Experimental and Numerical Analysis of Flexible Polymer Connections for CLT Buildings

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Year of Publication:	2018
Country of Publication:	South Korea
Format:	Conference Paper
Material:	CLT (Cross-Laminated Timber)
Application:	Wood Building Systems
Topic:	Connections
	Mechanical Properties
	Seismic
Keywords:	Pull-Pull Tests
	Cyclic Loading
	Energy Dissipation
	Glued-In Rods
Language:	English
Conference:	World Conference on Timber Engineering
Research Status:	Complete
Online Access:	Free

Resource Link

https://www.researchgate.net/publication/327238227_EXPERIMENTAL_AND_NUMERICAL_ANALYSIS_OF_FLEXIBLE_POLYMER_CONNECTIONS_FOR_CLT_BUILDINGS

Hybrid Cross Laminated Timber Plates (HCLTP) – Numerical Optimisation Modelling and Experimental Tests

https://research.thinkwood.com/en/permalink/catalogue1751

Author:	Sustersic, Iztok
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	Brezocnik, Jaka
	Gavric, Igor
	Aicher, Simon
	Dill-Langer, Gerhard
	Winter, Wolfgang
	Fadai, Alireza
	Demschner, Thomas
	Ledinek, Gregor
Year of Publication:	2016
Country of Publication:	Austria
Format:	Conference Paper
Material:	CLT (Cross-Laminated Timber)
Application:	General Application
Topic:	Design and Systems
	Mechanical Properties
Keywords:	Timber Ribs
	Concrete Topping
	Ultimate Limit States
	Serviceability Limit States
	Numerical Modelling
	Experimental Tests
Language:	English
Conference:	World Conference on Timber Engineering
Research Status:	Complete
Notes:	August 22-25, 2016, Vienna, Austria p. 4989-4996

Summary:

This paper presents the development of two new types of hybrid cross-laminated timber plates (HCLTP) with an aim to improve structural performance of existing cross-laminated timber plates (Xlam or CLT). The first type are Xlam plates with glued timber ribs and the second type are Xlam plates with a concrete topping. A numerical...

Online Access:	Free

Resource Link

http://repositum.tuwien.ac.at/obvutwoa/content/pageview/1650020

Influence of the Connection Modelling on the Seismic Behaviour of Crosslam Timber Buildings

https://research.thinkwood.com/en/permalink/catalogue660

Author:	Sustersic, Iztok
	Dujic, Bruno
	Fragiacomo, Massimo
Publisher:	Springer, Dordrecht
Year of Publication:	2014
Country of Publication:	Netherlands
Format:	Book Section
Material:	CLT (Cross-Laminated Timber)
Application:	Wood Building Systems
Topic:	Connections
	Seismic
Keywords:	Multi-Storey
	Connection Flexibility
	Natural Vibration
	Shear Force
	Ductility
	Ground Acceleration
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_61

Seismic Analysis of Cross-Laminated Multistory Timber Buildings Using Code-Prescribed Methods: Influence of Panel Size, Connection Ductility, and Schematization

https://research.thinkwood.com/en/permalink/catalogue566

Author:	Sustersic, Iztok
	Fragiacomo, Massimo
	Dujic, Bruno
Publisher:	American Society of Civil Engineers
Year of Publication:	2015
Country of Publication:	United States
Format:	Journal Article
Material:	CLT (Cross-Laminated Timber)
Application:	Wood Building Systems
Topic:	Seismic
	Connections
Keywords:	Multi-Story
	FE Analysis
	Geometry
	Vertical Load
	Friction
	Stiffness
	Strength
	Ductility
Language:	English
Research Status:	Complete
Series:	Journal of Structural Engineering

Summary:

This paper investigates the seismic analysis of multistory cross-laminated timber (XLAM) buildings. The influence of different parameters such as wall geometry, vertical load level, friction, and, most importantly, connection stiffness, strength, and duc...

Online Access: Free

Resource Link

https://www.researchgate.net/profile/Thang_Dao4/publication/322627690_Seismic_assessment_of_a_three-story_wood_building_with_an_integrated_CLT-lightframe_system_using_RTHS/links/5a6671fd4585158bca545443/Seismic-assessment-of-a-three-story-wood-building-with-an-integrated-CLT-lightframe-system-using-RTHS.pdf

Seismic Analysis of Cross Laminated Timber Buildings Using Code Prescribed Methods

https://research.thinkwood.com/en/permalink/catalogue1646

Author:	Sustersic, Iztok
	Fragiacomo, Massimo
	Dujic, Bruno
Year of Publication:	2016
Country of Publication:	Austria
Format:	Conference Paper
Material:	CLT (Cross-Laminated Timber)
Application:	Wood Building Systems
Topic:	Seismic
	Connections
Keywords:	FE Analysis
	Multi-Story
	Geometry
	Vertical Load
	Friction
	Strength
	Stiffness
	Ductility
Language:	English
Conference:	World Conference on Timber Engineering
Research Status:	Complete
Notes:	August 22-25, 2016, Vienna, Austria p. 3453-3461

Summary:

This paper investigates the seismic analysis of multi-story cross laminated timber (XLAM) buildings. The influence of different parameters such as wall geometry, vertical load level, friction and, most importantly, connection stiffness, strength and ductility is assessed. Linear and nonlinear finite element (FE) analyses are carried out on a...

Online Access: Free

Resource Link

http://repositum.tuwien.ac.at/obvutwoa/content/pageview/1649333

Seismic Shaking Table Testing of a Reinforced Concrete Frame with Masonry Infill Strengthened with Cross Laminated Timber Panels

https://research.thinkwood.com/en/permalink/catalogue525

Author:	Sustersic, Iztok
	Dujic, Bruno
Year of Publication:	2014
Country of Publication:	Canada
Format:	Conference Paper
Material:	CLT (Cross-Laminated Timber)
Application:	Wood Building Systems
Topic:	Seismic
Keywords:	Shake Table Test
	Seismic Strengthening
	Reinforced Concrete
Language:	English
Conference:	World Conference on Timber Engineering
Research Status:	Complete
Notes:	August 10-14, 2014, Quebec City, Canada

Summary:

This paper deals with the issue of seismic strengthening of existing older reinforced concrete frame buildings. A new method of strengthening by applying a new outer shell made of cross laminated timber (crosslam or Xlam) plates is presented. A seismic s...

Online Access:	Free

Resource Link

http://schd.ws/hosted_files/wcte2014/d5/ABS642_Sustersic_web.pdf

Seismic Shaking Table Testing of Glass-Timber Buildings

https://research.thinkwood.com/en/permalink/catalogue22

Author:	Ber, Boštjan
	Dujic, Bruno
	Sustersic, Iztok
	Jancar, Jurij
	Premrov, Miroslav
Year of Publication:	2014
Country of Publication:	Canada
Format:	Conference Paper
Material:	CLT (Cross-Laminated Timber)
Application:	Walls
	Hybrid Building Systems
Topic:	Seismic
Keywords:	Design
	Ductility
	Failure
	Shake Table Test
	Timber-glass
Language:	English
Conference:	World Conference on Timber Engineering
Research Status:	Complete
Notes:	August 10-14, 2014, Quebec City, Canada

Summary:

This paper deals with the seismic behaviour of timber-glass systems. A series of experiments was performed on the shaking table of the IZIIS institute in Skopje, Macedonia. One and two story full scale structures were subjected to a series of ground moti...

Online Access: Free

Resource Link

https://www.researchgate.net/publication/272293668_Seismic_shaking_table_testing_of_glass-timber_buildings