

Building Sustainability

Our highly qualified and specialist engineers offer expert advice on the design and implementation of cost-effective, comfortable and sustainable buildings.





Understanding client requirements and user operations, whilst balancing their needs within an overall framework of sustainability, are key factors in our success. Underpinning our service is the belief that intelligent design is the mechanism through which sustainable principles are translated into practical, cost-efficient solutions that satisfy the aspirations of owners, occupiers and future generations.

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Comfort Matters

In addition to obvious advantages of improved occupant health, contentment and workplace harmony, authoritative studies show that better indoor environmental quality (IEQ), makes sound financial sense through reduction of absenteeism and increased productivity. We have the expertise to evaluate every type of building and ensure that IEQ solutions are both effective and affordable.

We analyse thermal and visual comfort all year round, using virtual models in conjunction with benchmarking against industry best practice and client standards. We also draw on years of experience in designing for occupant comfort by blending theoretical knowledge with a real understanding of engineering applications.

Sustainable Leaders

Buildings have a major impact on the natural environment and governments are, understandably, introducing regulations to promote the principle of sustainability. Our highly qualified engineers have, for many years, led the way in promoting the best in practical and sustainable design. Every project has its own unique signature and is evaluated on its own merits to ensure optimal solutions are adopted.

We evaluate the feasibility of passive design measures, to reduce environmental impact, prior to investigating active systems. Our experienced engineers ensure that systems proposed in the design of the projects follow the principle of 'keep it simple' such that sustainability targets are met.

Design Accreditation

Increasingly, buildings must not only be environmentally friendly, but also able to demonstrate this through benchmarking against a range of sustainable targets, some of which are imposed by law and regulations.

We are registered assessors for the Building Research Establishment's environmental assessment method (BREEAM) and the code for sustainable homes. These have established themselves as the de facto standard for measuring building sustainability. We offer assessments against a wide variety of BREEAM standards, including international. Many of our buildings have achieved the highest BREEAM and other environmental assessment ratings. We offer practical and independent advice on building performance and labelling during all stages of the project.

- Photovoltaics
- Wind Turbines
- Combined Heat and Power
- Solar Heating
- Heat Pumps
- Recycled Water
- Trigeneration
- Ground Water
- Thermal Storage
- Heat Recovery
- Free-Cooling
- Lighting Control
- Displacement Ventilation

Our service is based on in-depth analysis of building form, allied with an extensive knowledge of modern construction materials and processes. We have a wide range of experience of every type of energy source and building services system. We understand the advantages and limitations of both passive and active systems. This results in buildings and environments that satisfy all stakeholders.



Essential Team Members

Sometimes it is difficult to get the right answers unless you know the right questions. We take an active role in helping establish the brief, including presenting appropriate options and developing the design. We offer expert advice and a fast response to your concerns or changing requirements.

Working closely with the architects and other members of the professional team is especially important in developing sustainable buildings. The built form can then be optimised in relation to any passive or active systems to be employed. Early involvement enables us to make a constructive contribution based on considered analysis of the available options and a detailed understanding of the client's requirements.

Software Tools

Leading edge software forms part of our toolbox. It allows us to analyse ideas and 'what-if' scenarios on 3D virtual models of any building. Delivering optimum results in the context of real construction projects is our trademark. This is achieved by experienced design engineers making use of modern software tools, rather than software specialists looking for applications.

We are committed to delivering the sustainable buildings you want within the commercial realities we must all recognise.



- 7 More London, London
- Commerzbank, Frankfurt
- Two Kingdom Street, London
- Centre for Mathematical Sciences, University of Cambridge
- Battersea Power Station, London

Advice

- Appropriate indoor conditions
- Benchmarking
- Building form and fenestration
- Daylighting
- Embedded energy
- Low energy design
- Renewable energy
- Targeting

Analysis

- Air movement
- BREEAM
- Carbon emissions
- Code for sustainable homes
- Comfort conditions
- Low and zero carbon options
- Energy predictions
- Natural ventilation effectiveness
- Building regulations compliance
- Shading analysis
- System performance
- Thermal performance

Solutions

- Optimised value
- Functional design
- Sustainability
- User satisfaction



Selected Projects

20 Blackfriars Rd, London
Arundel Great Court, London
Battersea Power Station
Berlaymont 2000, Brussels
Commerzbank, Frankfurt
DS6 Canary Wharf, London
Goldsmiths College, London
Hines Metropolitan, Warsaw
Index, Dubai
Kamakura House, Japan
Lewisham College, London
Lycée Albert Camus, Fréjus
MID City Place, London
Mistral, Reading
More London Development
National University Ireland
Odeon Leicester Sq, London
Oxford Brookes University
Potsdamer Platz, Berlin
Reykjavik City Hall, Iceland
Spinningfields, Manchester
St Paul's Academy, London
The Tower, One St George Wharf
The Willis Building, London
Wellingborough Hospital

Selected Clients

Allied London Properties
Argent
Boots the Chemist
British Airports Authority
British Land
Cambridge University
Daimler Chrysler
Daewoo
Development Securities
Helical Bar
Hilton Hotels
Hines
HSBC
Kent County Council
Land Securities
Minerva
Morgan Stanley
Oxford University
PricewaterhouseCoopers
Prudential
Selfridges
Standard Life
St George
Stanhope
University of Bath

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