

hardwood_joint

Innovative joints in hardwoods

Carmen Sandhaas

HOLZBAU UND BAUKONSTRUKTIONEN

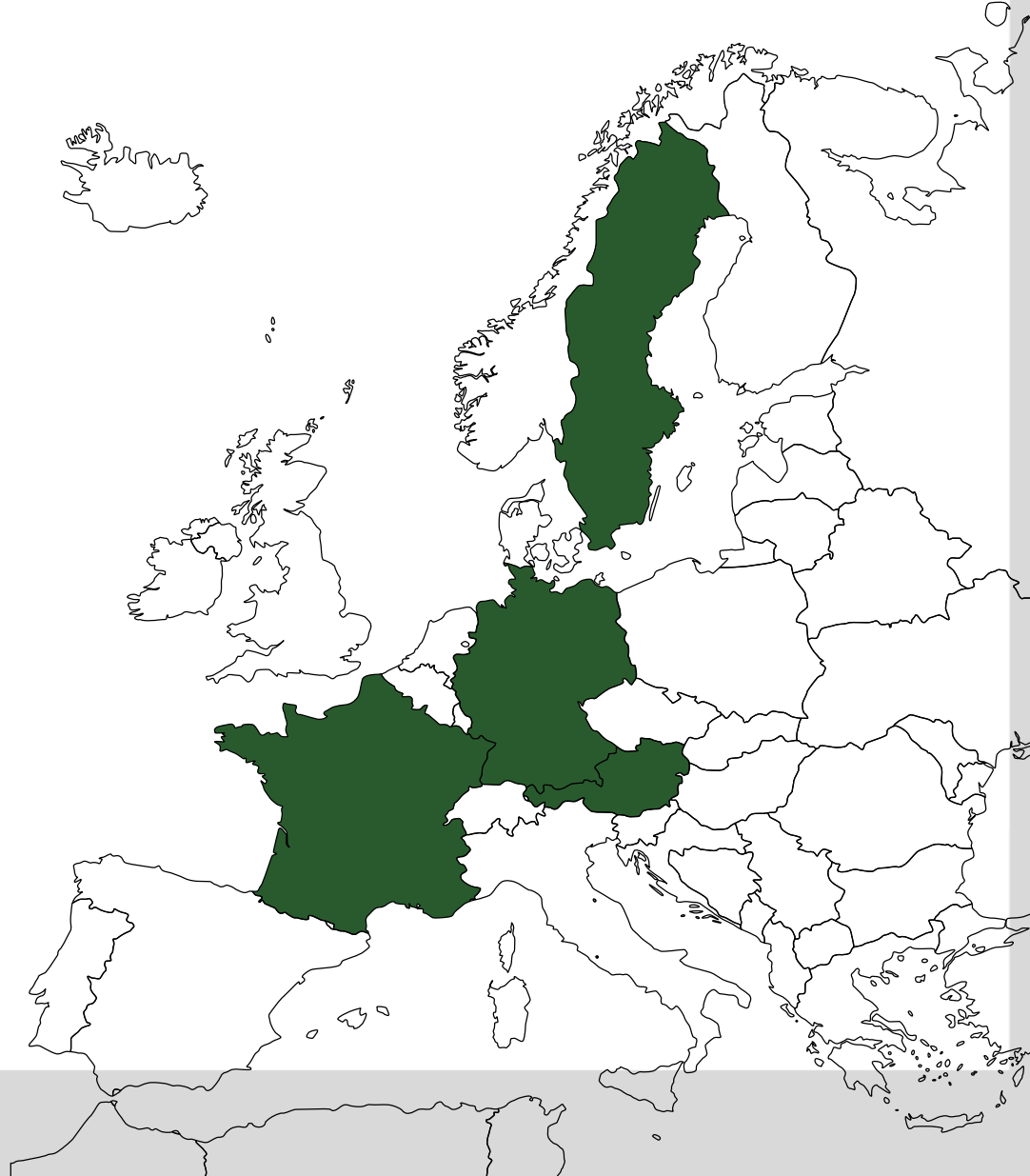


Consortium

10 partners, 4 from research and 6 from industry



From wood to wonders.



