

Prof. Dr. **Erik Serrano (Sweden)**
 Lund University, Structural Mechanics
 Lund, Sweden
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 COST FP1402, MC Member, WG2 Member



Personal

Years of experience in relevant field: 10
 Expertise: modelling of fracture in timber products, fracture mechanics, testing, FEM
 Degree: PhD (01.02.2001)

Organisation

Structural Mechanics (www.byggmek.lth.se)
 Focus: theoretical and practical research / innovation, and education and training
 Facilities: testing labs for mechanical testing, digital image correlation, acoustic lab, test facility for DOL test in outdoor sheltered climate (50 kN)

No. of staff	PhD students	MSc/year
4	4	5

Research projects

WG 2

Mechwood II, 2012-2014, Erik Serrano (at former employer Linnaeus University)
 AkuLite, AcuWood, 2010-2012 Delphine Bard
 SilentTimber, 2014-2017, Delphine Bard

WG 3

Mechwood II, 2012-2014, Erik Serrano (at former employer Linnaeus University)
 Innovative joints for timber structures, 2014-2016, Gustaf Larsson (PhD-Student), Per Johan Gustafsson (main supervisor), Roberto Crocetti, Henrik Danielsson, Johan Jönsson and Erik Serrano (co-supervisors)

Publications

WG 2

Serrano, E. & Enquist, B. Compression strength perpendicular to grain in cross-laminated timber (CLT) World Conference on Timber Engineering, 2010

Hochreiner, G.; Füssl, J.; Serrano, E. & Eberhardsteiner, J. Influence of wooden board strength class on the performance of cross-laminated timber plates investigated by means of full-field deformation measurements Strain, 2014, 50, 161-173

J. Negreira, A. Trollé, K. Jarnerö, L.-G. Sjökvist, D. Bard, Psycho-vibratory evaluation of timber floors – Towards the determination of design indicators of vibration acceptability and vibration annoyance, Journal of Sound and Vibration, Volume 340, 31 March 2015, Pages 383-408.

WG 3

T. Bader, M. Schweigler, G. Hochreiner, E. Serrano, B. Enquist. Dowel deformations in multi-dowel LVL-connections under moment loading. Wood Material Science and Engineering (submitted)

T. Bader, M. Schweigler, G. Hochreiner, M. Dorn, E. Serrano. Experimental characterization of the global and local behavior of multi-dowel LVL-connections under complex loading. Materials and Structures (submitted)

