



Building

Foster & Partners:
Bloomberg's European
headquarters

Forum

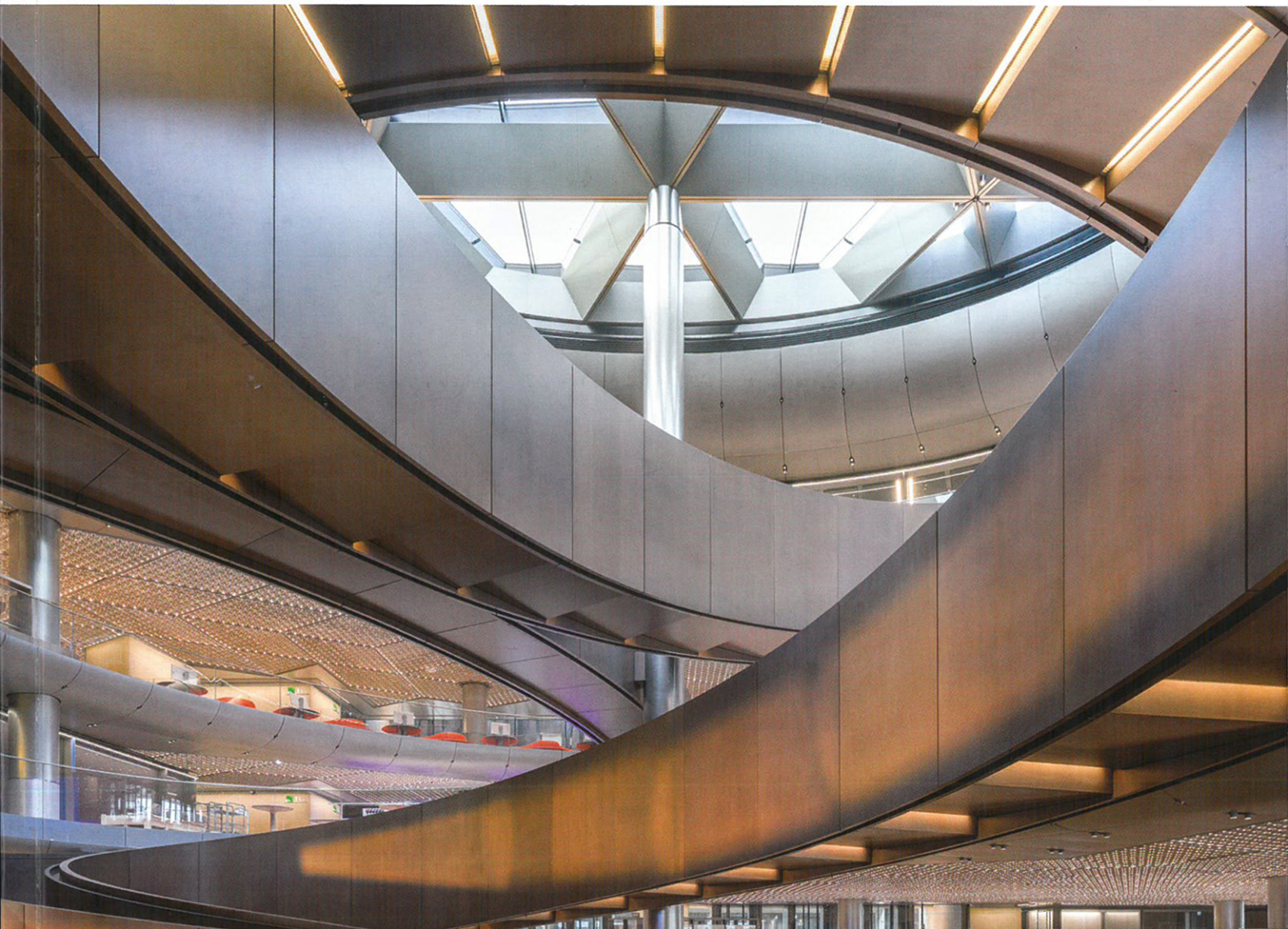
Patrik Schumacher, Alex
Lifschutz, Peter Ahrends,
Douglas Murphy