Consortium

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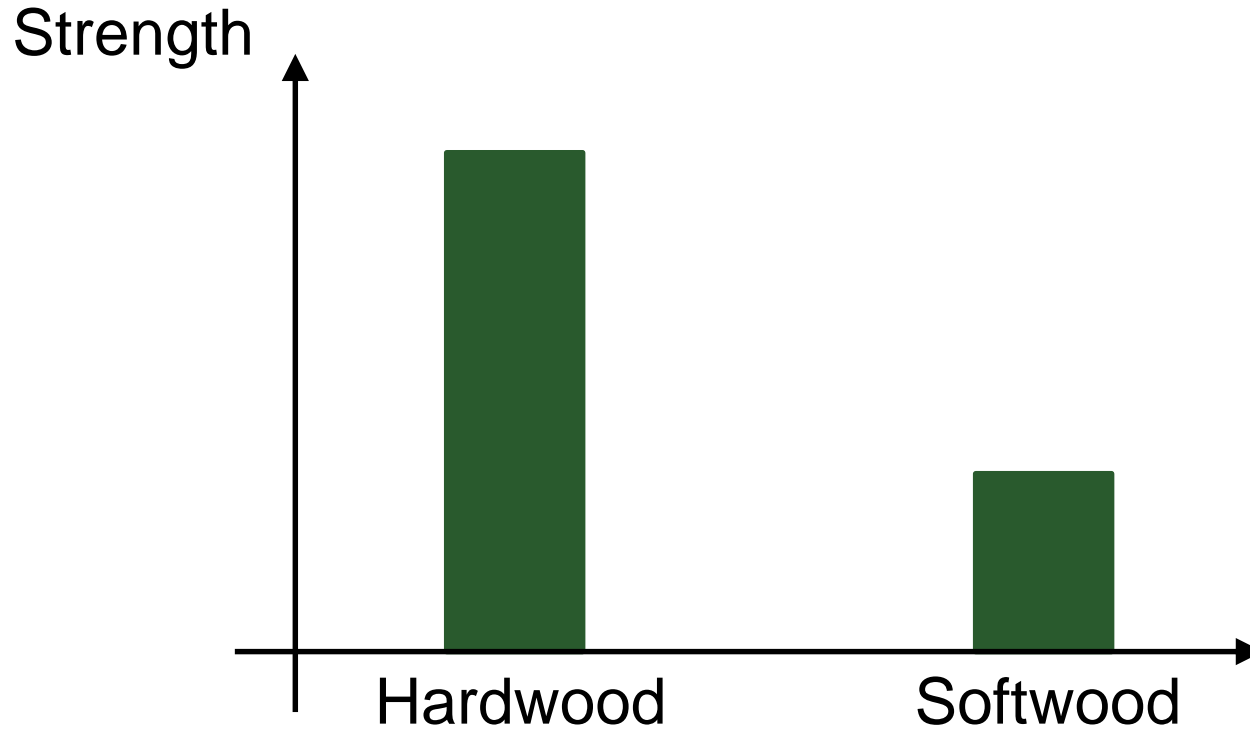
SIM



