

• Profiles

Born : London 1955

Educated: Trinity College Cambridge, Harvard University
Graduate School of Design

Visiting professor, De Montfort University, 1993-97

Dean of Art & Design Faculty, De Montfort University,
1997-2001

Professor of Architecture, University of Cambridge 2001-

Partner, Edward Cullinan Architects, 1981-86

Partner, Peake, Short & Partners, 1987-1992

Principal, Short & Associates 1992-

• Awards

- First 'High Architecture, Low Energy Award' (Architecture Today) 1995.
- Green Building of the Year (The Independent) 1995.
- H.J. Dyos Award 1996.
- Building of the Year Award (Building Magazine) 2000.
- Society of College, National and University Librarians (SCONUL) 'Best Academic Library Award' 1998-2003.
- CIBSE 'Project of the Year' 2003 & 2004
- RIBA Awards 2000 & 2003



Alan Short Short & Associate



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College of Cambridge

MA DipArch RIBA FRSA

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•Teaching and Research

He is a architect and designer of innovative low energy naturally ventilated and passively cooled non-domestic buildings. Research interest in developing and implementing viable sustainable building design. The invention of integrated sustainable environmental strategies for different building types in various climates in collaboration with the BP Institute, the Martin Centre and various other specialists.

- **Practices-** RIBA Sustainable Futures Committee, member 1999- present

Alan Short is a chartered architects. The practice pursues the design of research level sustainable public buildings *particulary college buildings and theaters*, for a wide variety of activities in the UK and abroad, currently working on the draught cooled School of Slavonic and East European Studies in Bloomsbury and the mixed mode Judson College Academic Centre in Chicago. It has recently completed the innovative Braunstone Health and Social Care Centre in Leicester and is extremely interested in extending its fundamental green design approach to the problem of making sustainable buildings for health.

• Design Philosophy

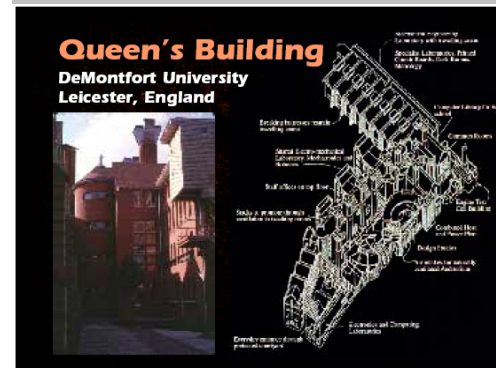
Alan Short's practice invents innovative, low energy building design strategies for education, research, industry and commerce across the world's populated climate regions.



Alan Short
Short & Associate



Central Hall
Westminster,
completed in 1912,
has a low-energy
ventilation system.



- **Open-and-shut case**

'We looked at the Central Hall Westminster, completed in 1912. Half the volume of the building was dedicated to keeping it well ventilated. A huge paddle wheel brought air in through the dome. Air was then sucked out underfoot and would exit through manually opened doors and large stacks.'

Why invest in such an elaborate ventilation system when the climate was cooler? People believed good ventilation prevented sickness, so airflow was a priority!



The new SSEES building at University College London

- **No sweat**

No mechanical air-conditioning, but passive cooling and natural ventilation

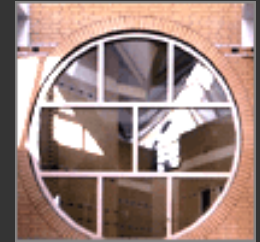
That's if you're inside the School of Slavonic and East European Studies (SSEES) at University of London. Built in 2005 for the climate of the future, it was designed to use a low-energy alternative to air conditioning.

- **Team talks**

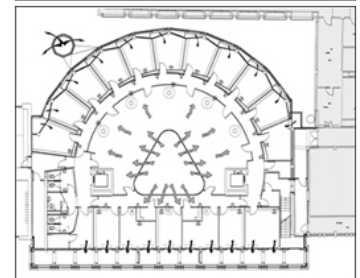
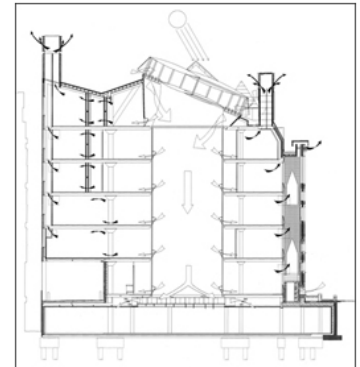
“It's critical that you have different experts who come together and discuss solutions. My design team evolved the strategy with fluid flow scientists, acoustic engineers and building engineers in order to achieve an effective and practical solution.”

