PART L COMPLIANCE AND SUSTAINABILITY REPORT

Proposed Care Home, Woodley Green, Reading

1656-REP-001
REVISION P01
21/01/2025

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Revision History

Revision	Date Issued	Description	Prepared	Approved
P01	21/01/2025	First Issue	JR	JW

Contents

1.0 Introduction

This report has been prepared to detail the thermal comfort modelling undertaken on the proposed care home development at Woodley Green, Reading, to detail the proposed energy strategy for the purposes of planning and tender on behalf of our client Only Care Ltd.

The report is provided to demonstrate the proposed route to compliance with Part L and to meet the planning and local policy requirements detailed in the Wokingham Borough Council local plan, and specifically conditions 10 and 11 of the planning consent reference 233168.

This report reflects the requirement to comply with the latest 2021 Part L Building Regulations due to the current programme and anticipated start on site. In accordance with the local policy, the report demonstrates at least a 10% reduction in carbon emissions over Building Regulations baseline compliance as well as a 10% reduction in emissions through renewable and low carbon solutions.

To this end, a preliminary thermal energy model has been constructed utilising EDSL Tas version 9.5.6. The software was used to determine a baseline performance, firstly with lean measures such as improved u-values and high efficiency plant and equipment, then the incorporation of clean/green measures. Investigation of appropriate LZC (low/zero carbon) and renewable technologies to reduce the energy consumption and CO_2 emissions concluded that utilising air source heat pumps for building heating in conjunction with a photovoltaic array provides the best value route to compliance.

The modelling and calculations have been produced based upon the parameters and assumptions detailed within this report.

The report takes into account the recognised energy hierarchy to “Be Lean, Be Clean, Be Green”, i.e. to minimise the building’s energy usage before applying renewable technologies to the design.

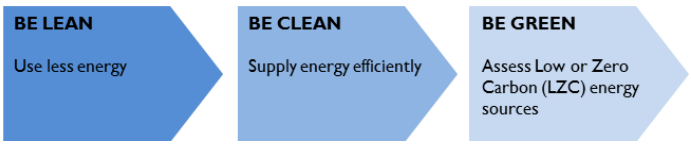

Figure 1: Energy Hierarchy

Further work will be required at later stages in the “design and build” process to ensure that the requirement to comply with the relevant targets and that all statutory guidelines or local planning enforcement requirements are met.

2.0 Description of the Development

The development consists of a residential care home plus communal facilities such as dining, circulation, assisted bathing, etc., as well as support and facilities accommodation such as offices, centralised laundry and kitchen, staff and plant areas, arranged over three floors.

During the early stages, the building layout has been carefully considered to maximise the site potential and provide the optimal operational layout for a residential care facility.

The layout of the proposed development is typical of modern care home buildings, with shallow plan rooms either side of centralised corridor areas to maximise natural light and natural ventilation opportunities.

The building has been orientated on the site to give maximum consideration to the use of natural light (in order to reduce lighting energy load as far as practicable) while still meeting the operational requirements of the building.

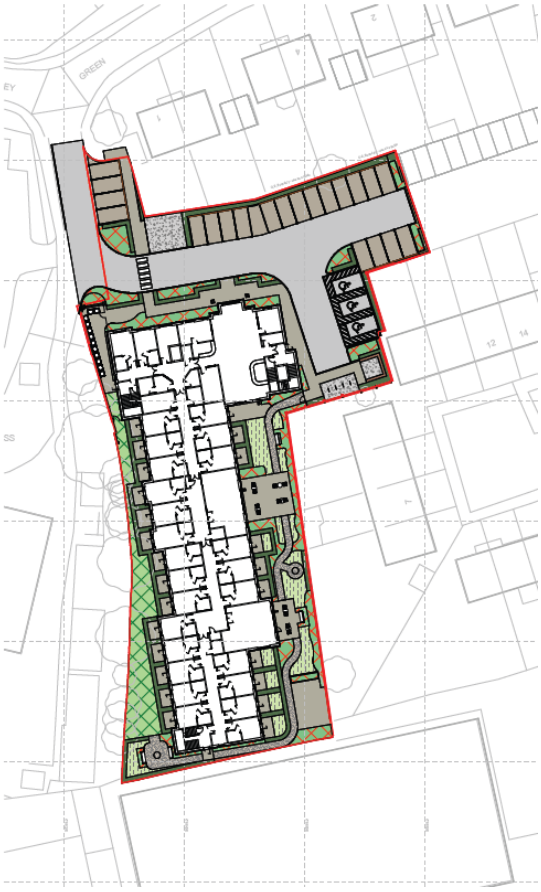

Figure 2: Proposed Site Plan

3.0 Planning Conditions

As well as demonstrating the route to both Part L and local policy requirements, this report also seeks to specifically deal with planning conditions 10 and 11 which state:

Condition 10
Carbon Emissions - Prior to the commencement of development, a scheme for achieving a 10% reduction in the predicted carbon emissions arising from operation of the development through the use of decentralised renewable and / or low carbon sources (as defined in the glossary of Planning Policy Statement: Planning and Climate Change (December 2007) or any subsequent version) shall be submitted to and approved in writing by the local planning authority. The minimum 10% reduction shall be achieved on top of the levels of reduction in carbon emissions required through the Building Regulations in force at the time of the submission of planning application. The approved scheme shall be implemented before the development is first occupied and shall remain operational for the lifetime of the development.