Works

Jamie Fobert Architects,
Maccreevor Lavington,
Wetherford Watson Mann,
Duggan Morris Architects,
Hayatsu Architects

Focus

Envelope: Vitsoe with Martin
Francis and Waugh Thistleton



Kit of Parts

Systems thinking informs a warm, flexible and sustainable home for furniture manufacturer Vitsoe

Constructed from engineered timber, the new home of furniture manufacturer and distributor Vitsoe adopts a similar kit-of-parts approach to that represented by its most celebrated product, the Dieter Rams-designed 606 Universal Shelving System. Conceived by an in-house team at Vitsoe working together with yacht designer Martin Francis, and delivered with the aid of architect Waugh Thistleton, the building provides workspace for a diverse team of 30 within a single six-metre-high volume, 135 metres long and 25 metres wide.

Located on a 3.3-acre brownfield site on the edge of Royal Leamington Spa, the building is intended to be adaptable in response to “the changing needs of all it serves: people, company, and environment”. It combines offices and product assembly facilities with a showroom, museum and overnight accommodation, which might be for guests or a resident housekeeper allowing out-of-hours use. (Space has been taken by a local dance-circus company, and Vitsoe envisages lectures and concerts in the building).

Columns and beams are made entirely of a newly developed beech laminate-veneer lumber (LVL), which allows smaller cross sections than softwood glulam, and has a particular significance for Vitsoe which has used northern European beech in its furniture since 1959.

For the walls and roof “cross-laminated timber performs efficiently both structurally and thermally”, says structural engineer James O’Callaghan, “while steel was better to achieve the saw-tooth roof profile to keep the honesty of the real working element. All the elements are self-explanatory and simple in their connection. Joists, beams and columns can be disassembled and reconfigured; parts can be added or removed. The structural system is boldly legible yet elegantly arranged”.



FOCUS

Below

A kitchen and dining area offer views of silver birch trees in the adjacent urban community wood.

Bottom

The building is naturally ventilated, and during daylight hours naturally lit via 16 rooflights in its saw-tooth roof. "As a business immersed in the value of true system-thinking, we have realised a universal building system for our new home", says Vitsoe managing director Mark Adams.

The company also notes the historic regional importance of timber framing as a factor in its choice of material, as well as the benefits of wood in enabling alteration, moderating internal humidity and locking in carbon. "1,020 cubic metres of timber have been used in the structure, representing 806 tonnes of sequestered carbon", says Vitsoe, which worked with Cambridge University's EPSRC Centre for Industrial Sustainability on the project. "Allowing for timber processing and delivery to site, the total carbon retained in the building structure is 612 tonnes."

Sustainability was a key driver in the design of the envelope, which has high levels of insulation and airtightness. Concertina loading-bay doors are protected by airlocks to minimise heat loss, and building's north-south orientation allows electricity generation from roof-mounted photovoltaics. Ground-stabilisation was preferred to pile foundations. On-site soil was combined with cement and rolled, thereby avoiding 600 truck movements to and from site. ↗

Project team

Building concept and design
Vitsoe, Martin Francis
Structural engineer
Eckersley O'Callaghan
Services engineer
Skelly & Couch
Delivery architect
Waugh Thistleton Architects
Landscape architects
Kim Wilkie, Wilder Associates
Industrial sustainability consultant
EPSRC Centre for Industrial Sustainability, University of Cambridge
Construction management
JCA Concept Construction

Selected suppliers & subcontractors

Timber contractors
Hess Timber, Plattform
Rooflights
Velux, Daylight Solutions
Windows
Veifac
Doors and ironmongery
Allgood
Bathrooms
Geberit
Loading-bay doors
Jewers
Cladding
Marley Eternit
Concrete floor and external area
Malin Floors
Solar installation
Aztec Solar Energy
Ground stabilisation
The Independent Stabilisation Company
Groundworks
JD Groundworks