<http://www.sciencemuseum.org.uk/antenna/building/energy/134.asp>

Alan Short
Short & Associate



Fresh air is pre-cooled in the central atrium that also allows light



The Queens Building, De Montfort University, Leicester

Owner / Reference: John Plumbridge, Head of Estates, De Montfort University, The Gateway, Leicester LE1 9BH
Total Project Cost: £9.7 million sterling, \$15.1 million
Gross Floor Area: 110,000 ft²
Construction Period: November 1991 - August 1993
Green Building of the Year 1995/RIBA Award 1995

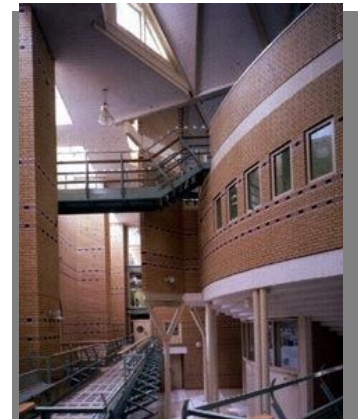
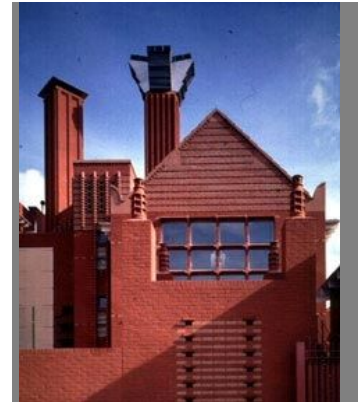
Since 1989 Short and Associate have been engaged for twelve projects by Leicester Polytechnic, subsequently to become De Montfort University in 1992. The most sizeable is the Queens Building, the new School of Engineering and Manufacture. It is quite unlike any other contemporary high tech educational or commercial building. It very successfully houses up to 2000 staff and students, now largely working at computers or meeting in a variety of seminar and conference rooms. It incorporates two steeply raked wide fan auditoria. It is built on a forlorn 1960's demolition site at the poor end of the once very prosperous and grand city of Leicester.

The entire building is naturally ventilated, passively cooled and naturally lit, including the two largest auditoria each seating 168 people. Conventional wisdom in the ventilation and heating industry was that this omission of mechanical and electrical equipment was quite impossible. In fact the building works very well and has been extensively monitored by the U.K. government's Building Research Establishment.

Charles Jencks singles the building out in the 'Architecture of the Jumping Universe'. He writes "I do not believe any historical labels do justice to the synthetic thinking behind the building which borrows as much from the contemporary pavilion planning of Frank Gehry as the tradition of thin industrial structures."



**Alan Short
Short & Associate**



The Lighthouse, Poole

Owner / Reference: Ruth Eastwood, Robin Cave, Poole Arts Centre, Kingsland Road, Poole, Dorset, BH15 1UG

Total Project Cost: contract of £5.5 million (\$8.6 million)

Gross Floor Area: Footage 200,000 ft² of existing 1972 Arts Centre, the largest Arts Centre in Britain outside London including the Wessex Hall, with its tilting retractable floor, the Towngate Theatre, a new Flexible Performance Space, foyers, cafés, bars and backstage facilities

Awards: CIBSE Project of the Year 2003/ RIBA Award 2003/ Poole Pride of Place Prize 2003

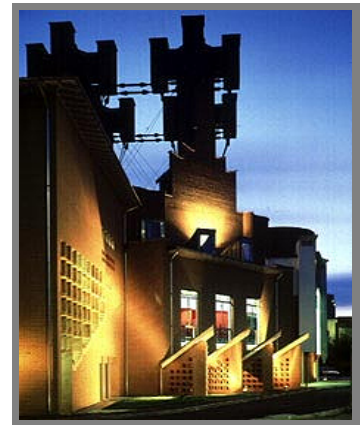
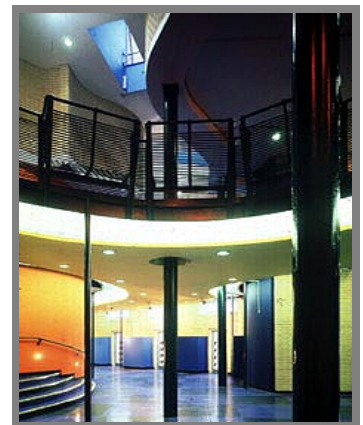
Construction Period: Project commenced on Competition Win April 1998, started on site April 2001, Completed September 2002 work carried out in three phases to enable the centre to continue to function throughout.