Condition 11
BREEAM - Prior to works proceeding beyond the slab level, information shall be provided to the submitted to and approved in writing by the local planning authority to demonstrate that at least four credits under BREEAM Ene01 would be achieved if the project were subject to BREEAM assessment. This information must relate to the final BRUKL output reports used to inform the Building Control Assessment.

Compliance with these conditions is addressed in the later sections of this report.

4.0 Energy Use in the Built Environment

In line with hierarchy of intervention it is essential to ensure that an efficient building and building services systems have been designed and proposed prior to the consideration of LZC technologies. Design measures that should be considered include, but are not limited to:

- Good insulation of walls, roofs and floors to reduce heat losses (but not at the expense of summertime overheating).
- Maximisation of potential for natural ventilation (where ambient noise levels and room function permit).
- Minimisation of requirements for mechanical cooling, by the application of good ventilation techniques.
- Reduction in electrical power usage via specification of efficient lighting controls, high efficiency luminaires and optimisation of daylighting through careful façade and building design.
- Specification of high efficiency plant/equipment.
- Minimising uncontrolled infiltration by robust construction details.
- Use of low energy ICT equipment.

To this end, the proposed design should promote reduced CO_2 emissions from delivered energy consumption by minimising operational energy demand through passive and best-practice measures. If these measures are incorporated then the addition of a renewable energy system will have a greater impact – renewable energy sources should not be used as an alternative to a well-designed building. The energy usage figures within this report have been based on reasonable but not unrealistic assumptions in line with good industry custom and practice at the present time.

5.0 Modelling Methodology

Using the RM Design Group architectural drawings current at the time of writing and this submission, a fully detailed model was produced in EDSL Tas version 9.5.6:

- B01-06 001 Rev - Proposed Ground Floor Plan (Planning)
- B01-06 002 Rev - Proposed First Floor Plan (Planning)
- B01-06 003 Rev - Proposed Second Floor Plan (Planning)
- B01-06 004 Rev - Proposed Roof Plan (Planning)
- B01-06 006 Rev - Proposed Elevations (Planning)
- B01-06 011 Rev - Proposed Site Plan (Planning)

The model was created by a fully qualified Level 5 low carbon energy assessor, accredited via the software provider and CIBSE. The assessor is a Chartered Engineer, with over 25 years experience in building services design, and an independent consultant not professionally connected to a single low and zero carbon technology or manufacturer.

6.0 Building Fabric Input Parameters

Detailed specific constructions have been reviewed with the architect and assumed as follows:

- External Walls 0.15 W/m²K
- Ground Floor 0.18 W/m²K
- Exposed Pitched Roofs 0.16 W/m²K
- Windows/Doors 1.3 W/m²K, g-value 0.41

Internal walls will be predominantly blockwork, with concrete separating floors to introduce thermal mass to stabilise internal temperatures within the building and provide suitable fire compartmentation where required.

External windows and doors have been modelled to represent the information and opening sections as detailed on the elevations, with the assumption that 100mm restrictors will be fitted throughout.

From various model runs and analysis of the BRUKL document, a g-value of 0.41 was found to be adequate to achieve compliance with Criterion 3 in all rooms and achieve compliance with TM52 in all areas and TM59 in bedroom areas.

Equally, uncontrolled ventilation losses should be limited and the new building constructed to meet stringent air permeability targets. Whilst Part L minimum requirements are 10m³/m²/hr at 50Pa, the notional building used for analysis includes a significantly lower rate (3m³/m²/hr at 50Pa), therefore it would be advantageous for the project to target an improvement over the limiting value. A rate of 5m³/m²/hr at 50Pa has been assumed for the purpose of this analysis based on what is considered an achievable value with traditional construction

7.0 Building Services Design

The building services for the development shall be designed with energy efficiency at the forefront, with plant and systems selected to have efficiencies in excess of those required by legislation to maximise carbon reduction. A summary of the preliminary servicing strategy is provided below, which is in line with the client's typical specification and room data sheets as summarised below:

Description of Services

Heating will be provided by high efficiency air source heat pumps, generally serving underfloor heating throughout the building. The units shall be sized to satisfy the peak heating demand of the building simultaneously.

Domestic hot water shall also be generated via high efficiency air source heat pumps. It is anticipated that these will be separate to the heating air source heat pumps in order to maximise efficiencies at the different operating temperatures.

The building shall generally be naturally ventilated via opening windows to comply with Building Regulations Part F. This includes all bedroom areas. All window openings will be restricted for safety and security.

Ventilation to wet/utility room areas (i.e. all ensuites, assisted bathrooms, sluices, WCs etc) shall be provided locally via ceiling mounted/local extract fans., generally as detailed within the project specification. All ventilation rates shall meet or exceed Building Regulation Part F requirements.

Heat recovery ventilation shall be provided landlocked areas which do not have opening windows due to the building layout at a rate of 4 air changes per hour (i.e. nurse stations). Corridors shall be mechanically ventilated via supply air as per the project specification.

