

## **EPC INFORMATION PACK**

Project Reference: 2022-02-2426 R

4A Elephant Yard

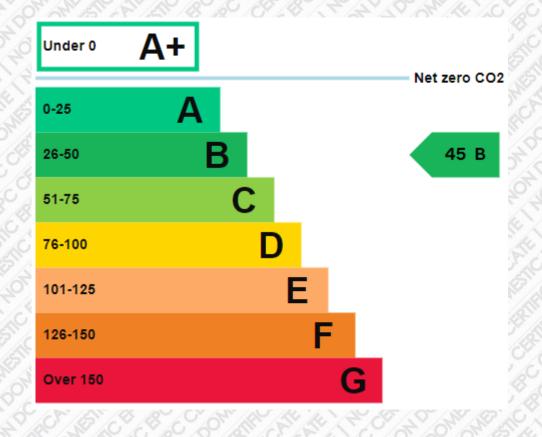
Kendal

LA9 4QQ



# ENERGY PERFORMANCE CERTIFICATE NON DOMESTIC





# Rules on letting this property

Properties can be let if they have an energy rating from A+ to E.

If a property has an energy rating of F or G, the landlord cannot grant a tenancy to new or existing tenants, unless an exemption has been registered.

From 1 April 2023, landlords will not be allowed to continue letting a non-domestic property on an existing lease if that property has an energy rating of F or G.

The validity of this certificate can be confirmed by visiting the link below

https://find-energy-certificate.service.gov.uk/energy-certificate/2832-5630-0531-2953-5585





# ENERGY PERFORMANCE CERTIFICATE NON DOMESTIC

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# **Energy performance certificate (EPC)**

4a Elephant Yard KENDAL LA9 4QQ Energy rating

Valid until: 1 August 2034

Certificate number:

2832-5630-0531-2953-5585

Property type

Retail/Financial and Professional Services

Total floor area

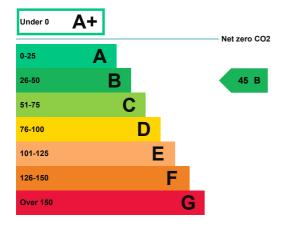
47 square metres

### Rules on letting this property

Properties can be let if they have an energy rating from A+ to E.

#### **Energy rating and score**

This property's energy rating is B.



Properties get a rating from A+ (best) to G (worst) and a score.

The better the rating and score, the lower your property's carbon emissions are likely to be.

## How this property compares to others

Properties similar to this one could have ratings:

If newly built

12 A

If typical of the existing stock

49 B

## Breakdown of this property's energy performance

Main heating fuel	Grid Supplied Electricity
Building environment	Air Conditioning
Assessment level	3
Building emission rate (kgCO2/m2 per year)	15.08
Primary energy use (kWh/m2 per year)	163

#### **Recommendation report**

Guidance on improving the energy performance of this property can be found in the  $\frac{\text{recommendation}}{\text{report (/energy-certificate/8906-4816-7416-0318-2797)}}$ .

#### Who to contact about this certificate

#### **Contacting the assessor**

If you're unhappy about your property's energy assessment or certificate, you can complain to the assessor who created it.

Assessor's name	Neil Austin
Telephone	01253486919
Email	neil.austin@ener-services.co.uk

#### Contacting the accreditation scheme

If you're still unhappy after contacting the assessor, you should contact the assessor's accreditation scheme.

Accreditation scheme	Elmhurst Energy Systems Ltd
Assessor's ID	EES/017379
Telephone	01455 883 250
Email	enquiries@elmhurstenergy.co.uk

#### About this assessment

Employer	Ener Services & Surveys Ltd
Employer address	Airey House Shepherd Road Lytham St Annes
Assessor's declaration	The assessor is not related to the owner of the
	property.
Date of assessment	19 July 2024
Date of certificate	2 August 2024

# **Energy performance certificate (EPC) recommendation** report

4a Elephant Yard KENDAL LA9 4QQ Report number 8906-4816-7416-0318-2797

Valid until

1 August 2034

## **Energy rating and EPC**

This property's energy rating is B.

For more information on the property's energy performance, see the EPC for this property.

