# The Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007

Report date:

19<sup>th</sup> November 2008

**EPC Number** 

9090-6052-0498-7330-3090

for



2 SYLVAN COURT
SYLVAN WAY
SOUTHFIELDS BUSINESS PARK
BASILDON
SS15 6TH



completed by

Mr G E Wilding

Dip2 OSH, Sp Dip EM, LCEA, CDM-C, CCP(Noise)

Principal Consultant

## **Recommendation Report**



Report Reference Number: 9090-6052-0498-7330-3090

2 Sylvan Court Sylvan Way Southfields Business Park Basildon SS15 6TH

Building Type(s): Office

| ADMINISTRATIVE INFORMATION    |   |  |
|-------------------------------|---|--|
| Issue Date:                   | 19 Nov 2008                                       |  |
| Valid Until:                  | 18 Nov 2018 (*)                                   |  |
| Total Useful Floor Area (m²): | 852   |  |
| Calculation Tool Used:        | iSBEM v3.2.b using calculation engine SBEM v3.2.b |  |
| Property Reference:           | 699523370000                                      |  |

| ENERGY ASSESSOR DETAILS   |  |  |
|---------------------------|--|--|
| Assessor Name:            | Mr Geoffrey Wilding                            |  |
| Employer/Trading Name:    | Quantum Risk Management<br>Limited             |  |
| Employer/Trading Address: | 20 Nelson Road, St Johns,<br>Worcester WR2 5BN |  |
| Assessor Number:          | LCEA130258                                     |  |
| Accreditation scheme:     | CIBSE Certification Ltd                        |  |
| Related Party Disclosure: | None   |  |

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#### 1. Background

Statutory Instrument 2007 No. 991, *The Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007*, as amended, transposes the requirements of Articles 7.2 and 7.3 of the Energy Performance of Buildings Directive 2002/91/EC.

This report is a Recommendation Report as required under regulations 16(2)(a) and 19 of the Statutory Instrument SI 2007:991.

This section provides general information regarding the building:

| Total Useful Floor Area (m²): | 852              |
|-------------------------------|------------------|
| Building Environment:         | Air Conditioning |

### 2. Introduction

This Recommendation Report was produced in line with the Government's approved methodology and is based on calculation tool iSBEM v3.2.b using calculation engine SBEM v3.2.b.

In accordance with Government's current guidance, the Energy Assessor did undertake a walk around survey of the building prior to producing this Recommendation Report.

#### 3. Recommendations

The following sections list recommendations selected by the energy assessor for the improvement of the energy performance of the building. The recommendations are listed under four headings: short payback, medium payback, long payback, and other measures.

#### a) Recommendations with a short payback

This section lists recommendations with a payback of less than 3 years:

| Recommendation   | Potential impact |
|--|------------------|
| Consider replacing T8 lamps with retrofit T5 conversion kit.   | HIGH             |
| The default chilller efficiency is chosen. It is recommended that the chiller system be investigated to gain an understanding of its efficiency and possible improvements. | HIGH             |
| Introduce HF (high frequency) ballasts for fluorescent tubes: Reduced number of fittings required.   | LOW              |
| Some spaces have a significant risk of overheating. Consider solar control measures such as the application of reflective coating or shading devices to windows.           | MEDIUM           |
| Consider replacing heating boiler plant with high efficiency type.   | HIGH             |
| Add optimum start/stop to the heating system.  | HIGH             |

#### b) Recommendations with a medium payback

This section lists recommendations with a payback of between 3 and 7 years:

| Recommendation  | Potential impact |
|---|------------------|
| The default heat generator efficiency is chosen. It is recommended that the heat generator system be investigated to gain an understanding of its efficiency and possible improvements. | HIGH             |
| Add weather compensation controls to heating system   | HIGH             |

| Add local time control to heating system. | HIGH |
|---|------|
|---|------|

#### c) Recommendations with a long payback

This section lists recommendations with a payback of more than 7 years:

| Recommendation   | Potential impact |
|--|------------------|
| Consider replacing heating boiler plant with a condensing type.  | HIGH             |
| Some glazing is poorly insulated. Replace/improve glazing and/or frames.   | HIGH             |
| Consider installing building mounted wind turbine(s).  | LOW              |
| Some floors are poorly insulated - introduce and/or improve insulation. Add insulation to the exposed surfaces of floors adjacent to underground, unheated spaces or exterior. | HIGH             |
| Consider installing solar water heating.   | LOW              |

#### d) Other recommendations

This section lists other recommendations selected by the energy assessor, based on an understanding of the building, and / or based on a valid existing energy report.

No recommendations defined by the energy assessor have been identified

#### 4. Next steps

#### a) Your Recommendation Report

As the building occupier, regulation 10(1) of SI 2007:991 requires that an Energy Performance Certificate "must be accompanied by a recommendation report".

You must be able to produce a copy of this Recommendation Report within seven days if requested by an Enforcement Authority under regulation 39 of SI 2007:991.

This Recommendation Report has also been lodged on the Government's central register. Access to the report, to the data used to compile the report, and to previous similar documents relating to the same building can be obtained by request through the Non-Dwellings Register (www.epcregister.com) using the report reference number of this document.

#### b) Implementing recommendations

The recommendations are provided as an indication of opportunities that appear to exist to improve the building's energy efficiency.

The calculation tool has automatically produced a set of recommendations, which the Energy Assessor has reviewed in the light of his / her knowledge of the building and its use. The Energy Assessor may have comments on the recommendations based on his / her knowledge of the building and its use. The Energy Assessor may have inserted additional measures in section 3d (Other Recommendations). He / she may have removed some automatically generated recommendations or added additional recommendations.