Cooling systems shall be provided to the following areas in line with the room data sheets and project specification:

- Lounges
- Dining Rooms
- Bistro/Reception
- Sensory Room
- Hair Salon
- Activity Rooms
- Library
- Managers Office
- Deputy Managers Offices
- Accounts Office
- Comms Room
- Medical/Drug stores

All areas listed above shall be cooled to maintain 24°C in summer, other than the medical/drug stores and comms room which shall be maintained at 18°C all year round. The cooling installation shall utilise

VRV/VRF systems to serve multiple indoor units from a single external unit as most appropriate. Note, systems shall provide independent control in all spaces.

High efficiency/LED lighting has been assumed throughout. PIR on/off devices have been assumed to ensuites, toilet areas, stores and staircase areas etc. to minimise energy use in line with the project specification.

8.0 Part L Compliance

All input data is to be reviewed and developed as the detailed design progresses. The below is typical of other similar developments in order to provide a realistic route to compliance at this stage and forms the basis of the compliance model.

8.1 Summary of Key Input Data

As well as the u-values and design air permeability previously indicated, the following information summarises the key input information assumed for this analysis:

Weather File
The NCM Swindon weather file has been utilised for this analysis and is considered to accurately represent the weather for the proposed location based on the BRE SBEM Weather Locations Lookup tool.

HVAC Systems
ASHP Heating CoP 3.0

VRF CoP 3.5
VRF SEER 5.0

Mechanical extract is provided to en-suites, bathrooms, WCs etc.
Mechanical extract: SFP: 0.2 W/l/s

Supply and extract systems: SFP 1.0W/l/s, minimum 80% heat recovery

Hot Water Services:
ASHP Heating CoP 2.5
Secondary Circulation:

Lighting
Whilst a full lighting design is yet to be undertaken, efficacies have been assumed as follows:
Bedrooms and ensuites: 95 lm/ct.Watt
All other areas: 105 lm/ct.Watt

PIR occupancy detection:
Ensuites, Bathrooms, Stores, WCs, Sluices, Change areas, Stairs, Staff Circulation

Manual switched:
All other areas

Photovoltaic Panels

A photovoltaic panel array has been utilised, based on the roof manufacturer input and maximising the potential for panels on the flat roof detail and construction. The proposed array equates to a yield of 25,000 kWh per annum which has been used for modelling purposes.

Indicative PV layout (subject to detailed design):

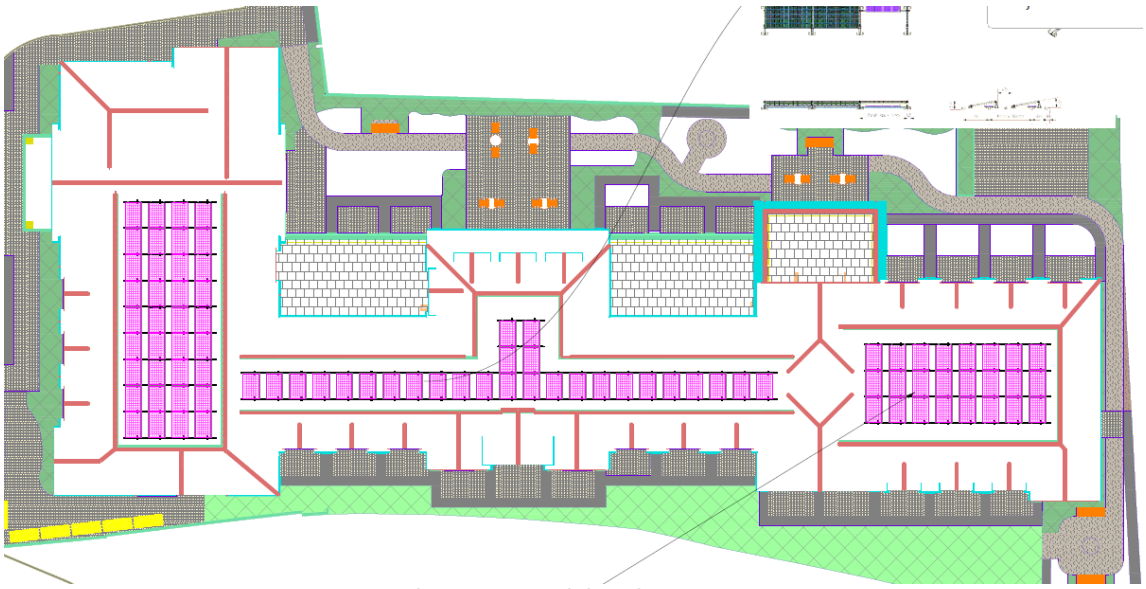

Figure 3: Provisional PV array

All input data is to be reviewed as the detailed design and procurement progresses to ensure and maintain compliance. It should be noted that the above input data is conservative and should for the most part be bettered during detailed design (i.e. boiler efficiencies, ventilation SFPs and heat recovery efficiencies, lighting efficacies etc.) which should have a positive effect on the overall result.