The project is a very intricate rebuilding of the largest arts building outside London, comprising the Wessex Hall, the home of the Bournemouth Symphony Orchestra, the Towngate Theatre, an arts cinema, a large gallery space, studios for craft and design activity, cafes, bars and extensive backstage accommodation. The foyers have been entirely reformed within the concrete frame and various acoustic interventions have been made in the auditoria.

The measures proposed to improve its environmental performance and comfort have completely transformed its external appearance and its public perception, particularly by younger potential audiences whom the Centre must attract to secure its future. The architecture derives from the weaving of cast glass elements into a textile, a theme taken up by Peter Freeman, who has lit the front, Danny Lane, who has made an extraordinary stainless steel and cast glass bar, and Janet Stoyel, weaver of metal threads and wire.

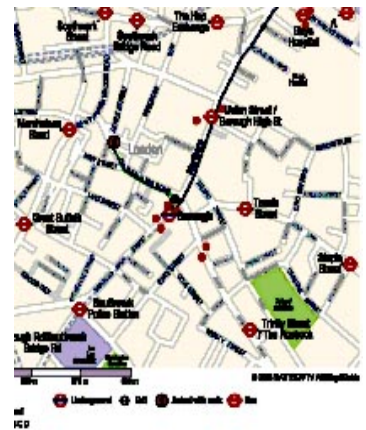
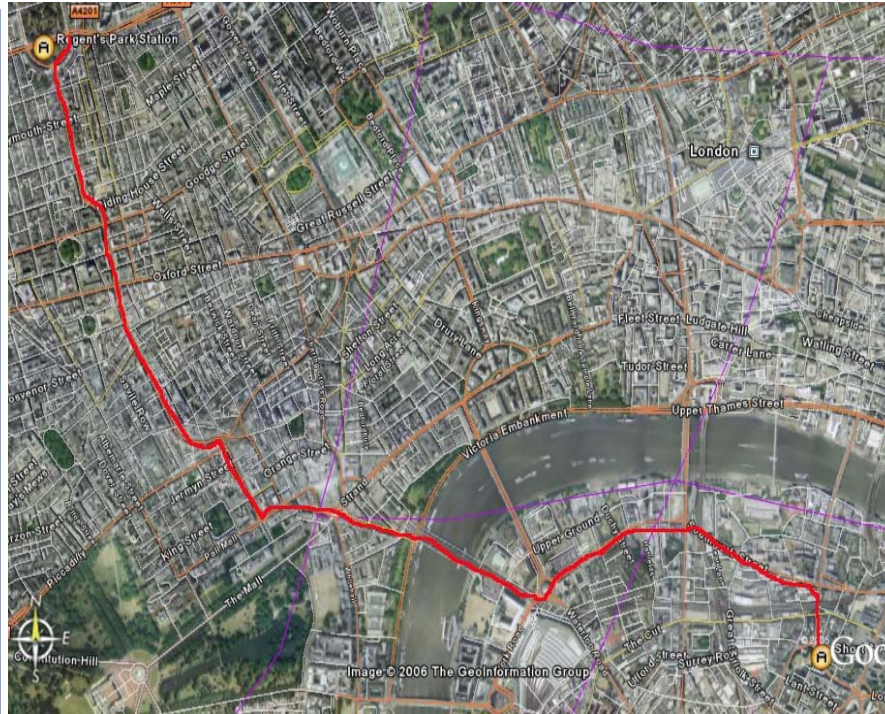


Alan Short
Short & Associate



Time	Details	Maps	Information
09:57	start 229 Great Portland Street	start map end map	Transfer time: 5 mins
10:02	Walk to Great Portland Street		
10:02	Great Portland Street Take the Circle Line	start map end map area map	Av Journey time: 10 mins
10:12	towards King's Cross St.Pancras or Metropolitan Line towards Aldgate or Hammersmith & City Line towards Liverpool Street		
10:16	Moorgate Take the Northern Line	start map end map area map	Av journey time: 6 mins Zone(s): 1
10:22	towards Morden		
	Borough Walk to 24a marshalsea road borough Marshalsea Road	start map end map area map	Transfer time: 8 mins Zone(s): 1
10:30	end 24a marshalsea road borough Marshalsea Road		

Maximum journey time: 00:33
Interchanges: 1



• Transportation

• Summary

- Professor and Architect
- Passive Cooling
- College Buildings and Theaters
- Ventilation Tower
- Collaboration with Engineers & Specialists
- Manchester & Leicester

• Passive cooling



Natural ventilation



High thermal mass



Night ventilation



Evaporative cooling

• References web-site

- www.arct.cam.ac.uk/archInterNet/
- www.sciencemuseum.org.uk/
- www.arct.cam.ac.uk/studioworks/
- www.view.captureweb.co.uk/
- www.shortandassociates.co.uk/