Norman Foster

Prominant Architect Norman Foster practices Green Architecture

Carly Overton
Arch 580 London Seminar
3.28.13

Norman Foster

Norman Foster is one of Britain's most prolific architects of his generation whose company maintains an international design practice, Foster + Partners

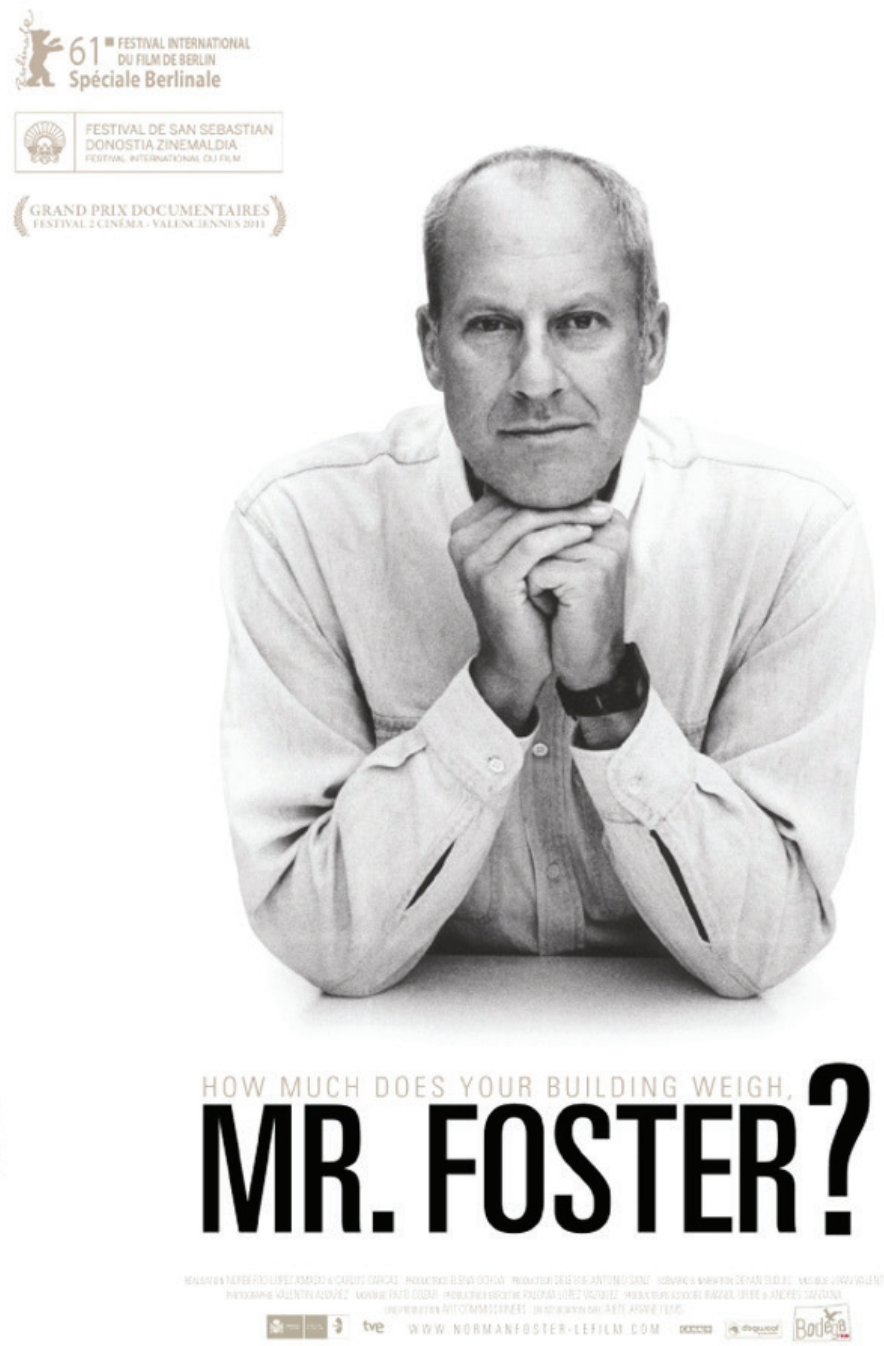
History + Background

born June 1 1935

Foster submitted a portfolio and winning a place at the University of Manchester School of Architecture.

He then won a scholarship to study at the Yale School of Architecture in the United States of America.

After returning to the UK in 1963, Foster set up his own practice, Team 4, which later became Foster + Parners.



Awards

1998 & 2004 Stirling Prize [American Air Museum at the Imperial War Museum & 30 St Mary Axe]
1999 Pritzker Architecture Prize
Minerva Medal
2009 Prince of Asturias Award
1994 AIA Gold Medal
2007 Lynn S. Beedle Lifetime Achievement Award
Aga Khan Award for Architecture [University of Technology Petronas in Malaysia]

design philosophy

Foster + Partners has had sustainability as a central theme for more than 40 years.

To remain at the forefront of sustainable advancements, their research and development group includes a multi-disciplinary sustainability forum and dedicated sustainability coordinator.

They consider sustainable performance holistically: from the embodied energy of materials to life-time energy performance.

In many of their projects, they have pioneered renewable energy solutions, which have offered dramatic reductions in pollution and carbon emissions.

Working with industry, they have created a new generation of super-efficient wind turbines and new forms of cladding systems that can harvest solar energy.