8.2 Results

Based on the above inputs, the following carbon dioxide emission rate figures were determined as follows:

TER (Target CO2 emission rate)	8.87 kg.CO_2/m² per annum	
BER (Building CO2 emission rate)	7.93 kg.CO_2/m² per annum	PASS (10.6% betterment over TER)
TPER (Target primary energy rate)	96.04 kWh/m² per annum	
BPER (Building primary energy rate)	85.22 kWh/m² per annum	PASS

This demonstrates the proposed route to compliance with Part L 2021 for further refinement and development during detailed design and procurement stages, and exceeds the requirement to provide a 10% betterment over Building Regulation compliance.

8.3 Planning Condition Compliance

With reference to the preliminary BRUKL report, which is provided in Appendix A for information, it can be seen that the overall regulated energy consumption for the building equates to 69.89 kWh/m². The PV generation equates to 8 kWh/m², which exceed the 10% minimum on site generation required by the local policy. Including the air source heat pumps as low carbon technology, this equates to an additional 7.13kWh/m² for the heating and 33.27 kWh/m² for the hot water, giving a cumulative 48.4kWh/m², equating to 69% of the developments regulated energy use provided by renewable or low carbon technologies, which is in excess of the 10% required by the policy.

If this were to be considered to include unregulated energy use (noted as 89.77 kWh/m² in the BRUKL), the overall energy use (regulated plus unregulated) would equate to 153.66 kWh/m², of which renewable or low carbon technologies at 48.4 kWh/m² would therefore be providing 31.5% of the developments overall energy use, so still in excess of the 10% required by policy.

Condition 11 requires that at least 4 credits under BREEAM Ene01 would be achieved if the project were subject to a BREEAM assessment. It is important to note that the condition does not require BREEAM to be targeted, but the stipulation to achieve 4 credits in this section aligns with the energy performance of the building meeting the requirements of BREEAM Excellent. Using the data from the BRUKL document in conjunction with the BRE online tool, it has been determined that the proposed design would achieve 8No. credits in the Ene01 section, so a significant betterment on the condition requirements. This is primarily driven by the all-electric solution proposed along with the photovoltaic panels, resulting in a very sustainable and high performing energy and carbon efficient development overall.

On this basis, this report demonstrates compliance with both condition 10 and11 of the approved planning permission for the development.

Appendix A – Preliminary BRUKL Report and Energy Performance Certificate, As designed

BRUKL Output Document

HM Government

Compliance with England Building Regulations Part L 2021

Project name

Propsed Care Home, Woodley Green, Reading

As designed

Date: Tue Jan 21 16:36:08 2025

Administrative information

Building Details

Address:

Certifier details

Name: John Ward

Telephone number: 07527 065481

Address: Betton Consulting Ltd, 4 Langley House, Wykeham Business Centre, Main Street, Wykeham, Scarborough, YO13 9QP

Certification tool

Calculation engine: TAS

Calculation engine version: "v9.5.6"

Interface to calculation engine: TAS

Interface to calculation engine version: v9.5.6

BRUKL compliance module version: v6.1.e.0

Foundation area [m^2]: 1016.45

The CO_2 emission and primary energy rates of the building must not exceed the targets

Target CO_2 emission rate (TER), $kgCO_2/m^2.annum$	8.87	
Building CO_2 emission rate (BER), $kgCO_2/m^2.annum$	7.93	
Target primary energy rate (TPER), $kWh_{PE}/m^2.annum$	96.04	
Building primary energy rate (BPER), $kWh_{PE}/m^2.annum$	85.22	
Do the building's emission and primary energy rates exceed the targets?	BER =< TER	BPER =< TPER

The performance of the building fabric and fixed building services should achieve reasonable overall standards of energy efficiency

Fabric element	$U_{a\text{-}Limit}$	$U_{a\text{-}Calc}$	$U_{i\text{-}Calc}$	First surface with maximum value
Walls*	0.26	0.15	0.15	External Wall
Floors	0.18	0.18	0.18	Ground Floor
Pitched roofs	0.16	0.16	0.16	Roof
Flat roofs	0.18	-	-	No flat roofs in project
Windows** and roof windows	1.6	1.3	1.3	W4
Rooflights***	2.2	-	-	No rooflights in project
Personnel doors^	1.6	1.3	1.3	EDa OPENING
Vehicle access & similar large doors	1.3	-	-	No vehicle access or similar large doors in project
High usage entrance doors	3	-	-	No high usage entrance doors in project

$U_{a\text{-}Limit}$ = Limiting area-weighted average U-values [$W/(m^2K)$] $U_{i\text{-}Calc}$ = Calculated maximum individual element U-values [$W/(m^2K)$]

$U_{a\text{-}Calc}$ = Calculated area-weighted average U-values [$W/(m^2K)$]

* Automatic U-value check by the tool does not apply to curtain walls whose limiting standard is similar to that for windows.

** Display windows and similar glazing are excluded from the U-value check. *** Values for rooflights refer to the horizontal position.

^ For fire doors, limiting U-value is 1.8 W/m^2K

NB: Neither roof ventilators (inc. smoke vents) nor swimming pool basins are modelled or checked against the limiting standards by the tool.

Air permeability	Limiting standard	This building
$m^3/(h.m^2)$ at 50 Pa	8	5

Building services

For details on the standard values listed below, system-specific guidance, and additional regulatory requirements, refer to the Approved Documents.

