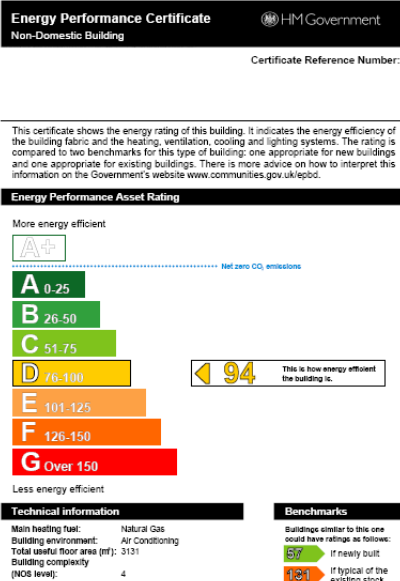


# LowC making low carbon communities happen

## EPC/DEC Certification from LowC



EPCs are now mandatory for construction, sale or rent of all non-dwellings >50m<sup>2</sup> and DEC required for all public buildings >1,000m<sup>2</sup>.



Regular inspection of air-conditioning plant is required by January 2009.

### Regulatory Requirements

The EU is committed to complying with the Kyoto protocol and has responded with a range of legislative and carbon mitigation initiatives. Many of these measures impact the built environment which represents more than 40% of the carbon emissions in the UK.

The Energy Performance of Buildings Directive (EPBD) was adopted by UK Government in December 2002, to be implemented in all member states before January 2009.

### Energy Performance Certificates (EPCs)

EPCs are now mandatory for all commercial buildings over 50m<sup>2</sup>, either under construction, sale or rent. Certificates must be produced by the building owner, vendor or landlord and provide:

- **Asset ratings (A-G)** detailing the intrinsic energy performance of a building
- **Performance benchmarks**
- **Recommendations** for cost-effective improvements with indicative payback periods

EPCs will improve investment yields and as such should not be considered as a constraint but as an opportunity, bringing benefits such as:

- **Attracting** environmentally conscious tenants and buyers
- **Capitalising** on marketing your 'green' credentials
- **Identifying** energy saving measures and renewable/low carbon technologies
- **Strengthen** competitive advantage by being prepared for legal audit processes
- **Improving** building management and providing all stakeholders with a clear roadmap of what to do next

EPCs can form part of an energy efficiency or sustainability audit to include recommendations related to operation (including water, waste and well-being related parameters) thus benefiting both landlord and tenant.

### Inspection of Air-Conditioning Systems

Under EPBD regulations, regular inspection of air-conditioning plant over 250kW is required by January 2009, with all remaining equipment over 12kW required by January 2011.

LowC has specialist building services engineers accredited to perform inspection to meet these criteria.

# LowC making low carbon communities happen

**Display Energy Certificate**  
 How efficiently is this building being used?

**A Government Dept**  
 12<sup>th</sup> & 13<sup>th</sup> Floor  
 Justice House  
 High Street  
 Anytown  
 AX 123D

**Certificate Reference Number:**  
 1234-1234-1234-1234

This certificate indicates how much energy is being used to operate this building. The operational rating is based on meter readings of all the energy actually used in the building. It is compared to a benchmark that represents performance indicative of all buildings of this type. There is now advice on how to interpret this information on the Government's website [www.communities.gov.uk/dec](http://www.communities.gov.uk/dec).

**Energy Performance Operational Rating**

This tells you how efficiently energy has been used in the building. The numbers do not represent actual units of energy consumed, they represent comparative energy efficiency. 100 would be typical for this kind of building.

A	0-25
B	26-50
C	51-75
D	76-100
E	101-125
F	126-150
G	Over 150

Less energy efficient

**Total CO<sub>2</sub> Emissions**

This tells you how much carbon dioxide the building emits. It shows tonnes per year of CO<sub>2</sub>.

**Previous Operational Ratings**

This tells you how efficiently energy has been used in this building over the last three assessment periods.

**Technical information**

This tells you technical information about how energy is used in this building. Construction date based on:

Main heating fuel: Gas  
 Building Environment: Air Conditioned  
 Total useful floor area (m<sup>2</sup>): 200  
 Asset Rating: 2007

Rating	Standard
Annual Energy Use (kWh/m <sup>2</sup> /year)	120
Typical Energy Use (kWh/m <sup>2</sup> /year)	120
Energy from renewables	0%

**Administrative information**

This is a Display Energy Certificate as defined in BS5593:2007 as amended.

Assessment Software: QES v4  
 Property Reference: 891123778612  
 Assessment Name: JMS-2007  
 Assessor Name: ABC-12345  
 Accreditation Scheme: ABC Accreditation Ltd  
 Employer/Trading Name: EnergyWorks Ltd  
 Employer/Trading Address Alpha House, New Way, Birmingham, B2 1AA  
 Issue Date: 12 May 2007  
 Valid Until: 01 Apr 2008  
 Valid Until: 31 Mar 2008  
 Related Party Disclosure: Employment not controlled as energy manager  
 Recommendations for improving the energy efficiency of the building are contained in Report Reference Number: 1234-1234-1234-1234

DEC Certificates provide a running score for the current and previous two years energy use.

EPC and DEC Inspections Identify energy saving measures and renewable/low carbon technologies

## Display Energy Certificates (DECs)

DECs are required for all public buildings over 1,000m<sup>2</sup> and demonstrate how efficiently a building is operated. Certificates must be produced by the occupier (public authorities only in a first instance) and are reviewed on a 12-monthly basis.

It is expected that all commercial buildings will eventually require DEC certification in addition to EPCs to further demonstrate improvements in overall energy performance.

## How does the certification process work?

LowC offers a range of consultancy services designed to integrate seamlessly with existing design strategies and planning procedures. Our certification processes for EPC and DEC accreditation involve the following phases:

- Information gathering
- Data modelling using approved software models
- Sign-off by an Approved Assessor
- Registration with National Database

EPC and DEC certification must be performed by Low Carbon Consultants accredited by a Government-authorized body. LowC employs Low Carbon Consultants accredited by the Chartered Institute of Building Services Engineers (CIBSE).

Our consultants are members of the Low Carbon Energy Assessor (LCEA) Register and have undertaken examinations to demonstrate their competence to deliver and maintain buildings which exceed minimum standards of energy efficient operation.

LowC consultants are required to update and enhance their skills continuously to ensure that they keep up with technological developments and the requirements of the regulations.

