

Millennium Experience



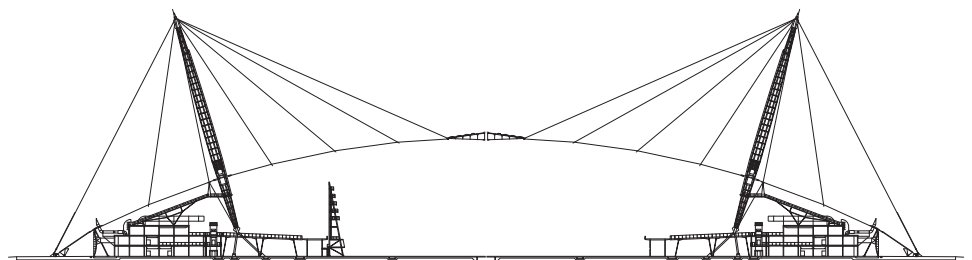
Awards

Civic Trust Award Commendation
2000

European Structural Steel Design Award
2000

RIBA Award
2000

Royal Academy Summer Exhibition
1998



Place/Date	London, England 1996 - 1999
Client	The New Millennium Experience Company
Area	100,000 m²
Cost	£43 million

Architect	Richard Rogers Partnership
Structural Engineer	Buro Happold Consulting Engineers
Services Engineer	Buro Happold Consulting Engineers
Quantity Surveyor	Hanscomb
Specification Consultant	Davis Langdon Everest Schumann Smith
Planning Supervisor	Ove Arup & Partners on behalf of RRP

Main Contractor	McAlpine Laing
Landscape Architect	Desvigne & Dalnoky, Bernard Ede
Fire Consultant	Buro Happold/Fedra
Construction Manager	McAlpine/Laing joint venture
Civil Engineer	WS Atkins
Acoustic Consultant	Sandy Brown Associates

Commissioned to mark the beginning of the new millennium, the Millennium Dome was intended as a celebratory, iconic, non-hierarchical structure offering a vast, flexible space. Although a high-profile project in its own right, the building also formed a key element of the masterplan by Richard Rogers Partnership (RRP) for the future development of the entire Greenwich Peninsula.

The Dome attracted intense media coverage and generated more political and public debate than any other British building of the last 100 years. For RRP, the project was a resounding success – the building itself was remarkably inexpensive (£43 million for groundworks, perimeter wall, masts, cable net structure and the roof fabric) and the practice devised a non-adversarial procurement route involving standardised components that delivered the building within fifteen months and under budget. Its content, however, was altogether less successful and was savaged by the press.

Mike Davies, project director, and Gary Withers of 'Imagination' together plotted the projection of the comets and stars, dawns and dusks onto the Dome's surface prior to its detailed structural rationalisation. For Davies, an enthusiastic astronomer, the idea of time was uppermost in his mind – the 12 hours, the 12 months, and the 12 constellations of the sky which measure time are all integral to the original concept. Indeed the 12 towers are intended to be perceived as great arms, out-stretched in celebration.

Designed in association with engineers Buro Happold, the key objectives were lightness, economy and speed of construction. The Dome is firmly rooted in the early work of the practice, in particular INMOS, Fleetguard, Nantes, the dome which formed part of the Royal Docks masterplan and the Autosalon at Massy, all of which are assisted span structures.

The structure solved with great elegance the problem of how to enclose and protect the separate exhibition 'zones' from the vagaries of the British climate. Providing 100,000 m² of enclosed space (2.2 million m³), the structure is 320 metres in diameter, with a circumference of one kilometre and a maximum height of 50 metres. The Dome is suspended from a series of twelve 100 metre steel masts, held in place by more than 70 kilometres of high strength steel cable which in turn support the Teflon-coated glass fibre roof.

The Dome is now being converted into a sports, leisure and entertainment complex, with the potential to become an Olympic venue for the 2012 Games.



The ultimate inspiration for the Dome was a great sky, a cosmos under which all events take place – the radial lines and circles of the high-tensile roof structure recall the celestial reference grid of astronomical maps throughout the ages.