



## Curved Cross Laminated Timber Elements

<https://research.thinkwood.com/en/permalink/catalogue1545>

Author: Stecher, Georg  
 Maderebner, Roland  
 Zingerle, Philipp  
 Flach, Michael  
 Kraler, Anton

Year of Publication: 2016

Country of Publication: Austria

Format: Conference Paper

Material: CLT (Cross-Laminated Timber)

Topic: Mechanical Properties

Keywords: Rolling Shear  
 Tensile Stress  
 Strength  
 Rigidity  
 Density

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 22-25, 2016, Vienna, Austria  
 p. 1131-1138

**Summary:**

In timber construction, curved timber components have been used repeatedly. Yet the use of curved CLT elements is a relatively recent phenomenon. To obtain a European Technical Approval (ETA) for so-called radius timber (single curved CLT elements), Holzbau Unterrainer GmbH commissioned the accredited testing institution TVFA...

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**Resource Link**

<http://hdl.handle.net/20.500.12708/172>



# Development of Modular Wooden Buildings with Focus on the Indoor Environmental Quality

<https://research.thinkwood.com/en/permalink/catalogue881>

Author: Beikircher, Wilfried  
Zingerle, Philipp  
Flach, Michael

Year of Publication: 2014

Country of Publication: Canada

Format: Conference Paper

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

Application: Wood Building Systems

Topic: Environmental Impact

Keywords: Indoor Air Quality  
Indoor Climate  
Modular Construction

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

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

Online Access: Free

## Resource Link

[http://schr.ws/hosted\\_files/wcte2014/60/ABS038\\_Flach\\_web.pdf](http://schr.ws/hosted_files/wcte2014/60/ABS038_Flach_web.pdf)



## Ecological Thermal Refurbishment with Prefabricated Timber Framed Façade Elements for Mid-Rise Buildings

<https://research.thinkwood.com/en/permalink/catalogue1783>

Author: Le Levé, Clemens  
Badergruber, Thomas  
Beikircher, Wilfried  
Kraler, Anton  
Flach, Michael

Year of Publication: 2016

Country of Publication: Austria

Format: Conference Paper

Material: Light Frame (Lumber+Panels)

Application: Wood Building Systems

Topic: Energy Performance

Keywords: Mid-Rise  
Façade  
Thermal  
Prefabricated

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 22-25, 2016, Vienna, Austria  
p. 5622-5629

### Summary:

The thermal refurbishment of the building stock is one of the most fundamental challenges of sustainable urban development. Particularly the use of natural and local materials gets an increasing relevance, regarding the embodied energy. The focus of this work is the development of systematised solutions for thermal refurbishment with...

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## System Solutions for Point Supported Wooden Flat Slabs

<https://research.thinkwood.com/en/permalink/catalogue1784>

Author: Zingerle, Philipp  
Maderebner, Roland  
Flach, Michael

Year of Publication: 2016

Country of Publication: Austria

Format: Conference Paper

Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Mechanical Properties  
Connections

Keywords: Point-Supported  
Stiffness  
Load Carrying Capacity  
Multi-Story  
Reinforcement

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 22-25, 2016, Vienna, Austria  
p. 5663-5668

### Summary:

The challenge with point-supported flat slabs is the stress concentration at the supporting points. The small strength of the wood perpendicular to the grain should not reduce the load carrying capacity of the CLT – Panels. Therefore, there are some existing state of the art methods of reinforcement with self-tapping screws, which open up the...

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<http://hdl.handle.net/20.500.12708/172>