ForestValue → Buildings



Using hardwoods to build



Building materials

Beech
glulam



Beech
LVL

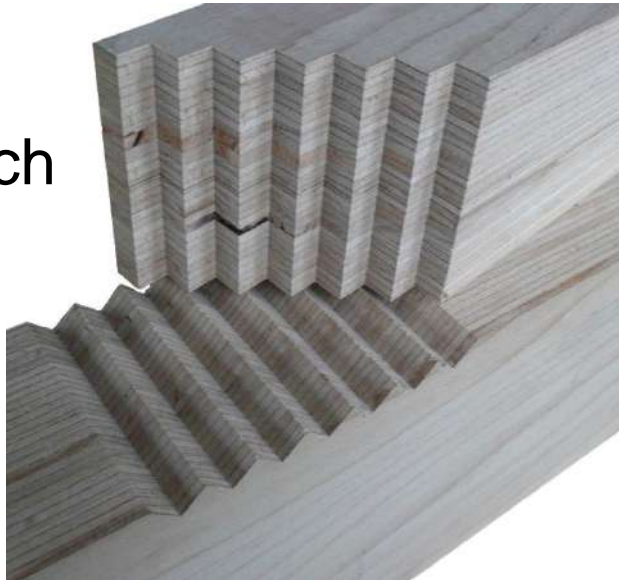


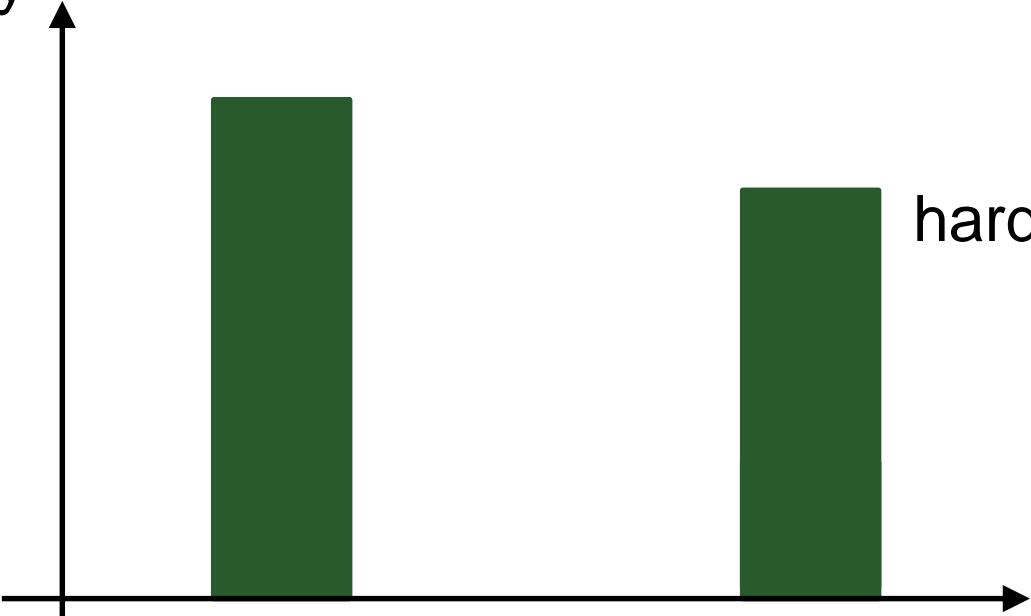
Photo: HASSLACHER NORICA TIMBER



Photo: HASSLACHER NORICA TIMBER

Joints

Capacity



Structural
members

Joints

hardwood_joint

Primary purpose

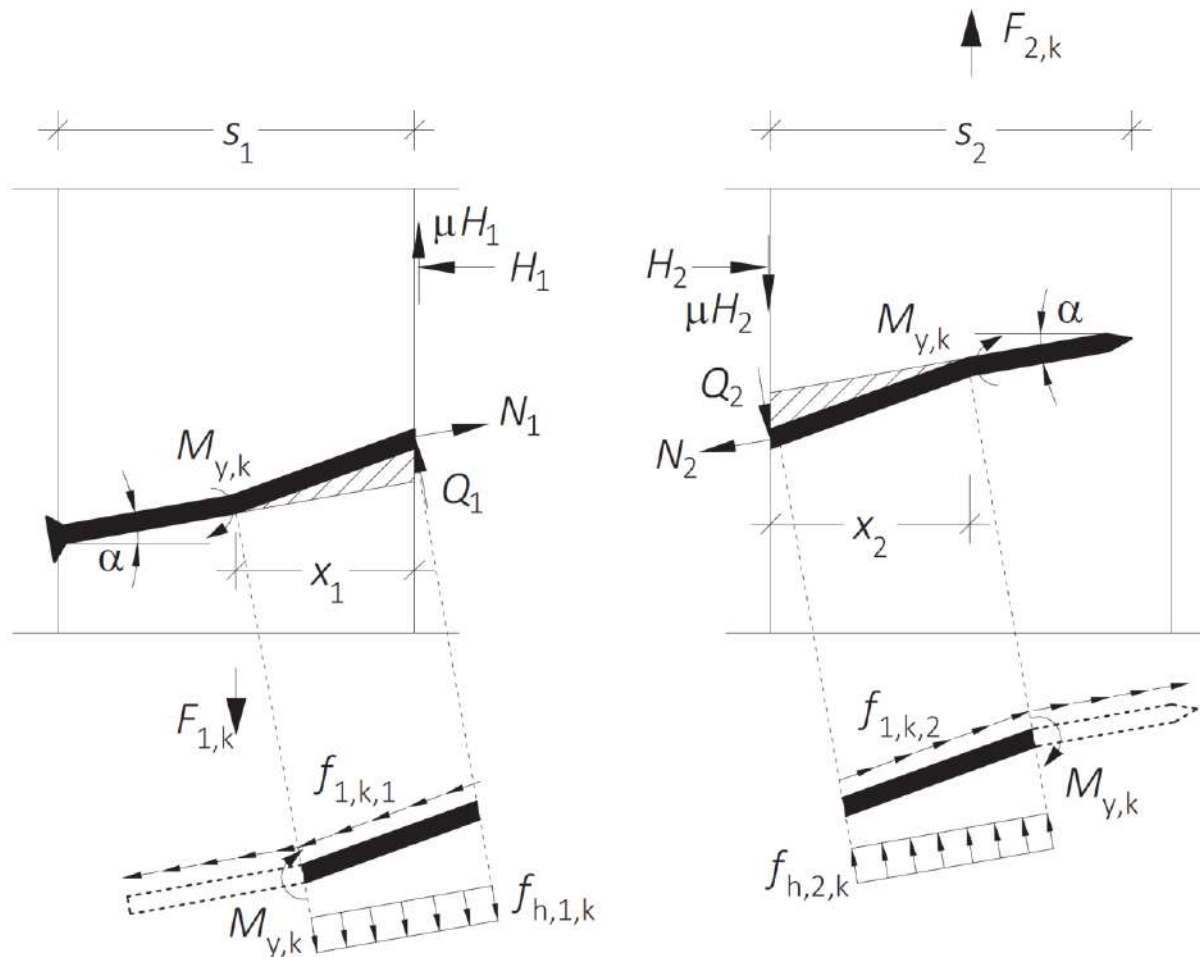