Whole building lighting automatic monitoring & targeting with alarms for out-of-range values	NO
Whole building electric power factor achieved by power factor correction	<0.9

1- UFH NV

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	3.2	-	-	-	-
Standard value	2.5*	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

2- UFH Extract (91 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	3.2	-	-	-	-
Standard value	2.5*	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

3- UFH Supply (21 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	3.2	-	-	0.5	-
Standard value	2.5*	N/A	N/A	1.5^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps. ^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

4- Comfort Cooling NV (18 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	3.5	5	-	-	-
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

5- Comfort Cooling NV (2 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	0	-	-	-	-
Standard value	N/A	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

6- Comfort Cooling MV (3 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	0	5	-	0.96	0.83
Standard value	N/A	5	N/A	1.5^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

7- Kitchen (Kitchen)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	0	5	-	1	-
Standard value	N/A	5	N/A	1.5^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

1- ASHP Water Heating

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	2.6	0
Standard value	0.91	N/A

Zone-level mechanical ventilation, exhaust, and terminal units

ID	System type in the Approved Documents
A	Local supply or extract ventilation units
B	Zonal supply system where the fan is remote from the zone
C	Zonal extract system where the fan is remote from the zone
D	Zonal balanced supply and extract ventilation system
E	Local balanced supply and extract ventilation units
F	Other local ventilation units
G	Fan assisted terminal variable air volume units
H	Fan coil units
I	Kitchen extract with the fan remote from the zone and a grease filter
NB: Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.	

Zone name	SFP [W/(l/s)]									HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I		
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard
Ensuite 1	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 2	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 3	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 4	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 5	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 6	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 7	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 8	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 9	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 10	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 11	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 12	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 13	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 14	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 15	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 16	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 17	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 18	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 19	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 20	0.2	-	-	-	-	-	-	-	-	-	N/A

Zone name	SFP [W/(l/s)]									HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I		
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard
Ensuite 21	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 22	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 23	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 24	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 25	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 26	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 27	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 28	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 29	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 30	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 31	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 32	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 33	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 34	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 35	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 36	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 37	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 38	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 39	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 40	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 41	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 42	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 43	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 44	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 45	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 46	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 47	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 48	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 49	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 50	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 51	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 52	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 53	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 54	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 55	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 56	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 57	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 58	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 59	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 60	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 61	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 62	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 63	0.2	-	-	-	-	-	-	-	-	-	N/A

Zone name	SFP [W/(l/s)]									HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I		
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard
Ensuite 64	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 65	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 66	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 67	0.2	-	-	-	-	-	-	-	-	-	N/A
Ensuite 68	0.2	-	-	-	-	-	-	-	-	-	N/A
Assisted Bathroom GF	0.2	-	-	-	-	-	-	-	-	-	N/A
Assisted Bathroom FF	0.2	-	-	-	-	-	-	-	-	-	N/A
Assisted Bathroom SF	0.2	-	-	-	-	-	-	-	-	-	N/A
Chef Office	-	0.5	-	-	-	-	-	-	-	-	N/A
Hairdresser	0.2	-	-	-	-	-	-	-	-	-	N/A
Photocopier	0.2	-	-	-	-	-	-	-	-	-	N/A
WC 1 Visitor	0.2	-	-	-	-	-	-	-	-	-	N/A
WC2	0.2	-	-	-	-	-	-	-	-	-	N/A
WC3	0.2	-	-	-	-	-	-	-	-	-	N/A
WC4	0.2	-	-	-	-	-	-	-	-	-	N/A
WC5	0.2	-	-	-	-	-	-	-	-	-	N/A
WC6	0.2	-	-	-	-	-	-	-	-	-	N/A
WC7	0.2	-	-	-	-	-	-	-	-	-	N/A
Sluice GF	0.2	-	-	-	-	-	-	-	-	-	N/A
Sluice FF	0.2	-	-	-	-	-	-	-	-	-	N/A
Sluice SF	0.2	-	-	-	-	-	-	-	-	-	N/A
Male Changing	0.2	-	-	-	-	-	-	-	-	-	N/A
Female Changing	0.2	-	-	-	-	-	-	-	-	-	N/A
Kitchen Changing	0.2	-	-	-	-	-	-	-	-	-	N/A
Store 6 Cleaner	0.2	-	-	-	-	-	-	-	-	-	N/A
Store 8 Kitchen	0.2	-	-	-	-	-	-	-	-	-	N/A
Store 10 Coshh	0.2	-	-	-	-	-	-	-	-	-	N/A
Store 14 Cleaner	0.2	-	-	-	-	-	-	-	-	-	N/A
Store 23 Cleaner	0.2	-	-	-	-	-	-	-	-	-	N/A
Circulation 2	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 3	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 4	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 5	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 6	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 7	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 9	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 10	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 11	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 12	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 13	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 14	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 15	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 17	-	0.5	-	-	-	-	-	-	-	-	N/A

Zone name	SFP [W/(l/s)]									HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I		
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard
Circulation 18	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 19	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 20	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 21	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 22	-	0.5	-	-	-	-	-	-	-	-	N/A
Circulation 23	-	0.5	-	-	-	-	-	-	-	-	N/A

