

Carpenter/Lowings Architecture & Design



Studio description

Background

Carpenter/Lowings Architecture & Design is a partnership between the American sculptor James Carpenter and British architect Luke Lowings, to develop a synthesis of structure, light and space in an architectural and urban context.

James Carpenter has been working with light, with a particular emphasis on glass in architecture for the last twenty-five years, as the principal of James Carpenter Design Associates in New York. Luke Lowings (a registered architect in the UK and in New York State) has been collaborating with JCDA in New York for the last twelve years, and is now based in London. With JCDA they have been responsible for the development of an internationally recognized and unique body of work that spans the boundaries of art, architecture and engineering with examples all over the world. Together they now have a studio in London to develop projects in the UK and Europe.

The ambition of the studio is to integrate visual ideas into architectural projects at a wide range of scales, through a thorough knowledge of materials and structure, continuing and broadening the work of JCDA. Carpenter and Lowings have produced projects of great visual and technical refinement through a collaborative process with clients and architects, developed over many years, and the studio is able to call upon the services of world-class engineers, fabricators, and installers in order to assemble teams capable of designing large building elements as well as smaller-scale installations. The studio hopes to produce independent architectural projects in the near future that combine the visual ideas that the team has become known for with more functional and defined programmatic concerns.

Carpenter/Lowings believes that light, structure and material can be brought together in such a way that they heighten the awareness of a specific site, space or time. This individual perception as part of a shared human experience, can create a sense of delight and wonder and strengthen a sense of connection to our surroundings.

Design Process

Carpenter/Lowings initiates the design of a project through the development of a unified aesthetic and structural concept in response to context and budget, which is then refined and elaborated in consultations with client, other members of the design team, engineers, specialist fabricators and materials engineers. The studio then develops a design through to detail design and installation, in parallel with the design team, as a constant refinement and expression of the concept.

Renderings, study models, full-scale mock-ups of components, and prototypes form part of the development of a project, and the attention to detail that this design process implies is carried through to the built work, through a thorough knowledge of current fabrication and construction techniques, and the capacities of installers.

Procurement Process

The procurement of a project can occur in a number of ways; smaller installations can be directly commissioned; larger projects can see Carpenter/Lowings acting as a fully integrated member of a design team, either as a design consultant to the architect or as architect. We have undertaken to assemble teams of designers and fabricators to produce special constructions for larger projects. In all cases however the design process remains consistent, with a stage-by-stage collaborative process to develop a unique response to each situation.

Apple London - Light Ceiling

Regent Street, London

Building Architect: Bohlin, Cywinski, Jackson, Berkeley/ Gensler, London

Engineer: Eckersley O'Callaghan Structural Design, London
2004

On 20 November 2004, Apple opened their first European high-profile store in London's Regent Street, to great acclaim. The design is based on previous stores in the USA and Japan, and includes some of the already well-known architectural features such as the all-glass stair and bridge. Most of the existing high-profile stores have a skylight over the stair, but in the Regent Street store, located inside a 6-storey building, it has been substituted by the "Light Ceiling".

Intended to evoke the sensation of arriving under a daylight canopy it uses 24 very large tilted planes of etched semi-reflective glass and the subtle contrasts in colour between different types of lighting to play with perceptions of inside and outside. The subtle reflectivity of the ceiling also brings a dynamism to the space as the shadows and the images of people using the glass stair are projected on it from uplights beneath the stair.

Each ceiling panel is constructed as a unit 6 metres by 750mm using a single custom-etched and coated sheet of low-iron glass, bonded to a stainless steel sheet, with integrated lighting and reflectors. Two independently controlled lamp sources concealed behind the panel allow the colour of the light to be varied infinitely between blue and white to evoke the reflected colour of the sky. Intended to complement the visual impact of the stairs, the directionality of the tilt of the panels creates a dynamic effect as one arrives in the store, moves up the stairs and circulates within the upper floor.



left: The Light Ceiling complements the rhythm of the glass stair
upper right: Light and colour reflections in the ceiling. The open lit side of the ceiling is being reflected in the bridge glazing.
lower right: Light Ceiling and glass bridge

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James Fraser Carpenter

born: Washington DC, USA 1948



Professional Experience

James Carpenter Design Associates, Inc., New York <i>Director</i>	Established 1979
Carpenter-Norris Consulting, Inc., New York <i>Director</i>	Established 1994
Carpenter/Lowings Architecture & Design, Ltd., London <i>Director</i>	Established 2001

