

# **Energy Performance Certificate (EPC) For Existing Buildings**

Unit 21&22, Swingbridge Industrial Estate Loughborough

Our Ref: 10-08-11184

October 2008





#### **Index**

#### Section

- 1 Executive Summary
- 2 Address Details
- **3** Accredited Assessor Details
- 4 Model Images

## **Appendices**

- **A -** Energy Performance Certificate
- **B** Recommendation Report



#### 1 Executive Summary

Stroma completed a survey of the Warehouse building at Unit 21&22, Kernan Drive, Swingbridge Industrial Estate, Loughborough on the 7<sup>th</sup> of October 2008.

The survey related to establishing the details of the fixed internal building services, building fabric and geometrical data.

The information gathered by the surveying team has since been processed using CLG Accredited software, by one of our Accredited Energy Assessors, in order to produce the required Energy Performance Certificate (EPC) and Recommendation Report (RR).

Both the EPC and RR are appended below.

The EPC and Recommendation Report were lodged onto the Landmark Register on 23rd of October 2008.

The unique Report Reference Numbers (RRN) for each of the documents are as follows;

EPC: 0450-0238-3920-1020-7096 RR: 9200-5097-0428-3400-2010



#### 2 Address Details

The following address is taken from the CLG approved Landmark register and is shown in the approved format along with the Unique Property Reference Number (UPRN);

UPRN: 512972030000

LINE 1:

LINE 2: Unit 21&22 LINE 3: Kernan Drive

LINE 4: Swingbridge Industrial Estate

CITY: LOUGHBOROUGH

POSTCODE: LE11 5JF



#### 3 Assessor Details

The Energy Assessment was undertaken by Firefly Risk Solutions in partnership with Stroma Technology. The following information relates to the Energy Assessor that completed and subsequently lodged the EPC onto the Landmark Register;

Assessor Name: Robert Waiting Assessor Number: STRO000034

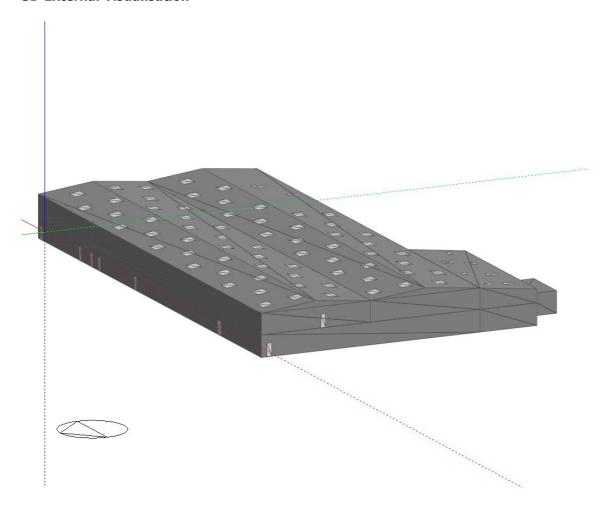
Accreditation Scheme: Stroma Accreditation Employer Trading Name: Stroma Technology Ltd.

Employer Trading Address: Unit 4, Pioneer Way, Pioneer Business Park, Castleford



## 4 Model Images

## **3D External Visualisation**





## Appendix A

**EPC Certificate** 



## **Energy Performance Certificate**



Non-Domestic Building

Unit 21 & 22 **Kernan Drive Swingbridge Industrial Estate** LOUGHBOROUGH **LE11 5JF** 

**Certificate Reference Number:** 

0450-0238-3920-1020-7096

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

0-25

26-50

51-75

**76-100** 

101-125

126-150

**Over 150** 

Less energy efficient

## Technical information

Main heating fuel:

**Natural Gas** 

**Building environment:** 

Air Conditioning

Total useful floor area (m<sup>2</sup>): 5871

**Building complexity** 

(NOS level):

3

This is how energy efficient the building is.

#### **Benchmarks**

Buildings similar to this one could have ratings as follows:

38

If newly built

If typical of the existing stock

#### **Administrative information**

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

**Assessment Software:** 

DesignBuilder v.1.6.9.003 using calculation engine SBEM v3.2.b

**Property Reference:** 

512972030000

**Assessor Name:** 

**Robert Waiting** 

**Assessor Number:** 

STRO000034

**Accreditation Scheme:** 

Stroma Accreditation Ltd

**Employer/Trading Name:** 

Stroma Technology

**Employer/Trading Address:** 

Unit 4 Pioneer Way

Issue Date:

24 Oct 2008

Valid Until:

23 Oct 2018 (unless superseded by a later certificate)

**Related Party Disclosure:** 

Recommendations for improving the property are contained in Report Reference Number: 9200-5097-0428-3400-2010

#### 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

## Appendix B

Recommendation Report



## **Recommendation Report**



Report Reference Number: 9200-5097-0428-3400-2010

Unit 21 & 22 Kernan Drive Swingbridge Industrial Estate LOUGHBOROUGH LE11 5JF

Building Type(s): Office

ADMINISTRATIVE INFORMATION		
Issue Date:	24 Oct 2008	
Valid Until:	23 Oct 2018 (*)	
Total Useful Floor Area (m²):	5871	
Calculation Tool Used:	DesignBuilder v.1.6.9.003 using calculation engine SBEM v3.2.b	
Property Reference:	512972030000	

ENERGY ASSESSOR DETAILS		
Assessor Name:	Robert Waiting	
Employer/Trading Name:	Stroma Technology	
Employer/Trading Address:	Unit 4 Pioneer Way	
Assessor Number:	STRO000034	
Accreditation scheme:	Stroma Accreditation Ltd	
Related Party Disclosure:		

## **Table of Contents**

1. Background	3
2. Introduction	3
3. Recommendations	4
4. Next Steps	6
5. Glossary	8

## 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):	5871
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 DesignBuilder v.1.6.9.003 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.	LOW
Improve insulation on HWS storage.	LOW
Install more efficient water heater.	LOW
Add time control to HWS secondary circulation.	LOW
Introduce HF (high frequency) ballasts for fluorescent tubes: Reduced number of fittings required.	LOW

## b) Recommendations with a medium payback

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

Recommendation	Potential impact
Consider replacing HWS with point of use system.	LOW
Consider replacing heating boiler plant with high efficiency type.	HIGH
Add optimum start/stop to the heating system.	HIGH

## c) Recommendations with a long payback

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

Recommendation	Potential impact
Some walls have uninsulated cavities - introduce cavity wall insulation.	HIGH
Some windows have high U-values - consider installing secondary glazing.	HIGH

Add weather compensation controls to heating system.	HIGH
Add local time control to heating system.	HIGH
Consider replacing heating boiler plant with a condensing type.	HIGH

## 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.