



7 – Glue-Laminated Timber (Glulam)

<https://research.thinkwood.com/en/permalink/catalogue1165>

Author: Chee Beng Ong
 Publisher: ScienceDirect
 Year of Publication: 2015
 Country of Publication: Netherlands
 Publication:
 Format: Book Section
 Material: Glulam (Glue-Laminated Timber)
 Application: General Application
 Topic: General Information
 Connections
 Keywords: Production
 Adhesives
 Finger Joints
 Language: English
 Series: Wood Composites
 Online Access: Payment Required

Resource Link

<https://doi.org/10.1016/B978-1-78242-454-3.00007-X>



Adhesion Performance of Melamine-Urea-Formaldehyde Resins with Various Melamine Contents for Glued Laminated Timber by High Frequency Heating System

<https://research.thinkwood.com/en/permalink/catalogue1515>

Author: Byung-Dae Park
Keon-Ho Kim
Kugbo Shim
Min-Kug Hong

Year of Publication: 2016

Country of Publication: Austria

Format: Conference Paper

Material: Glulam (Glue-Laminated Timber)

Application: General Application

Topic: Connections
Mechanical Properties

Keywords: MUF
Adhesives
PRF
High Frequency
Korea
Delamination Test
Pine
Water Resistance

Language: English

Conference: World Conference on Timber Engineering

Notes: August 22-25, 2016, Vienna, Austria
p. 504-510

Abstract:

This work attempted to investigate adhesion performance of melamine-urea-formaldehyde (MUF) resin adhesives for bonding glued-laminated timber (Glulam). Two preparation methods were employed to formulate MUF resins with various melamine contents from 20 % to 50 %: one-step method of synthesizing MUF resins in a batch...

Online Access: Free

Resource Link

<http://repositum.tuwien.ac.at/obvutwoa/content/pageview/1567654> ↗



Adhesive-Bonded Timber-Concrete Composites – Experimental and Numerical Investigation of Hygrothermal Effects

<https://research.thinkwood.com/en/permalink/catalogue1363>

Author: Lars Eisenhut
Werner Seim
Sonja Kühlborn

Publisher: ScienceDirect

Year of Publication: 2016

Country of Publication: Netherlands

Format: Journal Article

Material: Timber-Concrete Composite

Application: General Application

Topic: Serviceability

Keywords: Prefabrication
Dry Construction Method
Long-term
Adhesives
Hygrothermal

Language: English

Series: Engineering Structures

Online Access: Payment Required

Resource Link

<https://doi.org/10.1016/j.engstruct.2016.05.056>



Adhesive Bonding of Structural Hardwood Elements

<https://research.thinkwood.com/en/permalink/catalogue75>

Author: Mohammad Hassani
Organization: ETH Zurich
Year of Publication: 2015
Country of Publication: Switzerland
Publication:
Format: Thesis
Material: Glulam (Glue-Laminated Timber)
CLT (Cross-Laminated Timber)
Application: General Application
Topic: Mechanical Properties
Serviceability
Moisture
Keywords: Abaqus
Adhesives
Beech
Bonding
Delamination
Finite Element Model
Fracture
Long-term
Model
Hardwood
Language: English
Online Access: Free

Resource Link

<http://dx.doi.org/10.3929/ethz-a-010528229>



Adhesive Bonding of Timber and Glass in Load-Bearing Facades - Evaluation of the Ageing Behaviour

<https://research.thinkwood.com/en/permalink/catalogue1742>

Author: Felix Nicklisch
Bernhard Weller

Year of Publication: 2016

Country of Publication: Austria

Format: Conference Paper

Material: Timber-Glass Composite

Application: Hybrid Building Systems

Topic: Connections
Serviceability

Keywords: Adhesives
Façade
Load Bearing

Language: English

Conference: World Conference on Timber Engineering

Notes: August 22-25, 2016, Vienna, Austria
p. 4913-4920

Abstract:

Wooden constructions are on the rise again – encouraged by a strong trend towards sustainable and resource efficient buildings. Load-bearing timber-glass composite elements – a novel concept to use the in-plane loadbearing potential of glass – could contribute to a more efficient use of materials in façades. The current study relates to...

Online Access: Free

Resource Link

<http://repositum.tuwien.ac.at/obvutwoa/content/pageview/1650010>




Air-Coupled Ultrasound Propagation and Novel Non-Destructive Bonding Quality Assessment of Timber Composites

<https://research.thinkwood.com/en/permalink/catalogue13>

Author: Sergio Martín
Organization: ETH Zurich
Year of Publication: 2012
Country of Publication: Switzerland
Publication:
Format: Thesis
Material: Glulam (Glue-Laminated Timber)
Application: General Application
Topic: Mechanical Properties
Keywords: Adhesives
Bonding
Delamination
Failure
Non-Destructive Testing
Air-coupled Ultrasound (ACU)
Finite-Difference Time-Domain (FDTD) model
Language: English
Online Access: Free

Resource Link

<http://dx.doi.org/10.3929/ethz-a-7335172> 



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>



Assessing the Role of Adhesives in Durability of Laminated Veneer Lumber (LVL) By Fracture Mechanics

<https://research.thinkwood.com/en/permalink/catalogue913>

Author: Babak Mirzaei
Arijit Sinha
John Nairn

Publisher: De Gruyter

Year of Publication: 2016

Country of Publication: Germany

Format: Journal Article

Material: LVL (Laminated Veneer Lumber)

Application: General Application

Topic: Mechanical Properties
Serviceability

Keywords: Fracture Toughness
Crack Propagation
Moisture Conditions
Adhesives
Durability


Language: English

Series: Holzforschung

ISSN: 1437-434X

Online Access: Payment Required

Resource Link

<https://doi.org/10.1515/hf-2015-0193> 



Assessment of the Glue-Line Quality in Glued Laminated Timber Structures

<https://research.thinkwood.com/en/permalink/catalogue654>

Author: Bettina Franke
Florian Scharmacher
Andreas Muller

Publisher: Scientific.net

Year of Publication: 2013

Country of Publication: Switzerland

Format: Journal Article

Material: Glulam (Glue-Laminated Timber)

Application: General Application

Topic: Mechanical Properties

Keywords: Adhesives
Glue Lines
Production

Language: English

Series: Advanced Materials Research

Abstract:

Timber constructions with glulam members have regularly to be proofed for their performance to avoid structural collapse. For the assessment of glued laminated timber, it is important to know reliable methods and criteria. The requirements given in stand...

Online Access: Payment Required

Resource Link

<http://dx.doi.org/10.4028/www.scientific.net/AMR.778.424> [↗](#)



Behavior of Interlocking Cross-Laminated Timber (ICLT) Shear Walls

<https://research.thinkwood.com/en/permalink/catalogue240>

Author: Steven Sanders
Organization: Brigham Young University
Year of Publication: 2011
Country of Publication: United States
Format: Thesis
Material: CLT (Cross-Laminated Timber)
Application: Walls
Topic: Connections
Mechanical Properties
Seismic
Keywords: Adhesives
Commercial
Lateral Strength
Monotonic Testing
Low-Rise
Residential
Language: English
Online Access: Free

Resource Link

http://seaweb.groups.et.byu.net/sites/default/files/snrprojects/636-steven_l_sanders-2011-fsf.pdf