

Working Group 2 Eindhoven presentations

Vulnerability of components

- | • Discussion of aspects related to: | number |
|---|--------|
| o Stresses perpendicular to the grain _____ | 2 |
| o Moisture induced stresses _____ | 1 |
| o Ductility _____ | 2 |
| o Durability _____ | 1 |
| o Shear stresses _____ | 1 |
| o Load duration _____ | 1 |
| o others _____ | 3 |

Working Group II topics in the future: related to malfunctions and to robustness

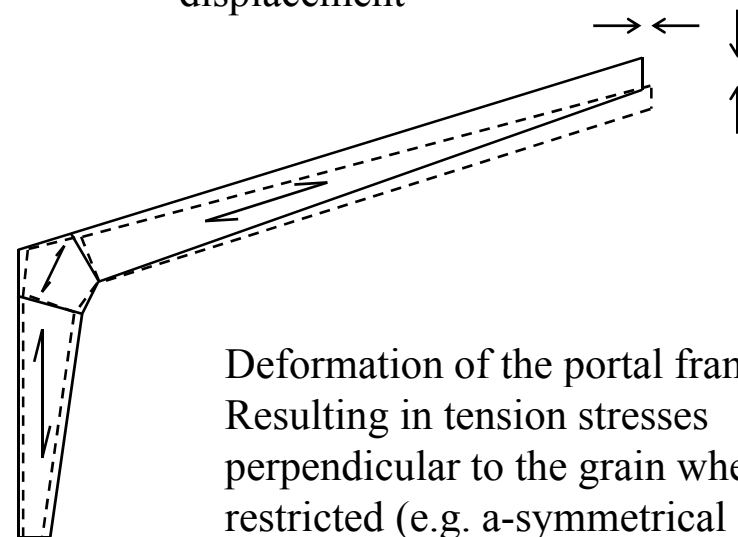
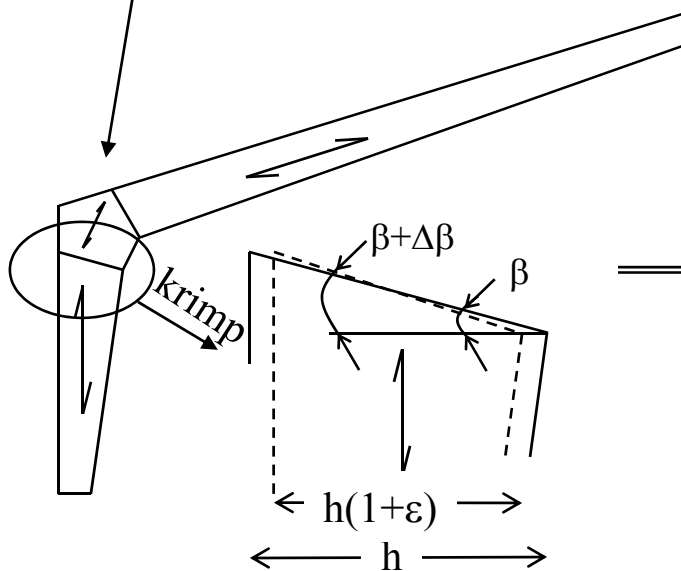
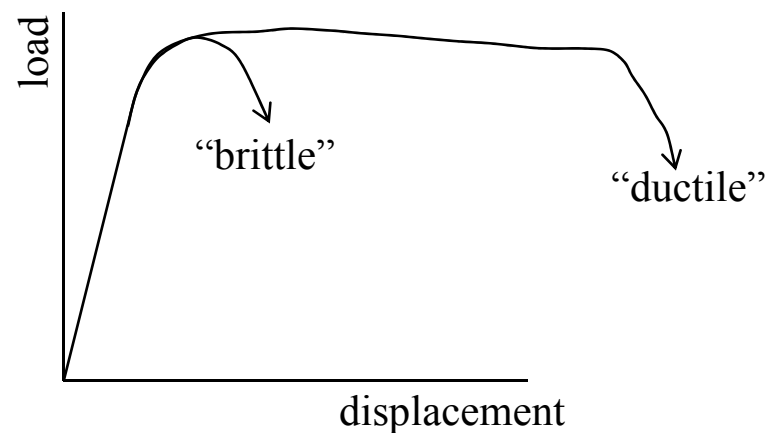
What is “most” vulnerable regarding failure EXCLUDING BAD DESIGN ?

- Joint ductility
- Serviceability (stiffness and vibration)?
- Moisture induced stresses
- Long term behaviour (load duration)
- Fire related to connections
- Glulam modelling (excluding quality control of the grading process)

- Durability aspects?

Working Group II topics for this meeting (Helsinki)

- Joint ductility (1)
- Moisture induced stresses (3)



Deformation of the portal frame. Resulting in tension stresses perpendicular to the grain when restricted (e.g. a-symmetrical frame) .

Working Group II topics for this meeting (Helsinki)

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| • Joint ductility (1) | Hans Blaß: | Ductility Aspects for Joints |
| • Moisture induced stresses (3) | Martin Häglund: | On moisture induced stresses in timber structural elements |
| | Alpo Ranta-Manus | Moisture induced stresses in glulam components |
| | Stefania Fortino
Florian Mirianon
Tomi Toratti | A 3 D moisture-stress FEM analysis of timber structures |