## Recommendations

## Additional recommendations

Recommendation	Potential impact on carbon emissions
Consider replacing T8 lamps with retrofit T5 conversion kit.	Medium
Introduce HF (high frequency) ballasts for fluorescent tubes: Reduced number of fittings required.	Low
Some windows have high U-values - consider installing secondary glazing.	Medium
Some glazing is poorly insulated. Replace/improve glazing and/or frames.	Medium
Consider installing building mounted wind turbine(s).	Low
The default chiller efficiency is chosen. It is recommended that the chiller system be investigated to gain an understanding of its efficiency and possible improvements.	Low
Consider installing solar water heating.	Low
Consider installing an air source heat pump.	Medium
Consider installing PV.	Low
Consider installing a ground source heat pump.	High

# Property and report details

Report issued on	2 August 2024
Total useful floor area	47 square metres
Building environment	Air Conditioning
Calculation tool	DesignBuilder Software Ltd, DesignBuilder SBEM, v7.2.0, SBEM, v6.1.e.0

# Assessor's details

Neil Austin	
01253486919	
neil.austin@ener-services.co.uk	
Ener Services & Surveys Ltd	
Airey House Shepherd Road Lytham St Annes	
EES/017379	
The assessor is not related to the owner of the property.	
Elmhurst Energy Systems Ltd	

# Secondary Recommendations Report

Not for Official Submission

v6.1.e.0

Building name Date: Fri Aug 02 13:06:39 2024

# 4a Elephant Yard

Building type: Retail/Financial and Professional Services

This report lists recommendations for energy-efficiency improvements to the building.

#### Key to colour codes used in this report

Included by the calculation Included by the user Excluded by the user

#### Recommendations for HEATING

#### HEATING accounts for 33.3% of the CO2 emissions

The overall energy performance of HEATING provision is FAIR. The overall CO2 performance of HEATING provision is POOR. The average energy efficiency of HEATING provision is GOOD. The average CO2 efficiency of HEATING provision is GOOD.

#### This recommendation was excluded by the assessor.

Add optimum start/stop to the heating system.

Code: EPC-H7
Energy Impact: HIGH
CO2 Impact: HIGH
CO2 Saved per £ Spent: GOOD
Applicable to: Whole building

Comments: No comments from assessor

#### This recommendation was excluded by the assessor.

Add weather compensation controls to heating system.

Code: EPC-H8
Energy Impact: HIGH
CO2 Impact: HIGH
CO2 Saved per £ Spent: GOOD
Applicable to: Whole building

Comments: No comments from assessor

#### This recommendation was excluded by the assessor.

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.

Code: EPC-H4
Energy Impact: HIGH
CO2 Impact: HIGH
CO2 Saved per £ Spent: GOOD
Applicable to: Whole building

Comments: No comments from assessor

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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.

 Code:
 EPC-H4

 Energy Impact:
 LOW

 CO2 Impact:
 LOW

 CO2 Saved per £ Spent:
 POOR

Applicable to: AC Generic HVAC

Comments:

#### Add optimum start/stop to the heating system.

 Code:
 EPC-H7

 Energy Impact:
 LOW

 CO2 Impact:
 LOW

 CO2 Saved per £ Spent:
 POOR

Applicable to: AC Generic HVAC

Comments:

#### Add weather compensation controls to heating system.

Code: EPC-H8
Energy Impact: LOW
CO2 Impact: LOW
CO2 Saved per £ Spent: POOR

Applicable to: AC Generic HVAC

Comments:

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.

Code: EPC-H4
Energy Impact: LOW
CO2 Impact: LOW
CO2 Saved per £ Spent: POOR

Applicable to: Default Electric Fanned HVAC

Comments:

#### Add optimum start/stop to the heating system.

Code: EPC-H7
Energy Impact: LOW
CO2 Impact: LOW
CO2 Saved per £ Spent: POOR

Applicable to: Default Electric Fanned HVAC

Comments:

#### Add weather compensation controls to heating system.

 Code:
 EPC-H8

 Energy Impact:
 LOW

 CO2 Impact:
 LOW

 CO2 Saved per £ Spent:
 POOR

Applicable to: Default Electric Fanned HVAC

Comments:

#### Recommendations for COOLING

COOLING accounts for 17.4% of the CO2 emissions

The overall energy performance of COOLING provision is POOR The overall CO2 performance of COOLING provision is POOR The average energy efficiency of COOLING provision is GOOD The average CO2 efficiency of COOLING provision is GOOD

The default chiller efficiency is chosen. It is recommended that the chiller system be investigated to gain an understanding of its efficiency and possible improvements.

