



## 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

Research Status: Complete

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> ↗



## An Analytical, Numerical and Experimental Study of Non-Metallic Mechanical Joints for Engineered Timber Constructions

<https://research.thinkwood.com/en/permalink/catalogue1606>

Author: Gheorghe Bazu  
Siavash Mahjourian Namari  
Jörg Wehsener  
Jens Hartig  
Peer Haller

Year of Publication: 2016

Country of Publication: Austria

Format: Conference Paper

Material: LVL (Laminated Veneer Lumber)

Application: General Application

Topic: Connections  
Mechanical Properties

Keywords: GFRP  
Densified Veneer Wood  
Plates  
Dowels  
Load Bearing Behaviour  
Analytical Model  
Numerical Model

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 22-25, 2016, Vienna, Austria  
p. 2059-2068

### Abstract:

Timber structures are strongly depending on the design of connections, which are mostly constructed from steel components. However, these joints have a number of limitations such as the tendency to be heavy, proneness to corrosion and often poor aesthetic appearances...

Online Access: Free

### Resource Link

<http://repositum.tuwien.ac.at/obvutwoa/content/pageview/1607776> ↗



## Behaviour and Design of Timber-Wood Lightweight Concrete-Composite Floor Systems

<https://research.thinkwood.com/en/permalink/catalogue1983>

Author: Alireza Fadai  
Christoph Radlherr

Year of Publication: 2018

Country of Publication: South Korea

Format: Conference Paper

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

Application: Floors

Topic: Design and Systems  
Mechanical Properties

Keywords: Load Bearing Behaviour

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Online Access: Free

### Resource Link

<https://indico.conference4me.psnr.pl/event/171/session/389/contribution/329/material/paper/1.pdf>



# Behaviours of Larch Glued Laminated Timber Beams Exposed to Standard Fire Heating During the Cooling Phase Study on Fire Performance of Structural Glued Laminated Timber Beams Part 1

<https://research.thinkwood.com/en/permalink/catalogue1112>

Author: Hinjin Kanjo  
Yusa Hidemasa  
Takehito Horio  
Takeo Hirashima  
Matsumoto Takumi  
Kiyoshi Saito

Publisher: J-STAGE

Year of Publication: 2015

Country of Publication: Japan

Format: Journal Article

Material: Glulam (Glue-Laminated Timber)

Application: Beams

Topic: Fire

Keywords: Larch  
Load Bearing Capacity  
Charring Rate  
Cooling

Language: Japanese

Research Status: Complete

Series: Architectural Institute of Japan Structural System

ISSN: 1881-8153

Online Access: Free

## Resource Link

<http://doi.org/10.3130/aijs.80.831>



# Bending Strength and Stiffness of Glulam Beams Made of Thermally Modified Beech Timber

<https://research.thinkwood.com/en/permalink/catalogue659>

Author: Robert Widmann  
Wilfried Beikircher  
José Cabo  
René Steiger

Publisher: Springer, Dordrecht

Year of Publication: 2014

Country of Publication: Netherlands

Format: Book Section

Material: Glulam (Glue-Laminated Timber)

Application: Beams

Topic: Mechanical Properties

Keywords: MUF  
PRF  
Thermally Modified Timber  
Beech  
Load Carrying Behaviour  
Four Point Bending Test  
Delamination Tests  
Shear Tests

Language: English

Research Status: Complete

Series: Materials and Joints in Timber Structures

ISBN: 978-94-007-7811-5

Online Access: Payment Required

## Resource Link

[http://dx.doi.org/10.1007/978-94-007-7811-5\\_52](http://dx.doi.org/10.1007/978-94-007-7811-5_52)



## Bending Tests on Glued Laminated Timber Beams with Well-Known Material Properties

<https://research.thinkwood.com/en/permalink/catalogue186>

Author: Gerhard Fink  
Jochen Kohler  
Andrea Frangi

Organization: ETH Zurich

Year of Publication: 2013

Country of Publication: Switzerland

Format: Report

Material: Glulam (Glue-Laminated Timber)

