

Case studies



Building sustainably with timber

"Most wood products perform well not only because growing trees absorb CO₂ but also because of low energy inputs for processing and good thermal properties in use..."

Generally wood products, from timber frame to joinery, can help designers improve on their EcoHomes ratings."

BRE, *Building Sustainably with Timber*, 2004



wood. for good.



FAIRMULE HOUSE, SHOREDITCH

Client:	Aqua Properties
Architects:	Quay 2c, London
Main contractors:	L.I. Construction
Structural engineers:	Anders Associates
Groundworks contractors:	Westwood Ltd
Solid timber structure:	Eurban



Fairmule House is the biggest solid timber building in the UK. Built on a classic brownfield site in Shoreditch, East London, the scheme incorporates 11 flats and 7 business units. Instead of steel or concrete, it uses solid timber laminated panels for its walls, roof and floors, providing a minimum saving of 700 tonnes of CO₂ through both sequestration and substitution.

Eurban, a design and build company specialising in solid timber construction, supplied the superstructure of the building. The sustainable laminated softwood panels are 115mm thick for the walls and 170mm

thick for the floors and roof and made from sawmill offcuts. The first panel to be craned onto site was 2.7m wide, 14m long and 115mm thick. Even the lift shaft is created from timber panels.

This system has a number of advantages:

- Speed. There was just a 6 week contract period for erection of the whole development
- Carbon-neutral sustainability
- Super tolerances on highly engineered panels
- A solid feel
- Good acoustics
- Excellent thermal efficiency through relatively thin walls
- A 'Modern Method of Construction'.



- Solid timber structure, using timber laminated panels
- Red cedar shingle cladding
- Solid timber roof, using timber laminated panels
- Building used 360m² of wood which sequestered 300 tonnes CO₂

Other green features include a sedum roof, sitting on a layer of insulation above the solid timber roofing, and double glazed windows made from composite aluminium / laminated timber, using super Low-E (low emissivity) glass which reduces maintenance and energy costs.