Teaching

University of Stuttgart, Light Weight Structures Institute, Germany Visiting Professor,	1999-2002
Harvard University, Massachusetts Eliot Noyes Professorship,	Autumn 2000
Massachusetts Institute of Technology, Massachusetts Materials Science,	Spring 2000
Columbia University, New York Adjunct Professor,	2000
University of Pennsylvania, Philadelphia, PA Visiting Professor, Structures,	1993-1998
Royal College of Art, London, Associate Lecturer,	1982-1991
Rhode Island School of Design, Providence, Associate Professor,	1973-77
University of California, Berkeley, Sculpture Instructor,	1972

Education

Rhode Island School of Design, Providence, Rhode Island BFA, Sculpture,	1972
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Membership

American Institute of Architects (AIA), Associate Member
American Society of Civil Engineers (ASCE), Affiliate Member
Illuminating Engineering Society of North America (IESNA)
International Society for Glass Technology
International Solar Energy Society (ISES)
Rhode Island School of Design (RISD), Board of Trustees

Awards

MacArthur Fellow	2004
Olympics, IES Illuminating Engineering Society, First Place	2001
45th PA Awards, Tulane University Center (with Vincent James Associates), New Orleans, LA	2000
General Services Administration, Lens Ceiling (with Richard Meier), Phoenix, AZ	1998
Benedictus Award, Citations	1996, 1998, 2003
41st Annual Progressive Architecture Awards, Citation- Wabasha Street Bridge	1994
New York State Council of the Arts, Centerway Bridge Design, Corning, NY	1993-94
Pilkington Glass Curtain Wall Competition, Honourable Mention, Chicago, IL	1993
AIA Institute Honors Award, Washington, DC	1991
Glass House Competition, Honourable Mention (with Toshiko Mori), Tokyo, Japan	1991
New York Foundation for the Arts, Fellowship, New York	1990
Harvard University, Graduate School of Design, Loeb Fellowship	1989
American Association of Structural Engineers, First Place-Specialty Structures	1987
NY Association of Consulting Engineers, First Place- Building Structural Design	1987
National Endowment for the Arts, Design Arts Fellowship	1985
National Endowment for the Arts, Design Arts Fellowship	1979
Rhode Island School of Design, European Honors Programme	1971

Luke Lowings

born: Cambridge, England 1961



Professional Experience

Carpenter/Lowings Architecture & Design, Ltd., London <i>Director</i>	Established 2001
James Carpenter Design Associates, Inc., New York <i>Project Designer, Project Manager</i>	1989 - 2001
Richard Rogers + Partners, London <i>Project Design Team Member</i>	1985-1986, 1989

Teaching

Architectural Association, London Guest tutor Diploma unit 5, George Liaropoulos and Lluís Viu Rebes	2003
Columbia University, New York Graduate Seminar	2000 & 2001
University of Pennsylvania, Philadelphia, PA Graduate Design Studio	Autumn 1999
University of Pennsylvania, Philadelphia, PA, Graduate Design Studio	Spring 1998
New Jersey Institute of Technology, Newark, NJ, 3rd Year Design Studio	Autumn 1996-Autumn 1998
University of Pennsylvania, Philadelphia, PA, Graduate Design Studio with James Carpenter and Peter McLeary	Spring 1995
Guest Critic, Columbia University, Bennington College, NJIT, University of the Arts, Pennsylvania, Harvard, the University of Pennsylvania, in the US, and the Bartlett School in London.	

Education

Registered Architect, New York State	2001
South Bank Polytechnic, London RIBA Part III Exam for ARCUK registration, registered architect in the UK	1991
Royal College of Art, London, MA Dip Arch.	1986 - 1988
Kingston Polytechnic, London, BA Architectural Studies	1981 -1984
Cambridgeshire College of Art and Technology, Cambridge Foundation Course in Art and Design	1980

Publications and Awards

"Constructing the Ephemeral - Innovation in the use of glass" Contribution to "Innovation in Architecture" Alan Brookes (Ed.)	2003
"The Material and the Ephemeral" in "Glass - Structure and Technology" S. and S. Behling (Eds.)	1999
"The Material and the Ephemeral" paper given at conference "Glass in Buildings" University of Bath, England	1999
Numerous publications of work with James Carpenter Design Associates: Architectural Review, Techniques & Architecture, Progressive Architecture, L'Arca, A+U, DETAIL etc. 1990-2001	
General Services Administration Award, Lens Ceiling, Phoenix, AZ	1998
Benedictus Award, Citations	1996, 2003
"Tensegrity Rings Sculpture" exhibited in "Mutant Materials" Exhibition at MoMA, New York	1995
Progressive Architecture Design Award for "Twin Mast Bridge", St. Paul	1993
Prizewinner, Young Architects Forum, Architectural League of NY, New York	1991
Thesis project - RCA (for 1M sf temporary exhibition space on the site of the Crystal Palace) published in "Building Design", London	1988