

## Challenges:

Masonite Beams Ltd faces several sustainability challenges, such as ensuring staff understand the company objectives and sustainability goals, that the supply chain aligns with these goals, and managing logistics and deliveries to minimise carbon emissions.

Ensuring that staff understand sustainability principles and can see how these align with company goals requires ongoing education, including CPDs. Working with the supply chain to reduce wastage or half-loads of transport can be challenging as construction deadlines must also be taken into account. Balancing sustainability, profitability and deadlines requires communication and co-ordination within Masonite Beams Ltd and throughout the supply chain.

Steps have already been taken to increase sustainability, including empowering staff with CPDs, liaising with the transport supply chain to optimise loads and routes, and working with Masonite Beams AB in Sweden to innovate and manufacture more efficiently while reducing emissions.

## Impact:

The Supply Chain Sustainability School has helped Masonite Beams Ltd to understand its current position on sustainability and what measures were already in place. The assessments highlighted areas for improvement as well as strengths. Having learning pathways provided ensures materials are targeted and relevant.

The webinars have been valuable in increasing staff knowledge, not just on sustainability but also on AI, tools, wellbeing and FIR. Masonite Beams Ltd wishes to remain an active member of the School, not only because of the useful resources, but also to demonstrate commitment to sustainability and ethical business practices to existing and potential clients, as well as to the supply chain.

## Value gained:

Masonite Beams Ltd has gained significant value from the School, particularly through individual CPDs and in shaping sustainability goals and action plans. The ability to evaluate performance against other companies has highlighted areas requiring additional focus, while the variety of topics enables different staff members to build knowledge across all areas.

Using the School ensures that sustainability remains a constant priority and provides resources to share with customers and the wider supply chain.

Progress has also been made in the following areas:

## Fact box



### Company

Masonite Beams Ltd

### No of employees

2

### HQ

PO Box 99, Bury St Edmunds,  
Suffolk, IP28 9DD

### Website

[www.masonitebeams.co.uk](http://www.masonitebeams.co.uk)

### Main contact

Malcolm Houston

### Services

I-joist manufacturer

### About

*Founded in 1974, Masonite Beams stands as Europe's longest-running manufacturer of I-joists, proudly delivering innovative solutions to the construction industry for five decades. Their advanced factory in Rundvik, northern Sweden, has the capacity to produce approximately 25 million meters of I-joists each year.*

## 1. Resource Efficiency & Circularity

- I-joist design uses less than 80% of the raw timber volume compared to solid timber, maximising material utility.
- Webbing is made from sawmill by-products, supporting recycling and reducing waste.
- In Norway, recyclable packaging is used, and the company participates in Grønt Punkt for waste recycling.

## 2. Climate Impact Reduction

- Thermal efficiency: The I-profile design minimises thermal bridges, enhances insulation, cuts energy loss in buildings, and lowers emissions over the building's lifetime.
- LCA-proven low carbon footprint: A 2024 lifecycle analysis by the Swedish Environmental Institute and KTH confirmed Masonite's system has the lowest CO<sub>2</sub> footprint among comparable multi-family wood-construction systems.

## 3. Sustainable Supply Chain

- Certification: All timber is PEFC and/or FSC-certified, ensuring sustainable forestry practices.
- ISO: Masonite Beams also holds ISO 14001 for environmental management and ISO 9001 for quality.

## 4. Innovation & Collaborative Projects

- Participation in the BioGlue-Centre project (2024–2029), developing bio-based adhesives to replace fossil-based glues in I-joist production.
- Collaboration with Grönbo and Acouwood to deliver “5D-modelled” timber buildings with high acoustic and thermal performance, built in efficient, low-waste processes.
- Supporting the development of DAISY, an AI design software, to maximise efficiency in design and estimating.

## 5. Certifications & Reporting

- Environmental disclosures include FSC/PEFC certificates, EPDs, conformity declarations, LCA reports and environmental policies.
- As a subsidiary of Byggma Group, the company contributes to EU transparency and sustainability directives, including Norway's Openness Act.

## Future proofing:

Masonite Beams Ltd believes that achieving Gold membership of the Supply Chain Sustainability School will demonstrate its strong commitment to sustainability, FIR and ethical business practices.