Foster high-performance hardwood structures by developing economic, reliable and innovative joint technologies for hardwood members and the design thereof.

HOW?

UNDERSTAND – COMPLETE – OPTIMISE – IMPLEMENT

UNDERSTAND...

Contributions to load-carrying capacity of joints



UNDERSTAND...

Contributions to load-carrying capacity of joints

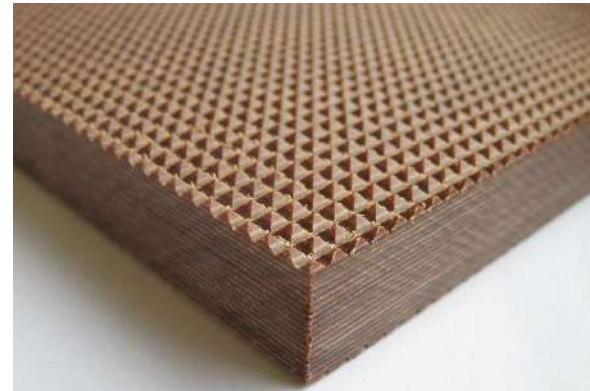
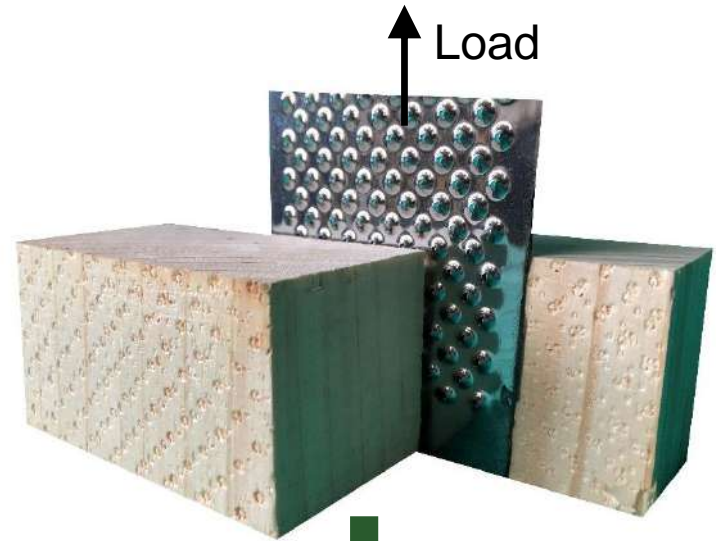
... COMPLETE...