General lighting and display lighting	General luminaire	Display light source	
Zone name	Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
Standard value	95	80	0.3
Comms	105	-	-
Bedroom 1	95	-	-
Bedroom 2	95	-	-
Bedroom 3	95	-	-
Bedroom 4	95	-	-
Bedroom 5	95	-	-
Bedroom 6	95	-	-
Bedroom 7	95	-	-
Bedroom 8	95	-	-
Bedroom 9	95	-	-
Bedroom 10	95	-	-
Bedroom 11	95	-	-
Bedroom 12	95	-	-
Bedroom 13	95	-	-
Bedroom 14	95	-	-
Bedroom 15	95	-	-
Bedroom 16	95	-	-
Bedroom 17	95	-	-
Bedroom 18	95	-	-
Bedroom 19	95	-	-
Bedroom 20	95	-	-
Bedroom 21	95	-	-
Bedroom 22	95	-	-
Bedroom 23	95	-	-
Bedroom 24	95	-	-
Bedroom 25	95	-	-
Bedroom 26	95	-	-
Bedroom 27	95	-	-
Bedroom 28	95	-	-
Bedroom 29	95	-	-
Bedroom 30	95	-	-
Bedroom 31	95	-	-
Bedroom 32	95	-	-

General lighting and display lighting	General luminaire	Display light source	
Zone name	**Efficacy [lm/W]**	**Efficacy [lm/W]**	**Power density [W/m²]**
Standard value	95	80	0.3
Bedroom 33	95	-	-
Bedroom 34	95	-	-
Bedroom 35	95	-	-
Bedroom 36	95	-	-
Bedroom 37	95	-	-
Bedroom 38	95	-	-
Bedroom 39	95	-	-
Bedroom 40	95	-	-
Bedroom 41	95	-	-
Bedroom 42	95	-	-
Bedroom 43	95	-	-
Bedroom 44	95	-	-
Bedroom 45	95	-	-
Bedroom 46	95	-	-
Bedroom 47	95	-	-
Bedroom 48	95	-	-
Bedroom 49	95	-	-
Bedroom 50	95	-	-
Bedroom 51	95	-	-
Bedroom 52	95	-	-
Bedroom 53	95	-	-
Bedroom 54	95	-	-
Bedroom 55	95	-	-
Bedroom 56	95	-	-
Bedroom 57	95	-	-
Bedroom 58	95	-	-
Bedroom 59	95	-	-
Bedroom 60	95	-	-
Bedroom 61	95	-	-
Bedroom 62	95	-	-
Bedroom 63	95	-	-
Bedroom 64	95	-	-
Bedroom 65	95	-	-
Bedroom 66	95	-	-
Bedroom 67	95	-	-
Bedroom 68	95	-	-
Ensuite 1	95	-	-
Ensuite 2	95	-	-
Ensuite 3	95	-	-
Ensuite 4	95	-	-
Ensuite 5	95	-	-
Ensuite 6	95	-	-
Ensuite 7	95	-	-

General lighting and display lighting	General luminaire	Display light source	
Zone name	**Efficacy [lm/W]**	**Efficacy [lm/W]**	**Power density [W/m²]**
Standard value	95	80	0.3
Ensuite 8	95	-	-
Ensuite 9	95	-	-
Ensuite 10	95	-	-
Ensuite 11	95	-	-
Ensuite 12	95	-	-
Ensuite 13	95	-	-
Ensuite 14	95	-	-
Ensuite 15	95	-	-
Ensuite 16	95	-	-
Ensuite 17	95	-	-
Ensuite 18	95	-	-
Ensuite 19	95	-	-
Ensuite 20	95	-	-
Ensuite 21	95	-	-
Ensuite 22	95	-	-
Ensuite 23	95	-	-
Ensuite 24	95	-	-
Ensuite 25	95	-	-
Ensuite 26	95	-	-
Ensuite 27	95	-	-
Ensuite 28	95	-	-
Ensuite 29	95	-	-
Ensuite 30	95	-	-
Ensuite 31	95	-	-
Ensuite 32	95	-	-
Ensuite 33	95	-	-
Ensuite 34	95	-	-
Ensuite 35	95	-	-
Ensuite 36	95	-	-
Ensuite 37	95	-	-
Ensuite 38	95	-	-
Ensuite 39	95	-	-
Ensuite 40	95	-	-
Ensuite 41	95	-	-
Ensuite 42	95	-	-
Ensuite 43	95	-	-
Ensuite 44	95	-	-
Ensuite 45	95	-	-
Ensuite 46	95	-	-
Ensuite 47	95	-	-
Ensuite 48	95	-	-
Ensuite 49	95	-	-
Ensuite 50	95	-	-

