



BREEAM Assessments & Energy Certificate Services

Thornley & Lumb Partnership Ltd have invested heavily in the training of key personnel as accredited Low Carbon Consultants and Energy Advisors to be able to offer SBEM Calculations, Energy Performance Certificates (EPC's), Display Energy Certificates (DEC's) & Air Conditioning Inspections for all types of properties. We have also undertaken training to allow us to offer BREEAM Assessments in Offices, Retail & Ecohomes as an addition to our already extensive portfolio of services.

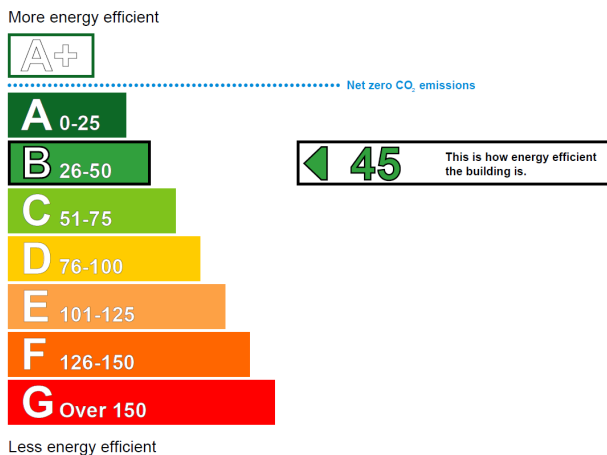
Having carried out extensive training and assessment projects all of which have been independently checked and verified by the Chartered Institute of Building Service Engineers (CIBSE), we are now registered Low Carbon Consultants and Energy Assessors for Commercial Properties. We are also recognised as a Registered & Licensed Consultant with BRE for Offices, Retail & Ecohomes BREEAM Assessments.

Energy Certificates - The Law

From 6 April 2008 energy performance certificates are needed for all commercial buildings that are constructed, sold or let. Public buildings throughout England and Wales will need to display an energy certificate from October 2008 (similar legislation will also apply to Scotland and Northern Ireland).

These certificates must be produced by an accredited energy assessor. There are two types of energy certificate:

- The **Energy Performance Certificate**, which is required for all buildings when they are constructed, sold or let.
- The **Display Energy Certificate**, will be required for public buildings and those occupied by public authorities which have a total useful area greater than 1000m² and provide a public service to a large number of people and therefore frequently visited by those people (i.e. a school, hospital, government or local authority building). These will show the actual energy usage of a building and will need to be displayed from 1 October 2008.



Air Conditioning Inspections

New regulations also require that all air conditioning systems above 250 kW (total installed building AC load) are inspected by January 2009. Those over 12kW must be inspected by 4 January 2011. This work must be carried out by an accredited inspector

SBEM Calculations

In addition to being able to provide EPC's & DEC's we are also able to provide full SBEM calculations required to show compliance with L2A of the building regulations for all new buildings and extensions. We are able to undertake these as part of a Comprehensive Consultancy Package with full Mechanical and Electrical Design for the project or as a stand alone service to provide an independent assessment of a design on behalf of the client.

All SBEM calculations are undertaken using an Industry approved and accredited software package allowing the production of all documentation required for Building Control Submission. As Low Carbon Consultants we are able to self certify compliance with L2A

Renewable Energy

We are able to provide proposals for the implementation of Renewable Technologies to a specific project and assess the likely impact of Carbon Emissions, Energy Reduction and Associated Payback periods. With integration into the SBEM calculation tool we are able to demonstrate a Whole Building Energy Model and the impact on the overall energy usage of the building.

Detailed assessment of the following can be provided :

- Solar Thermal & Photovoltaic
- Ground / Air Source Heat Pumps
- Domestic & Commercial CHP Systems
- Biomass Boilers
- Wind Energy

We are also able to offer technical advice on Grey Water Recover & Rain Water Harvesting systems.

Mechanical & Electrical Building Services Consultant Engineers



BREEAM Assessments & Energy Certificate Services

BREEAM Assessments in Offices, Retail, Ecohomes & The Code for Sustainable Homes

The Building Research Establishment Environmental Assessment Method (BREEAM) was launched in July 1990 & quickly established itself as the world's most widely used environmental assessment method for buildings. BREEAM is intended to assist construction professionals in understanding & mitigating the environmental impacts of the developments they design and build.

Below is a brief summary of each of the BREEAM assessment type and appropriate buildings within each category.

Why BREEAM ?

- Improved marketability of buildings for developers
- Improved corporate image for tenants
- Better working environment for employees
- Reduced building running costs
- Lower legal and insurance cost for tenants
- Good returns on investment for developers
- BREEAM promotes and rewards innovation

BREEAM Retail

BREEAM Retail can be used to carry out environmental assessments for most types of retail development, and for a number of different stakeholders ranging from developers to individual tenants, managing agents and landlords. Assessments can be carried out on single units or whole developments at four different stages in the building life cycle:

- New build
- Major refurbishment
- Tenant fit-out
- Existing building (occupied): called 'Management and Operation' assessment

BREEAM Retail can assess the following types of retail developments:

- General display and sale of goods: For example Shopping Centre, DIY stores, showrooms and all general retail outlets
- Food retail: For example supermarkets, general stores with a food retail section and shops that sell food for consumption off the premises.
- Customer service retail: For example bank, post office, dry cleaners, travel agency etc.

BREEAM Offices

BREEAM Offices is the world's most widely used means of reviewing and improving the environmental performance of office buildings. BREEAM Offices assessments can be carried out on both new and existing office buildings non occupied or occupied, as follows:

- New build or refurbishment: design and procurement
- Existing office (occupied): management and operation

Ecohomes

Ecohomes is a version of BREEAM for homes. It provides an authoritative rating for new, converted or renovated homes, and covers houses, flats and apartments.

Ecohomes balances environmental performance with the need for a high quality of life and a safe and healthy internal environment. Many of the issues are optional, ensuring Ecohomes is flexible enough to be tailored to a particular development or market.

Ecohomes Assessments can be carried out at both the design stage or post construction for:

- New build
- Major refurbishment projects

In April 2007 the Code for Sustainable Homes replaced Ecohomes for the assessment of new housing in England. EcoHomes 2006 will continue to be used for refurbished housing in England and for all housing in Scotland and Wales.

The Code for Sustainable Homes

On the 27 February 2008 the Government confirmed that from 1 May 2008 it would be mandatory for all new homes to have a rating against this Code. These new regulations for providing for mandatory ratings do not apply to properties where the initial notice, full plans or Building Notice have been received by the relevant Local Authority Building Control body prior to 1st May 2008.

Contact us

If you would like to discuss your requirements for any project please get in touch with our office on 01274 687755:

James Forster: BREEAM Offices
Ecohomes
The Code for Sustainable Homes
SBEM Calculations
EPC's & DEC's

Andrew Jagger: BREEAM Retail
Ecohomes
Air Conditioning Inspections
SBEM Calculations
EPC's & DEC's

Alternatively please email any enquiries to:

energy@thornleylumb.co.uk

Mechanical & Electrical Building Services Consultant Engineers