

project overview

Location: London, UK

Type: Office

Completion: 1993-2000

Area: 34,000 sq. m²

Floors: 14

Costs: 70,000,000

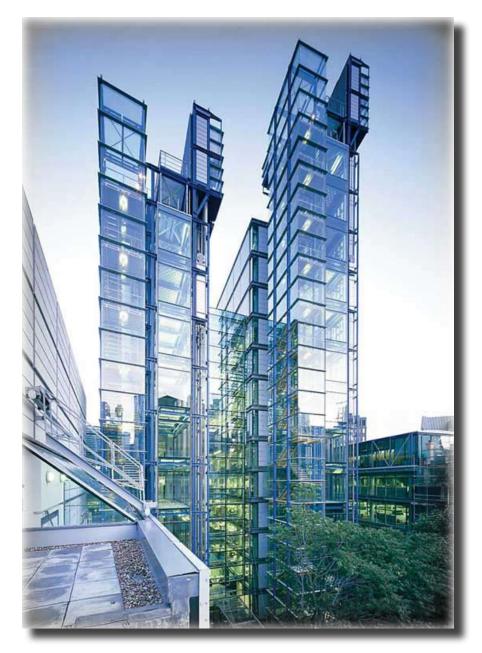
Client: Lloyd's Register

Design Team: Richard Rogers Parnership

Structural Engineer: Anthony Hunts Associatesw

Lloyds Register have operations covering management systems, land-based industries, railways, oil and gas, with 200 offices and over 5,000 employees worldwide. Their historic home in Fenchurch Street in the heart of the City of London includes the historic Grade II listed building at 71 Fenchurch Street which was purpose built for the company in 1901 and includes some of the finest sculpture, joinery, plasterwork and metalwork of the period.

Key objectives include: to safeguard the existing listed building as a flagship for the development; to preserve the Lloyds Avenue conservation area that includes St. Katherine's Churchyard; to provide an appropriate entrance to the churchyard and a new visual presence to Fenchurch Street; and to provide Lloyds Register



design

backgrounds

design intent

design strategies

furthur info



site

The site is predominantly surrounded by existing buildings causing problems of poor aspect and access. It is restricted by 71 Fenchurch Street and by the obligation to retain the facades of Coronation House and 6870 Fenchurch Street. The development is also obliged to respect the conservation area of Lloyds Avenue, the churchyard, the mature existing trees and the peaceful setting. In addition, the existing public right of way passing through the site was to be retained and integrated.

To address the challenge of providing the required amount of new accommodation within the remaining space, three slender, tapered rectangular blocks fan out alongside two dramatic glazed atria, varying in height from six to 14 levels. The atria, central to the design concept, allow light into and views out of the building at all levels, despite the constrictions of the site.

Most of the proposed accommodation is contained in the two taller blocks, while the third block backs up onto the seven-storey retained facade of Coronation House. On the opposite side of the site, a rigorously detailed and uncompromisingly contemporary concrete, steel and glass facade celebrates the only point at which the building makes its presence felt on the street. Within this basic diagram, environmental considerations are optimised. The naturally ventilated atria act as buffers mediating between the internal and external climates, the narrow profile of the offices optimises access to daylight and views, and the building structure and cladding minimise cooling requirements.

design intent

Following the presentation of the competition design, the proposal underwent some adjustments to take planning requirements into account and was also reviewed extensively by the client and their representatives to ensure that the proposal was commercially viable and met institutional standards. Detailed elements of the design that were borne out in the development of the concept include rigorously detailed service cores expressed as separate elements attached to the ends of the office blocks, articulating the edges of the building as it tapers into the churchyard at one end and outwards towards the river at the other. These cores contain primary circulation facing the churchyard, while secondary cores on the other side contain toilets, goods lifts and staircases, as well as the main service risers.

To reinforce legibility for users and visitors alike, the steelwork is color-coded blue for the main structure, yellow for stairs, red for lifts and silver-grey for secondary elements. The cores, like the rest of the building, have clear glazing so that the movement of the lifts and the coming and going of people on the stairs animate the exterior of the building. The top of the building is elegantly terminated by an articulated roof line made up of the core towers capped by steel-clad banks of lift motor rooms; an elegant solution to a practical necessity. 71 Fenchurch Street building was reorganized to contain a new 50 seat auditorium, formal rooms for conferences and entertaining, with more office space on the upper floors and a new service core attached to the rear.

appearance

design strategies

public realm

Reduced energy consumption was one of the prime objectives of the project, and the building was designed to use 30 percent less energy than a conventional office building. Included among the energy-saving systems are external solar protection, reinforced concrete soffits, and a system of chilled beams. By reducing solar heat gain inside the building and using the thermal mass of reinforced concrete, it was possible to significantly reduce cooling needs. This allowed chilled beams to be used for cooling rather than a more conventional air conditioning system.

The service cores are expressed as towers - two primary circulation cores face the churchyard, while secondary cores to the rear house toilets, good lifts and staircases, as well as main services risers. Highly transparent glazing offers instant legibility - people using the fully glazed wall-climber lifts and stairs animate the building's exterior.

The glazed facade is designed to maximise daylight while limiting solar heat gains in summer and heat losses in winter. In addition to double glazing, the east and west facades feature panels of motorised louvres which automatically control solar energy ingress. Working in conjunction with the louvred facades, chilled beams incorporating sprinklers, lighting and a PA system cool the air in the offices. The building's energy efficiency means a reduction of carbon dioxide emissions by 33 percent and of costs by 40 percent when compared with those of a conventionally air-conditioned building.

furthur info

building construction

In addition to the Lloyd's Register of Shipping, RRP also supervised the renovation and refurbishment of 71 Fenchurch Street using specialist contractors for the historic restoration work. The entire rear elevation of the building was demolished to allow for an interface with the new building from a core structure tied to the existing building without any additional load onto it.

references

Burdett, Richard. <u>Richard Rogers Parnershi. Monacelli Press.</u>

New York City. 1996

 $\underline{\text{http://www.richardrogers.co.uk/render.aspx?siteID=1&navIDs=1,2}}$

contact

Richard Rogers Partnership
Thames Wharf
Rainville Road
London W6 9HA
United Kingdom
Tel +44 (0) 20 7385 1235
Fax +44 (0) 20 7385 8409
General enquiries enquiries@rrp.co.uk
Student enquiries studentenquiries@rrp.co.uk



location



<u>contact</u>