Novel failure modes



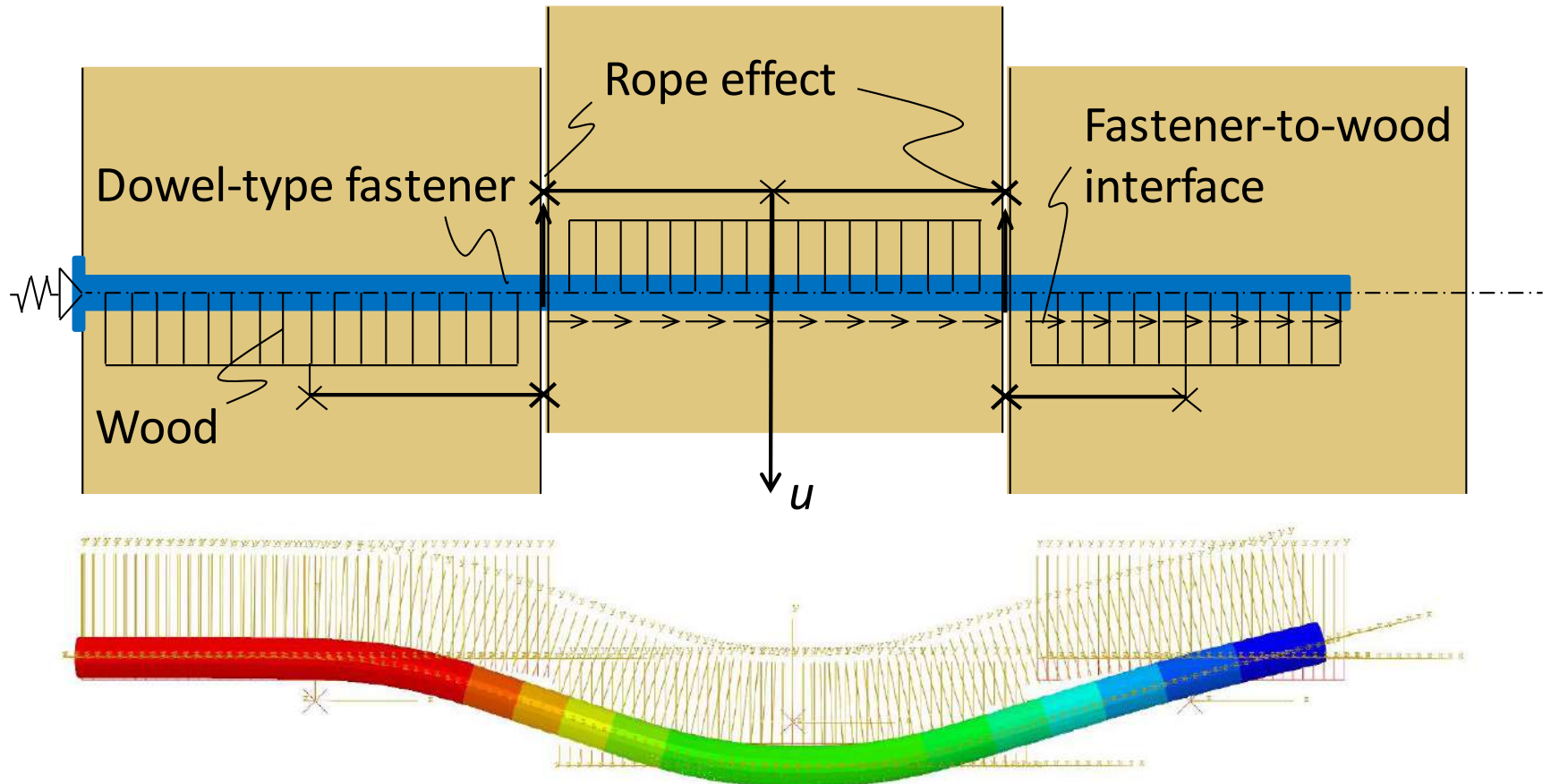
...OPTIMISE...