Code: EPC-C1
Energy Impact: LOW
CO2 Impact: LOW
CO2 Saved per £ Spent: POOR
Applicable to: Whole building

Comments: No comments from assessor

The default chiller efficiency is chosen. It is recommended that the chiller system be investigated to gain an understanding of its efficiency and possible improvements.

Code: EPC-C1
Energy Impact: LOW
CO2 Impact: LOW
CO2 Saved per £ Spent: POOR

Applicable to: AC Generic HVAC

Comments:

#### Recommendations for HOT-WATER

#### HOT-WATER accounts for 3.7% of the CO2 emissions

The overall energy performance of HOT-WATER provision is FAIR The overall CO2 performance of HOT-WATER provision is FAIR The average energy efficiency of HOT-WATER provision is GOOD The average CO2 efficiency of HOT-WATER provision is GOOD

There are no recommendations for HOT-WATER

#### Recommendations for LIGHTING

#### LIGHTING accounts for 45.4% of the CO2 emissions

The overall energy performance of LIGHTING provision is FAIR The overall CO2 performance of LIGHTING provision is FAIR

Replace tungsten GLS lamps with CFLs: Payback period dependent on hours of use.

Code: EPC-L2
Energy Impact: HIGH
CO2 Impact: HIGH
CO2 Saved per £ Spent: GOOD
Applicable to: Whole building

Comments: A review of the lighting is recommended with a view to upgrading all lighting to LED. This would reduce energy consumption, improve light quality and reduce maintenance issues. Worth exploring.

#### Consider replacing T8 lamps with retrofit T5 conversion kit.

Code: EPC-L5
Energy Impact: LOW
CO2 Impact: MEDIUM
CO2 Saved per £ Spent: GOOD
Applicable to: Whole building

Comments: A review of the lighting is recommended with a view to upgrading all lighting to LED. This would reduce energy consumption, improve light quality and reduce maintenance issues. Worth exploring.

#### Introduce HF (high frequency) ballasts for fluorescent tubes: Reduced number of fittings required.

 Code:
 EPC-L7

 Energy Impact:
 LOW

 CO2 Impact:
 LOW

 CO2 Saved per £ Spent:
 FAIR

Applicable to: Whole building

Comments: A review of the lighting is recommended with a view to upgrading all lighting to LED. This would reduce energy consumption, improve light quality and reduce maintenance issues. Worth exploring.

#### **Recommendations for RENEWABLES**

#### Consider installing a ground source heat pump.

Code: EPC-R1
Energy Impact: MEDIUM
CO2 Impact: HIGH
CO2 Saved per £ Spent: POOR
Applicable to: Whole building

Comments: Probably not appropriate at this location

#### Consider installing building mounted wind turbine(s).

 Code:
 EPC-R2

 Energy Impact:
 LOW

 CO2 Impact:
 LOW

 CO2 Saved per £ Spent:
 POOR

Applicable to: Whole building

Comments: Probably not appropriate at this location

#### Consider installing solar water heating.

Code: EPC-R3
Energy Impact: LOW
CO2 Impact: LOW
CO2 Saved per £ Spent: POOR
Applicable to: Whole building

Comments: Probably not appropriate at this location

#### Consider installing PV.

Code: EPC-R4
Energy Impact: LOW
CO2 Impact: LOW
CO2 Saved per £ Spent: POOR
Applicable to: Whole building

Comments: Economics and practicalities would require careful investigation prior to any investment

#### Consider installing an air source heat pump.

Code: EPC-R5
Energy Impact: MEDIUM
CO2 Impact: MEDIUM
CO2 Saved per £ Spent: POOR

Applicable to: Whole building

Comments: Already installed in primary areas

#### Consider installing a ground source heat pump.

Code: EPC-R1
Energy Impact: MEDIUM
CO2 Impact: HIGH
CO2 Saved per £ Spent: POOR

Applicable to: Default Electric Fanned HVAC

Comments:

#### Consider installing an air source heat pump.

Code: EPC-R5
Energy Impact: MEDIUM
CO2 Impact: MEDIUM
CO2 Saved per £ Spent: POOR

Applicable to: Default Electric Fanned HVAC

Comments:

#### Recommendations for OVERHEATING

#### This recommendation was excluded by the assessor.

In some spaces, the solar gain limit defined in the NCM is exceeded, which might cause overheating. Consider solar control measures such as the application of reflective coating or shading devices to windows.