Application: Beams

Topic: Mechanical Properties

Keywords: Bending Strength  
Failure  
Load Bearing Capacity  
Four Point Bending Test  
Density  
Model  
Bending Stiffness

Language: English

Research Status: Complete

Online Access: Free

### Resource Link

<http://dx.doi.org/10.3929/ethz-a-009950793>



## Bending Tests with Glulam Columns under Eccentric Normal Force Stress

<https://research.thinkwood.com/en/permalink/catalogue1138>

Author: Andrea Frangi  
Matthias Theiler

Organization: ETH Zurich

Year of Publication: 2015

Country of Publication: Switzerland

Format: Thesis

Material: Glulam (Glue-Laminated Timber)

Application: General Application

Topic: Mechanical Properties

Keywords: Load Bearing Capacity  
Axial Compression  
Buckling Tests  
Spruce

Language: German

Research Status: Complete

Online Access: Free

### Resource Link

<http://dx.doi.org/10.3929/ethz-a-10483013>



## Building Climate – Long-Term Measurements to Determine the Effect on the Moisture Gradient in Timber Structures

<https://research.thinkwood.com/en/permalink/catalogue266>

Author: Andreas Gamper  
Philipp Dietsch  
Michael Merk

Organization: Technical University of Munich

Year of Publication: 2014

Country of Publication: Germany

Format: Report

Material: Glulam (Glue-Laminated Timber)

Application: Wood Building Systems

Topic: Serviceability  
Moisture

Keywords: Moisture Gradients  
Climate  
Load Carrying

Language: English

Research Status: Complete

Online Access: Free

### Resource Link

[https://www.irbnet.de/daten/kbf/kbf\\_e\\_F\\_2962.pdf](https://www.irbnet.de/daten/kbf/kbf_e_F_2962.pdf)





## Buildings Made of Dowel-Laminated Timber: Joint and Shear Wall Properties

<https://research.thinkwood.com/en/permalink/catalogue1718>

Author: Carmen Sandhaas  
Year of Publication: 2016  
Country of Publication: Austria  
Format: Conference Paper  
Material: DLT (Dowel Laminated Timber)  
Application: Shear Walls  
Topic: Mechanical Properties  
Seismic  
Connections  
Keywords: Joints  
Load Carrying Capacity  
Cyclic Tests  
Energy Dissipation  
Behaviour Factors  
Numerical Models  
Language: English  
Conference: World Conference on Timber Engineering  
Research Status: Complete  
Notes: August 22-25, 2016, Vienna, Austria  
p. 4589-4596

### Abstract:

Dowel-laminated timber (DLT) elements consist of lamellae arranged side-by-side that are connected with beech dowels. Due to the glue-free DLT element layout, joints and shear walls potentially suffer from considerable reduction of stiffness and load carrying capacity as metal fasteners inserted perpendicular to the element plane may be...

Online Access: Free

### Resource Link

<http://repositum.tuwien.ac.at/obvutwoa/content/pageview/1649868> ↗



## Chapter 6: Fire Damage of Wood Structures

<https://research.thinkwood.com/en/permalink/catalogue897>

**Author:** Brian Kukay  
Robert White  
Frank Woeste

**Publisher:** International Code Council

**Year of Publication:** 2012

**Country of Publication:** United States

**Format:** Book Section

**Material:** Solid-sawn Heavy Timber  
LSL (Laminated Strand Lumber)  
LVL (Laminated Veneer Lumber)

**Application:** General Application

**Topic:** Fire  
Mechanical Properties

**Keywords:** Bending Tests  
Withdrawal Tests  
Load Bearing Capacity  
Charring  
Reduced Cross Section Method

**Language:** English

**Research Status:** Complete

**Series:** Inspection, Testing, and Monitoring of Buildings and Bridges

**Online Access:** Free

### Resource Link

[http://www.fpl.fs.fed.us/documnts/pdf2012/fpl\\_2012\\_kukay001.pdf](http://www.fpl.fs.fed.us/documnts/pdf2012/fpl_2012_kukay001.pdf)