Increase stiffness and capacity

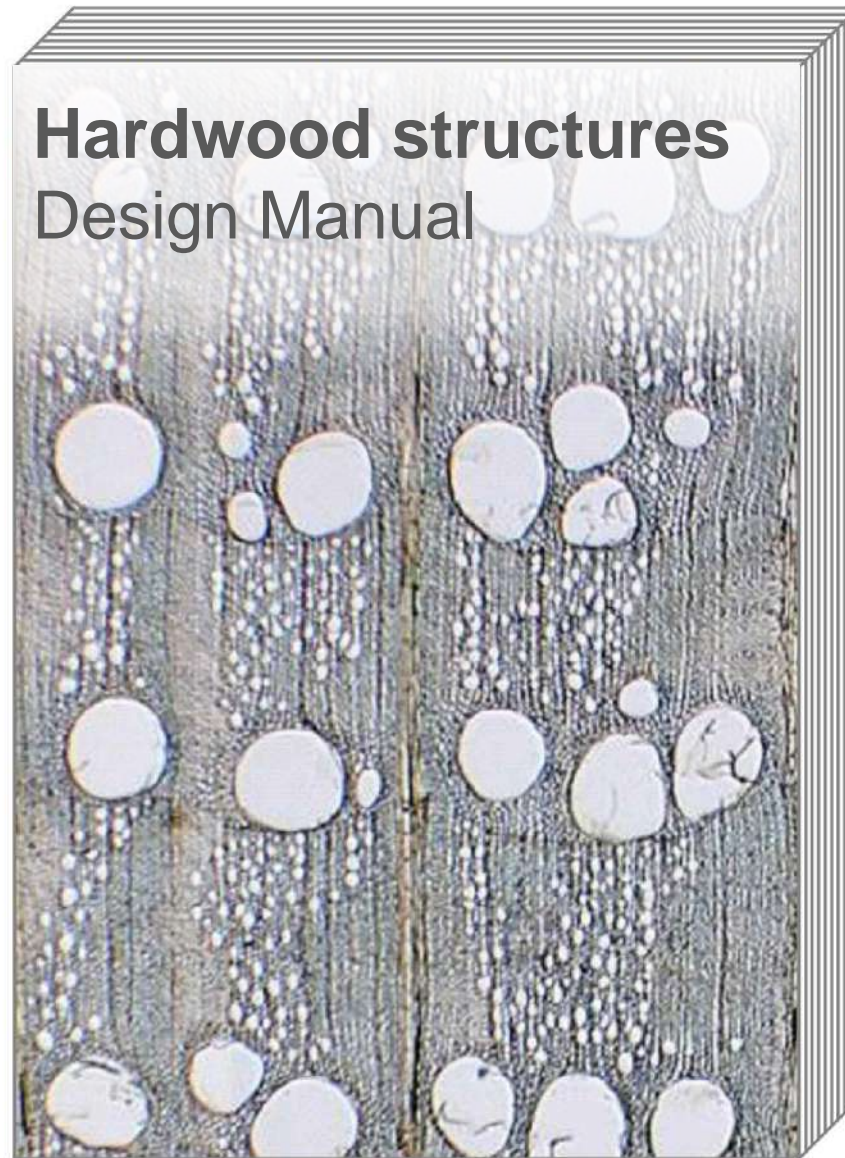


...OPTIMISE...

- BOF (nonlinear **beam-on-foundation**) modelling



...IMPLEMENT.



THANK YOU



ForestValue

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