



An Enhanced Beam Model for Glued Laminated Structures that takes Moisture, Mechano-sorption and Time Effects into Account

<https://research.thinkwood.com/en/permalink/catalogue44>

Author: Ormarsson, Sigurdur
Steinnes, Jan

Year of Publication: 2014

Country of Publication: Canada

Format: Conference Paper

Material: Glulam (Glue-Laminated Timber)

Application: Beams

Topic: Moisture
Serviceability

Keywords: Climate
Creep
Finite Element Model
Hygro-Mechanical
Long-term
Visco-Elastic

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 10-14, 2014, Quebec City, Canada

Abstract:

There is a need of more advanced analysis for studying how the long-term behaviour of glued laminated timber structures is affected by creep and by cyclic variations in climate. A beam theory is presented able to simulate the overall hygro-mechanical and...

Online Access: Free

Resource Link

http://orbit.dtu.dk/files/118444933/ABS311_Ormarsson_web.pdf