Code: EPC-V1
Energy Impact: HIGH
CO2 Impact: HIGH
CO2 Saved per £ Spent: GOOD
Applicable to: Whole building

Comments: No comments from assessor

#### Recommendations for ENVELOPE

#### Some windows have high U-values - consider installing secondary glazing.

Code: EPC-E5
Energy Impact: MEDIUM
CO2 Impact: MEDIUM
CO2 Saved per £ Spent: POOR
Applicable to: Whole building

Comments: Some of the windows are of an age where more efficient glazing units are available. In the event that maintenance is required it would be well worth considering upgrading to argon and reflective units. Maybe planning/cost/benefit issues here.

#### This recommendation was excluded by the assessor.

Carry out a pressure test, identify and treat identified air leakage. Enter result in EPC calculation.

Code: EPC-E7
Energy Impact: HIGH
CO2 Impact: HIGH
CO2 Saved per £ Spent: GOOD
Applicable to: Whole building

#### Some glazing is poorly insulated. Replace/improve glazing and/or frames.

Code: EPC-E8
Energy Impact: MEDIUM
CO2 Impact: MEDIUM
CO2 Saved per £ Spent: POOR
Applicable to: Whole building

Comments: Some of the windows are of an age where more efficient glazing units are available. In the event that maintenance is required it would be well worth considering upgrading to argon and reflective units. Maybe planning/cost/benefit issues here.

#### **Recommendations for FUEL-SWITCHING**

There are no recommendations for FUEL-SWITCHING

#### **Recommendations for AUXILIARY**

#### AUXILIARY accounts for 0.1% of the CO2 emissions

The overall energy performance of AUXILIARY provision is POOR The overall CO2 performance of AUXILIARY provision is POOR

There are no recommendations for AUXILIARY

#### **Recommendations for OTHER**

There are no recommendations for OTHER

# SBEM Main Calculation Output Document

Fri Aug 02 13:06:39 2024

v6.1.e.0

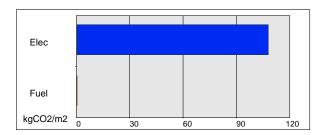
#### **Building name**

# 4a Elephant Yard

Building type: Retail/Financial and Professional Services

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 Building Bye-laws Jersey Part 11) 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**

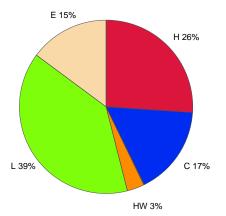


0 kgCO2/m2 displaced by the use of renewable sources.

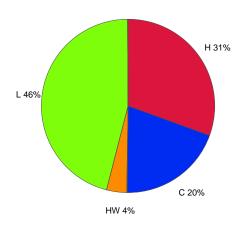
#### Building area is 46.69 m2

## **Annual Energy Consumption**

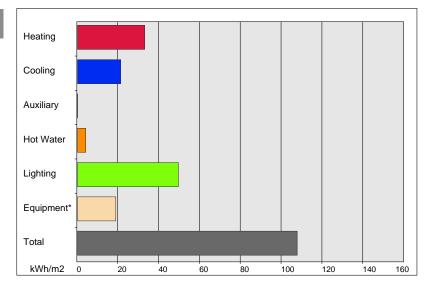
(Pie chart including Equipment end-use)

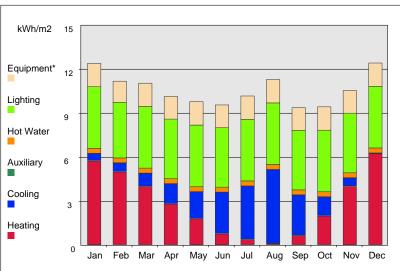


(Pie chart excluding Equipment end-use)

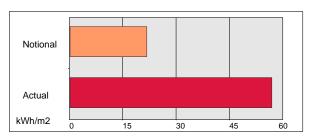


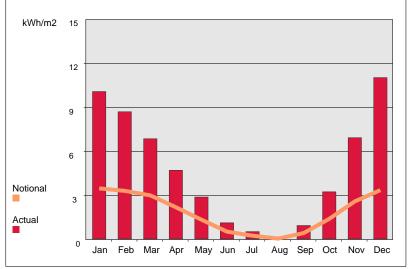
(\*) Although energy consumption by equipment is shown in the graphs for information, this end-use has not been included in the total results of the building or the calculation of the ratings.





# **Annual Heating Demand**





# Annual Cooling Demand