General lighting and display lighting	General luminaire	Display light source	
Zone name	**Efficacy [lm/W]**	**Efficacy [lm/W]**	**Power density [W/m²]**
Standard value	95	80	0.3
Ensuite 51	95	-	-
Ensuite 52	95	-	-
Ensuite 53	95	-	-
Ensuite 54	95	-	-
Ensuite 55	95	-	-
Ensuite 56	95	-	-
Ensuite 57	95	-	-
Ensuite 58	95	-	-
Ensuite 59	95	-	-
Ensuite 60	95	-	-
Ensuite 61	95	-	-
Ensuite 62	95	-	-
Ensuite 63	95	-	-
Ensuite 64	95	-	-
Ensuite 65	95	-	-
Ensuite 66	95	-	-
Ensuite 67	95	-	-
Ensuite 68	95	-	-
Assisted Bathroom GF	105	-	-
Assisted Bathroom FF	105	-	-
Assisted Bathroom SF	105	-	-
Managers Office	105	-	-
Admin Office	105	-	-
Chef Office	105	-	-
Office GF	105	-	-
Hairdresser	105	-	-
Office FF	105	-	-
Office SF	105	-	-
Care Station GF	105	-	-
Care Station FF	105	-	-
Care Station SF	105	-	-
Photocopier	105	-	-
WC 1 Visitor	105	-	-
WC2	105	-	-
WC3	105	-	-
WC4	105	-	-
WC5	105	-	-
WC6	105	-	-
WC7	105	-	-
Sluice GF	105	-	-
Sluice FF	105	-	-
Sluice SF	105	-	-
Reception	105	105	-

General lighting and display lighting	General luminaire	Display light source	
Zone name	**Efficacy [lm/W]**	**Efficacy [lm/W]**	**Power density [W/m²]**
Standard value	95	80	0.3
Male Changing	105	-	-
Female Changing	105	-	-
Kitchen Changing	105	-	-
Dining GF	105	-	-
Dining FF	105	-	-
Dining SF	105	-	-
Lounge GF	105	-	-
Lounge FF	105	-	-
Lounge SF	105	-	-
Bistro	105	-	-
Staff Room	105	-	-
Sensory	105	-	-
Kitchen	105	-	-
Laundry	105	-	-
Plantroom	105	-	-
Tank Room	105	-	-
Store 1	105	-	-
Store 2 Hoist	105	-	-
Store 3 Drugs	105	-	-
Store 4	105	-	-
Store 5	105	-	-
Store 6 Cleaner	105	-	-
Store 7	105	-	-
Store 8 Kitchen	105	-	-
Store 9	105	-	-
Store 10 Coshh	105	-	-
Store 11 Hoist	105	-	-
Store 12 Drugs	105	-	-
Store 13	105	-	-
Store 14 Cleaner	105	-	-
Store 15	105	-	-
Store 16 Laundry	105	-	-
Store 17	105	-	-
Store 18	105	-	-
Store 19 Hoist	105	-	-
Store 20 Drugs	105	-	-
Store 21	105	-	-
Store 22	105	-	-
Store 23 Cleaner	105	-	-
Circulation 1	105	-	-
Circulation 2	105	-	-
Circulation 3	105	-	-
Circulation 4	105	-	-

General lighting and display lighting	General luminaire	Display light source	
Zone name	**Efficacy [lm/W]**	**Efficacy [lm/W]**	**Power density [W/m²]**
Standard value	95	80	0.3
Circulation 5	105	-	-
Circulation 6	105	-	-
Circulation 7	105	-	-
Circulation 8	105	-	-
Circulation 9	105	-	-
Circulation 10	105	-	-
Circulation 11	105	-	-
Circulation 12	105	-	-
Circulation 13	105	-	-
Circulation 14	105	-	-
Circulation 15	105	-	-
Circulation 16	105	-	-
Circulation 17	105	-	-
Circulation 18	105	-	-
Circulation 19	105	-	-
Circulation 20	105	-	-
Circulation 21	105	-	-
Circulation 22	105	-	-
Circulation 23	105	-	-
Stair 1	105	-	-
Stair 2	105	-	-
Stair 3	105	-	-

The spaces in the building should have appropriate passive control measures to limit solar gains in summer

