Ropemaker

Property overview

Ropemaker in London EC2 is due for practical completion in early summer 2009. The 20-storey building will provide 590,000 sq ft of space, of which 95% is office, with up to three retail units on the ground floor. Planning consent was granted in May 2007.

Our use of resources

Ropemaker achieved a BREEAM Excellent environmental rating. It received an Energy Performance Certificate (EPC) B rating and, thanks to its energy efficient design, is set to have 33% less carbon dioxide emissions than current standards.

Design features which will reduce carbon emissions include:

- Double-glazed tilting façades will reduce the energy required for cooling by up to 27% compared to a flat façade
- Air conditioning systems will use free cooling for as much of the year as possible, with surplus heat recovered and re-used
- All energy used for heating space and water will come from zero-carbon sources, including photovoltaic roof panels, as well as solar thermal panels and a biomass boiler
- The 800 sq ft of photovoltaic roof panels will generate 12,000 kWh of clean power each year, enough to run 14,000 washing machine cycles.

> Ropemaker's innovative façade, extensive biodiversity and sustainable services design made the building an obvious choice pilot scheme for helping the BRE set the new Outstanding BREEAM criteria. Ropemaker is an exemplar scheme which scores very well on all aspects of BREEAM.
>
> **Tom Saunders**, Special Projects Manager, BRE

Other sustainability features include:

- A rainwater harvesting system will be used to flush many of the WCs, together with water efficient devices this will save 5.4 million litres of potable water each year
- Green roofs and terraces will cover 60% of the available space, encouraging biodiversity, providing an attractive area for occupiers and enhancing the appearance of the building
- Ropemaker is also located close to excellent public transport links and will feature 270 internal cycle spaces, as well as lockers and shower facilities.

This year, our contractors at Ropemaker saved 1,515 tonnes of waste from landfill, recovering 86% of construction waste. 24% of materials used in the buildings came from re-used or recycled sources.

Our customers and us

Townshend Landscape Architects

Ropemaker's sustainability credentials are a key selling point in the marketing of the building to potential occupiers. The Bank of Tokyo-Mitsubishi UFJ, Ltd., and Mitsubishi UFJ Securities International plc have signed a pre-letting agreement for up to 38% of the office space. The energy efficiency measures and water saving devices will not only be good for occupiers' sustainability credentials, they will reduce their utilities bills.

The entrance to Ropemaker will also feature an artwork designed to encourage occupiers and visitors to think about environmental issues. The illuminated artwork will be powered by the air flow through the Vitrine air duct. This will visually highlight the building's services and the way output from the mechanical plant is re-used, in this case to produce light.

Our communities and us

As part of the planning agreement with the London Borough of Islington, we are investing more than £1 million for affordable housing. We are also providing the local council with £531,000 for the promotion of local employment and training opportunities, and £750,000 for streetscape works. Our contractor, Mace, and the trade contractors have been actively involved in a creating a new adventure playground for the local community.

> Given the scale, constraints and impact of the project, this was the best office scheme by some margin. The comprehensive approach resulted in good transport options, reduced energy demand and renewable production, huge water savings and excellent recycling efforts. It was also one of the few schemes to result in tangible benefits for the local community.
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> **Estates Gazette's Green Office Development of the Year judges**

Us and our suppliers

At Ropemaker, we worked with our contractor, Mace, and their supply chain to encourage efficient use of materials on-site. Two products used on the project were selected for a case study by the national waste advisory body, WRAP. One sub-contractor, Grants, delivered a Technik flooring solution that reduced waste by more than 50%, compared to traditional screed flooring, and cut costs for labour and materials by 30%. Another sub-contractor, Swift Horsman, used a prefabricated toilet pod system, which also reduced waste on-site significantly and improved consistency and quality. These initiatives provided savings on disposal and transport costs, as well as cutting carbon emissions and easing traffic congestion. This year, Swift Horsman won the British Land Supplier of the Year Award (Developments).

Efficient use of materials on-site

	Technik flooring	Benchmark Screeded flooring
Amount of waste per 100m²	2.8m³	4.7m³
Cost of waste per 100m²	£467	£1,509
Labour costs per m²	£84	£140
Material costs m²	£114	£147
BRE ecopoints (The lower the score the better)	8	10

This year, the average reportable accident rate at Ropemaker was 0.06 per 100,000 hours worked and the average lost-day accident rate was 0.26. There were four reportable accidents and one lost-day accident, with 1,546,040 hours worked.

Visit the Ropemaker website