online Access: Free

Resource Link

http://www.nzsee.org.nz/db/2013/Poster_52.pdf



Shell Structures for Architecture

<https://research.thinkwood.com/en/permalink/catalogue1156>

Editor: Sigrid Adriaenssens
Philippe Block
Diederik Veenendaal
Chris Williams

Publisher: Taylor&Francis Group

Year of Publication: 2014

Country of Publication: United Kingdom

Format: Book

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

Application: Shell Structures

Topic: Design and Systems

Language: English

Research Status: Complete

ISBN: 9781317909385

Online Access: Payment Required

Resource Link

<http://www.tandfebooks.com/isbn/9781315849270> ↗



Shell Structures in Wood

<https://research.thinkwood.com/en/permalink/catalogue19>

Author: Alexandra Cheng
AnnaLisa Meyboom
Jessica Hunter
Oliver Neumann
Roy Cloutier
Sara Maia
Thomas Gaudin
Thomas Tannert

Organization: Forestry Innovation Investment

Year of Publication: 2015

Country of Publication: Canada

Format: Report

Material: CLT (Cross-Laminated Timber)

Application: Shell Structures

Topic: Market and Adoption
Design and Systems

Keywords: Design

Language: English


Research Status: Complete

Abstract:

The larger intention of this research and the future research trajectory is to expand the conception of wood as a structural building material, encouraging its broader use both within Canada and in emerging markets. When architects and engineers desire a...

Online Access: Free

Resource Link

<http://www.bcfii.ca/system/files/reports/public/fii418-2014-15-ubc-cawp-shell-structures-in-wood.pdf>




Timber Shell: Wood in Building

<https://research.thinkwood.com/en/permalink/catalogue264>

Author: Oliver Neumann
Jessica Hunter
AnnaLisa Meyboom
Alex Cheng
Thomas Tannert

Publisher: American Research Institute for Policy Development

Year of Publication: 2015

Country of Publication: Canada

Format: Journal Article

Material: CLT (Cross-Laminated Timber)

Application: Shell Structures

Topic: Design and Systems

Keywords: Prototype

Language: English

Research Status: Complete

Series: Journal of Engineering and Architecture

ISSN: 2334-2994

Online Access: Free

Resource Link

<http://doi.org/10.15640/jea.v3n2a15> 