"The principles of sustainability are integral to our work: designing buildings that run at a fraction of current energy requirements, or urban quarters that can support thriving communities, improving the quality of life in a city for all."

[note] BREEAM : Building Research Establishment Environmental Assessment Method is widely used in the UK to asses new and existing building types

30 St. Mary Axe [the Gherkin]
London, UK 2001-2005

Features

40 Story building has a dramatic sculptural form and dominates the skyline.

A key feature of the buildings internal organization is a set of spiralling light-wells that wind around the building and cut across the simple circular plan that procides a perimeter of six office ‘fingers’ around the central core.

It is described as ‘environmentally progressive’, the lightwells allowing light to penetrate and ventilate the offices, thus reducing air conditioning loads

The glazing allows full perimeter views; the tapering geometry reduces reflections and wind distrubances at ground level

Despite a few post occupancy issues, the completion of the Gherkin immediately established it as a major London landmark.

Scottish Gas Headquarters

Edinburgh, UK 2001-2003

BREEAM: Excellent

Area: 10 568 m^2
Capacity: 1150

Features

The building's glazed facade is surrounded with a natural silver-anodised 'brise-soleil', which forms a rectangular veil over the U-shaped building footprint.

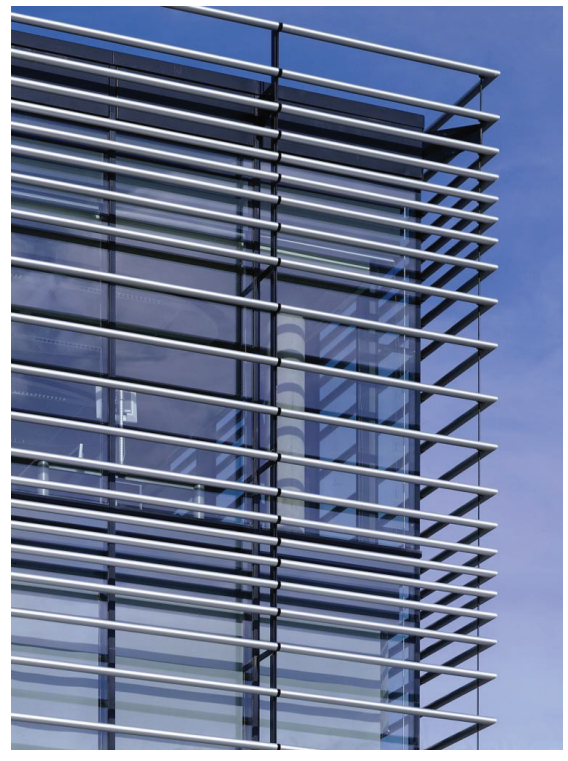
It has been designed to take into consideration the low angle sun that is common in Scotland during the winter months.

An optimised combination of horizontal oval tubular fixed external 'brise soleil' shading and high performance glazing achieves an ideal balance between natural light penetration and solar protection.

Internally, solar control/anti-glare blinds have been installed under tenant fit-out.

Beyond the entrance is an atrium whose high roof is covered with a lantern of white glass, through which diffused daylight fills the space.

40% of the floor area is within 7.5 meters of a window and natural light (at a daylight factor between 2% to 5%).



Awards

Scottish Design Award – Commercial Interior, Scottish Gas HQ, Edinburgh

British Council for Offices Award – Winner: National and Scotland, Commercial Workplace category, Scottish Gas HQ, Edinburgh

Bishop Square Development
London, UK 2001-2005

Area: 101 521 m^2
Height: 54 m

BREEAM: Very Good

Features

The office building incorporates the largest commercial photovoltaic installation in Europe.

It produces enough energy to power the landscape lighting across the site, or to make over 2 million pieces of toast or over 3 million cups of tea.

It saves over 23 tonnes of CO2 emissions, which is equivalent to 1.6 million party balloons or 14 Olympic swimming pools.

Electricity generation 54,000kWh/yr

Awards

London Planning Award ‘Best New Public Space’ – Bishop’s Square Development at Spitalfields

Regeneration Awards – Winner Best Commercial-led Regeneration Project, Bishops Square, Spitalfields, London

London Planning Awards – Best Built Project Contributing to London’s Future, Joint Winner, Bishops Square, Spitalfields, London

The Hearst Tower
New York, USA 2000-2006

Area: 79 500 m^2
Height: 182 m
Capacity: 2200

Features

The Hearst Tower is the first “green” high rise office building completed in New York City

The floor of the atrium is paved with heat conductive limestone

Polyethylene tubing is embedded under the floor and filled with ciruclating water for cooling in the summer and heating in the winter

Rain collected on the roof is stored in the a cistern in the basement and is used in the cooling system

26% less energy than minimum New York requirements is used
85% of the buildings structural steel contains recycled materials

Awards

LEED GOLD (New Construction)
LEED Platium (BO+M)
Green Building Competition for New York City, Honourable Mention – Hearst Tower
Council on Tall Buildings and Urban Habitat (CTBUH) Best Sustainable Building Award – Hearst Tower, New York
Business Week/Architectural Record Citation for Excellence – Hearst Tower interior, New York
New York City MASterwork Awards – Best New Building, Hearst Tower
AIA New York Design Honor Award in the Architecture category – Hearst Tower, New York
Global Green USA Green Building Design Award – Hearst Tower, New York

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Norman Foster is a leader in sustainability in the UK and internationally. He has created a firm that applies sustainable practices to improve the quality of life and the environment.