These recommendations do not include matters relating to operation and maintenance which cannot be identified from the calculation procedure.

#### c) Legal disclaimer

The advice provided in this Recommendation Report is intended to be for information only. Recipients of this Recommendation Report are advised to seek further detailed professional advice before reaching any decision on how to improve the energy performance of the building.

#### d) Complaints

Details of the assessor and the relevant accreditation scheme are on this report and the energy performance certificate. You can get contact details of the accreditation scheme from our website at www.communities.gov.uk/epbd, together with details of their procedures for confirming authenticity of a certificate and for making a complaint.

#### 5. Glossary

#### a) Payback

The payback periods are based on data provided by Good Practice Guides and Carbon Trust energy survey reports and are average figures calculated using a simple payback method. It is assumed that the source data is correct and accurate using up to date information.

The figures have been calculated as an average across a range of buildings and may differ from the actual payback period for the building being assessed. Therefore, it is recommended that each suggested measure be further investigated before reaching any decision on how to improve the energy efficiency of the building.

#### b) Carbon impact

The High / Medium / Low carbon impact indicators against each recommendation are provided to distinguish, between the suggested recommendations, those that would have most impact on carbon emissions from the building. For automatically generated recommendations, the carbon impact indicators are determined by software, but may have been adjusted by the Energy Assessor based on his / her knowledge of the building. The impact of other recommendations are determined by the assessor.

#### c) Valid report

A valid report is a report that has been:

- Produced within the past 10 years
- Produced by an Energy Assessor who is accredited to produce Recommendation Reports through a Government Approved Accreditation Scheme
- Lodged on the Register operated by or on behalf of the Secretary of State.

## **Energy Performance Certificate**



Non-Domestic Building

2 Sylvan Court Sylvan Way Southfields Business Park Basildon SS15 6TH

**Certificate Reference Number:** 

0360-0338-7590-9309-2096

This certificate shows the energy rating of this building. It indicates the energy efficiency of the building fabric and the heating, ventilation, cooling and lighting systems. The rating is compared to two benchmarks for this type of building: one appropriate for new buildings and one appropriate for existing buildings. There is more advice on how to interpret this information on the Government's website www.communities.gov.uk/epbd.

#### **Energy Performance Asset Rating**

More energy efficient



Net zero CO, emissions

 $A_{0-25}$ 

B 26-50

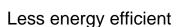
C 51-75

D 76-100

101-125

\_ 126-150

**G** Over 150



#### **Technical information**

Main heating fuel:

Natural Gas

Building environment: Air Conditioning

Total useful floor area (m<sup>2</sup>): 852

**Building complexity** 

(NOS level):

4

**Benchmarks** 

This is how energy efficient

the building is.

Buildings similar to this one could have ratings as follows:

62

If newly built

142

If typical of the existing stock

#### Administrative information

This is an Energy Performance Certificate as defined in SI2007:991 as amended

**Assessment Software:** 

iSBEM v3.2.b using calculation engine SBEM v3.2.b

**Property Reference:** 

699523370000

**Assessor Name:** 

Mr Geoffrey Wilding

**Assessor Number:** 

LCEA130258

**Accreditation Scheme:** 

CIBSE Certification Ltd

**Employer/Trading Name:** 

Quantum Risk Management Limited

**Employer/Trading Address:** 

20 Nelson Road, St Johns, Worcester WR2 5BN

Issue Date:

19 Nov 2008

Valid Until:

18 Nov 2018 (unless superseded by a later certificate)

**Related Party Disclosure:** 

None

Recommendations for improving the property are contained in Report Reference Number: 9090-6052-0498-7330-3090

#### If you have a complaint or wish to confirm that the certificate is genuine

Details of the assessor and the relevant accreditation scheme are on the certificate. You can get contact details of the accreditation scheme from the Government's website at www.communities.gov.uk/epbd, together with details of the procedures for confirming authenticity of a certificate and for making a complaint.



For advice on how to take action and to find out about technical and financial assistance schemes to help make buildings more energy efficient visit www.carbontrust.co.uk or call us on 0800 085 2005

## SBEM Main Calculation Output Document

Wed Nov 19 08:18:14 2008

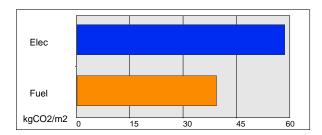
#### **Building name**

## Sylvan Court

#### Building type: Office

SBEM is an energy calculation tool for the purpose of assessing and demonstrating compliance with Building Regulations (Part L for England and Wales, Section 6 for Scotland, Part F for Northern Ireland and Part L for Republic of Ireland) and to produce Energy Performance Certificates and Building Energy Ratings. Although the data produced by the tool may be of use in the design process, **SBEM** is not intended as a building design tool.

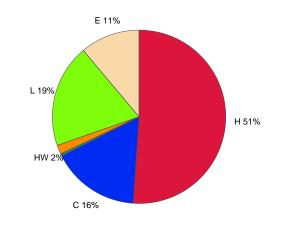
#### **Building Energy Performance and CO2 emissions**



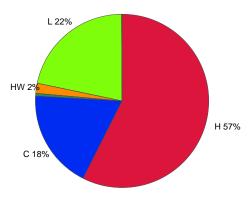
0 kgCO2/m2 displaced by the use of renewable sources.

Building area is 851.815m2

#### **Annual Energy Consumption**



(Pie chart excluding Equipment end-use)



(\*) Although energy consumption by equipment is shown in the graphs, the CO2 emissions associated with this end-use have not been taken into account when producing the rating.

