



Lateral Load-Resisting System Using Mass Timber Panel for High-Rise Buildings

<https://research.thinkwood.com/en/permalink/catalogue1221>

Author: Chen, Zhiyong
Chui, Ying-hei

Publisher: Frontiers Media

Year of Publication: 2017

Country of Publication: Switzerland

Format: Journal Article

Material: LSL (Laminated Strand Lumber)

Application: Shear Walls
Hybrid Building Systems

Topic: Seismic
Wind
Design and Systems

Keywords: Lateral Load Resisting System
High-Rise
Dowel-Type Connections
FE model
Linear Static Analysis
Non-linear Dynamic Analysis
Timber-Steel Hybrid

Language: English

Research Status: Complete

Series: Frontiers in Built Environment

Online Access: Free

Resource Link

<https://doi.org/10.3389/fbuil.2017.00040>



Comparison of the Seismic Performance of Different Hybrid Timber-Steel Frame Configurations

<https://research.thinkwood.com/en/permalink/catalogue1775>

Author: Marin, Jose Alberto
He, Minjuan

Year of Publication: 2016

Country of Publication: Austria

Format: Conference Paper

Application: Hybrid Building Systems
Shear Walls

Topic: Seismic
Design and Systems

Keywords: Finite Element Model
Timber-Steel Hybrid
Deformation
Lateral Loading
Abaqus
Displacement
Inter-Story Drift
Diaphragm

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 22-25, 2016, Vienna, Austria
p. 5401-5408

Summary:

This paper presents a finite element modeling case study of three different designs of hybrid timber-steel 6-story buildings. One of the buildings is composed by steel frames and timber diaphragms while the other two cases consist of the initial design with timber shear walls added in different dispositions, one with outer walls and the other...

Online Access: Free

Resource Link

<http://repositum.tuwien.ac.at/obvutwoa/content/pageview/1650102>



Risk Minimization in RTS, with Application to FFTT Timber Construction

<https://research.thinkwood.com/en/permalink/catalogue337>

Author: Larsen, Alfred
Organization: University of British Columbia
Year of Publication: 2015
Country of Publication: Canada
Format: Thesis
Material: CLT (Cross-Laminated Timber)
Application: Hybrid Building Systems
Topic: Design and Systems
Seismic
Keywords: Costs
FFTT
Timber-Steel Hybrid
Analytical Model
Language: English
Research Status: Complete
Online Access: Free

Resource Link

<http://doi.org/10.14288/1.0167112>



Ductility Estimation for a Novel Timber-Steel-Hybrid System with Consideration of Uncertainty

<https://research.thinkwood.com/en/permalink/catalogue389>

Author: Zhang, Xiaoyue
Fairhurst, Michael
Kaushik, Kuldeep
Tannert, Thomas

Publisher: American Society of Civil Engineers

Year of Publication: 2015

Country of Publication: United States

Format: Journal Article

Application: Hybrid Building Systems

Topic: Design and Systems
Seismic
Connections

Keywords: Ductility Factors
High-Rise
National Building Code of Canada
FFTT
Non-linear Dynamic Analysis
Lateral Load Resisting System
Timber-Steel Hybrid

Language: English

Research Status: Complete

Series: Structures Congress

Summary:

In the 2010 National Building Code of Canada (NRC 2010), certain structures can be designed for seismic loads using an equivalent static force procedure. In these provisions, elastic design forces are reduced by a ductility factor, R_d , which accounts for...

Online Access: Free

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