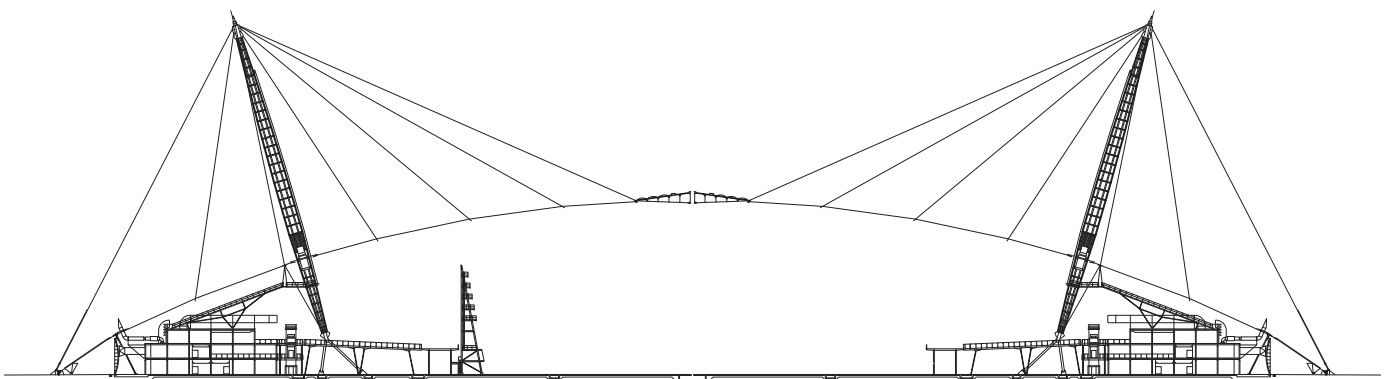




Millennium Dome

London





Place
London, UK

Date
1996-1999

Client
The New Millennium
Experience Company

Area
100,000m²

Cost
£43 million

**Structural and 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

Awards

2000
Civic Trust Award Commendation

European Structural Steel Design Award

RIBA Award

1998
Royal Academy Summer Exhibition

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 Rogers Stirk Harbour + Partners (RSHP) 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 RSHP, 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.

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

The fact that it is a beautifully expressive and inspiring structure, rather than a lowest-common-denominator shed, is witness to the imaginative and visionary powers of its designers

Elizabeth Wilhide, *The Millennium Dome*

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 metres square of enclosed space (2.2 million cubic metres), the structure is 365m in diameter, with a circumference of one kilometre and a maximum height of 50 metres. The Dome is suspended from a series of twelve 100metres steel masts, held in place by more than 70km of high-strength steel cable which in turn support the Teflon-coated glass fibre roof.

More than six million people visited the attraction during 2000. The Dome has now become the home of the O2 arena, one of the UK's most popular music venues.