



**Advanced Wood-Based Solutions for Mid-Rise and High-Rise Construction: In-Situ Testing of the Origine 13-Storey Building for Vibration and Acoustic Performances**

<https://research.thinkwood.com/en/permalink/catalogue1474>

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Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems  
Floors  
Walls

Topic: Acoustics and Vibration  
Serviceability

Keywords: Origine  
Natural Frequencies  
Damping Ratios  
Sound Insulation  
Ambient Vibration Tests  
Static Deflection  
Apparent Sound Transmission Class  
Apparent Impact Insulation Class

Language: English

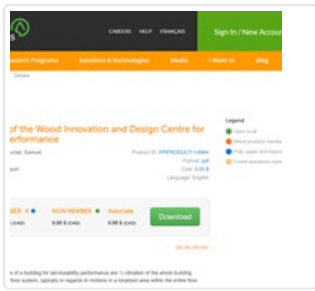
**Abstract:**

Serviceability performance studied covers three different performance attributes of a building. These attributes are 1) vibration of the whole building structure, 2) vibration of the floor system, typically in regards to motions in a localized area within the entire floor plate, and 3) sound insulation performance of the wall and floor assemblies...

Online Access: Payment Required

**Resource Link**

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# In-Situ Testing of the Wood Innovation and Design Centre for Serviceability Performance

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Format: Report

Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Serviceability  
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Keywords: Vibration Performance  
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Natural Frequencies  
Damping Ratios  
Ambient Vibration Testing  
Apparent Sound Transmission Class  
Apparent Impact Insulation Class

Language: English

## Abstract:

Three performance attributes of a building for serviceability performance are 1) vibration of the whole building structure, 2) vibration of the floor system, typically in regards to motions in a localized area within the entire floor plate, and 3) sound insulation performance of the wall and floor assemblies...

Online Access: Free

## Resource Link

<https://fpinnovations.ca/Extranet/Pages/AssetDetails.aspx?item=/Extranet/Assets/ResearchReportsWP/16783.pdf#.WymNAflKiUI>