

Can UK timber hold its own with imported wood?

Dale Johnstone

Edinburgh Napier University: MSC Advanced Structural Engineering

Summary

To prove that UK grown timber is suitable for industrial use, specifically whether long span timber truss systems are appropriate for the construction of an industrial warehouse.

Background

UK timber is often seen to be inferior to imported timber due to how it is graded. Timber has many properties; however, density, bending strength and stiffness are the three properties used to grade the wood. The stiffness of UK timber is often lower than imported wood of similar density and the resulting bending strength means it receives a lower classification.

Challenges

The purpose of this project is to investigate if UK timber can be as good as timber imported from elsewhere. Through this research the properties of UK timber will be inserted into the structural software to compare the structural analysis results of UK timber and standard EC5 timber. The challenge will be to influence the views of the Scottish construction sector of the benefits of UK timber.

Benefits

The benefits of using UK timber include:

- Reduce the carbon footprint: using any timber helps to reduce the carbon footprint but using UK timber would deliver further reductions via reduced emissions from transporting the timber to site.
- Helping local woodland management: income from timber sales helps support woodland management and expansion
- Stimulating timber demand: UK government policy involves significant expansion of UK forest cover so to achieve these targets, demand for UK timber needs to increase.



Alexander G Brownlie, Group Commercial Director, BSW Timber

“ We have a need for sustainable building envelopes that will meet our future needs for large spans creating ideal industrial spaces in which our business can grow. The work being pioneered by Dale Johnstone with COCIS is a major step forward to addressing these challenges and opportunities. ”