



## Analysis of Timber-Concrete Ceiling Structure in Multi-Storey Building

<https://research.thinkwood.com/en/permalink/catalogue859>

Author: Sucharda, Oldrich  
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Publisher: Scientific.net

Year of Publication: 2014

Country of Publication: Switzerland

Format: Journal Article

Material: Timber-Concrete Composite

Application: Ceiling

Topic: Acoustics and Vibration

Keywords: Multi-Storey  
Eigenfrequencies  
Load  
finite element method

Language: English

Research Status: Complete

Series: Advanced Materials Research

### Summary:

The paper deals with a numerical analysis of timber-concrete ceiling. The finite element method is used for the analysis. The calculation takes into account a dynamic effect of load. The structure creates the ceiling of the gymnasium. The goal of the paper is a study of ceiling eigenfrequencies and a maximum response to a harmonic excitation...

Online Access: Free

### Resource Link

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.965.438&rep=rep1&type=pdf>



## Modal Vibration Testing of an Innovative Timber Structure

<https://research.thinkwood.com/en/permalink/catalogue1494>

Author: Leyder, Claude  
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Year of Publication: 2016

Country of Publication: Austria

Format: Conference Paper

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

Application: Hybrid Building Systems

Topic: Acoustics and Vibration

Keywords: Beech  
Post-Tensioned  
Modal Vibration Tests  
Eigenfrequencies  
Damping Ratios  
Mode Shapes

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 22-25, 2016, Vienna, Austria  
p. 177-185

### Summary:

This research paper deals with the evaluation of the dynamic modal vibration tests conducted on an innovative timber structure, the ETH House of Natural Resources. The building serves as a demonstrator of several innovative structural systems and technologies relating to timber. The main load-bearing structure comprises...

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### Resource Link

<http://repositum.tuwien.ac.at/obvutwoa/content/pageview/1567592>