



Damping in Timber Structures

<https://research.thinkwood.com/en/permalink/catalogue106>

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 Organization: Norwegian University of Science and Technology
 Year of Publication: 2012
 Country of Publication: Norway
 Format: Thesis
 Material: Glulam (Glue-Laminated Timber)
 Application: Wood Building Systems
 Floors
 Beams
 Topic: Design and Systems
 Keywords: Damping
 Model
 Panels
 Spruce
 Testing
 Vibrations
 Language: English
 Research Status: Complete

Summary:

Key point to development of environmentally friendly timber structures, appropriate to urban ways of living, is the development of high-rise timber buildings. Comfort properties are nowadays one of the main limitations to tall timber buildings, and an enhanced knowledge on damping phenomena is therefore required, as well as improved prediction models for damping.

The aim of this work has consequently been to estimate various damping quantities in timber structures. In particular, models have been derived for predicting material damping in timber members, beams or panels, or in more complex timber structures, such as floors. Material damping is defined as damping due to intrinsic material properties, and used to be referred to as internal friction. In addition, structural damping, defined as damping due to connections and friction in-between members, has been estimated for timber floors.

Online Access: Free

Resource Link

<http://hdl.handle.net/11250/236926>