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Comms	N/A	N/A
Bedroom 1	NO (-73%)	NO
Bedroom 2	NO (-46%)	NO
Bedroom 3	NO (-22%)	NO
Bedroom 4	NO (-27%)	NO
Bedroom 5	NO (-22%)	NO
Bedroom 6	NO (-37%)	NO
Bedroom 7	NO (-25%)	NO
Bedroom 8	NO (-37%)	NO
Bedroom 9	NO (-19%)	NO
Bedroom 10	NO (-27%)	NO
Bedroom 11	NO (-25%)	NO
Bedroom 12	NO (-55%)	NO
Bedroom 13	NO (-28%)	NO
Bedroom 14	NO (-27%)	NO
Bedroom 15	NO (-27%)	NO
Bedroom 16	NO (-19%)	NO
Bedroom 17	NO (-63%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Bedroom 18	NO (-32%)	NO
Bedroom 19	NO (-32%)	NO
Bedroom 20	NO (-25%)	NO
Bedroom 21	NO (-30%)	NO
Bedroom 22	NO (-32%)	NO
Bedroom 23	NO (-31%)	NO
Bedroom 24	NO (-33%)	NO
Bedroom 25	NO (-32%)	NO
Bedroom 26	NO (-8%)	NO
Bedroom 27	NO (-77%)	NO
Bedroom 28	NO (-55%)	NO
Bedroom 29	NO (-55%)	NO
Bedroom 30	NO (-27%)	NO
Bedroom 31	NO (-32%)	NO
Bedroom 32	NO (-27%)	NO
Bedroom 33	NO (-41%)	NO
Bedroom 34	NO (-30%)	NO
Bedroom 35	NO (-41%)	NO
Bedroom 36	NO (-24%)	NO
Bedroom 37	NO (-32%)	NO
Bedroom 38	NO (-29%)	NO
Bedroom 39	NO (-58%)	NO
Bedroom 40	NO (-32%)	NO
Bedroom 41	NO (-31%)	NO
Bedroom 42	NO (-32%)	NO
Bedroom 43	NO (-24%)	NO
Bedroom 44	NO (-65%)	NO
Bedroom 45	NO (-36%)	NO
Bedroom 46	NO (-36%)	NO
Bedroom 47	NO (-30%)	NO
Bedroom 48	NO (-84%)	NO
Bedroom 49	NO (-67%)	NO
Bedroom 50	NO (-67%)	NO
Bedroom 51	NO (-47%)	NO
Bedroom 52	NO (-51%)	NO
Bedroom 53	NO (-47%)	NO
Bedroom 54	NO (-57%)	NO
Bedroom 55	NO (-50%)	NO
Bedroom 56	NO (-57%)	NO
Bedroom 57	NO (-45%)	NO
Bedroom 58	NO (-51%)	NO
Bedroom 59	NO (-48%)	NO
Bedroom 60	NO (-69%)	NO
Bedroom 61	NO (-51%)	NO
Bedroom 62	NO (-50%)	NO
Bedroom 63	NO (-51%)	NO
Bedroom 64	NO (-45%)	NO
Bedroom 65	NO (-75%)	NO
Bedroom 66	NO (-54%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Bedroom 67	NO (-54%)	NO
Bedroom 68	NO (-52%)	NO
Managers Office	NO (-46%)	NO
Admin Office	NO (-54%)	NO
Chef Office	N/A	N/A
Office GF	NO (-87%)	NO
Hairdresser	N/A	N/A
Office FF	NO (-55%)	NO
Office SF	NO (-67%)	NO
Care Station GF	N/A	N/A
Care Station FF	N/A	N/A
Care Station SF	N/A	N/A
Photocopier	N/A	N/A
Reception	NO (-88%)	NO
Dining GF	NO (-18%)	NO
Dining FF	NO (-79%)	NO
Dining SF	NO (-68%)	NO
Lounge GF	NO (-26%)	NO
Lounge FF	NO (-70%)	NO
Lounge SF	NO (-36%)	NO
Bistro	NO (-21%)	NO
Staff Room	NO (-64%)	NO
Sensory	NO (-36%)	NO
Kitchen	NO (-65%)	NO
Laundry	NO (-65%)	NO
Store 3 Drugs	N/A	N/A
Store 12 Drugs	N/A	N/A
Store 20 Drugs	N/A	N/A
Circulation 1	NO (-43%)	NO

Regulation 25A: Consideration of high efficiency alternative energy systems

Were alternative energy systems considered and analysed as part of the design process?	YES
Is evidence of such assessment available as a separate submission?	YES
Are any such measures included in the proposed design?	YES

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

	Actual	Notional
Floor area [m^2]	3114	3114
External area [m^2]	4506	4506
Weather	SWI	SWI
Infiltration [m^3/hm^2@ 50Pa]	5	3
Average conductance [W/K]	1214	1378
Average U-value [W/m^2K]	0.27	0.31
Alpha value* [%]	42.43	27.43

* Percentage of the building's average heat transfer coefficient which is due to thermal bridging

Building Use

% Area	Building Type
	Retail/Financial and Professional Services
	Restaurants and Cafes/Drinking Establishments/Takeaways
	Offices and Workshop Businesses
	General Industrial and Special Industrial Groups
	Storage or Distribution
	Hotels
100	**Residential Institutions: Hospitals and Care Homes**
	Residential Institutions: Residential Schools
	Residential Institutions: Universities and Colleges
	Secure Residential Institutions
	Residential Spaces
	Non-residential Institutions: Community/Day Centre
	Non-residential Institutions: Libraries, Museums, and Galleries
	Non-residential Institutions: Education
	Non-residential Institutions: Primary Health Care Building
	Non-residential Institutions: Crown and County Courts
	General Assembly and Leisure, Night Clubs, and Theatres
	Others: Passenger Terminals
	Others: Emergency Services
	Others: Miscellaneous 24hr Activities
	Others: Car Parks 24 hrs
	Others: Stand Alone Utility Block

Energy Consumption by End Use [kWh/m^2]

	Actual	Notional
Heating	7.13	9.37
Cooling	5.3	7.78
Auxiliary	4.6	6.81
Lighting	13.59	11.42
Hot water	33.27	29.48
Equipment*	89.77	89.77
TOTAL**	**63.89**	**64.87**

* Energy used by equipment does not count towards the total for consumption or calculating emissions.
** Total is net of any electrical energy displaced by CHP generators, if applicable.

Energy Production by Technology [kWh/m^2]

	Actual	Notional
Photovoltaic systems	8	0
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0
Displaced electricity	*8*	*0*

Energy & CO_2 Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m^2]	176.47	223.49
Primary energy [kWh_{PE}/m^2]	85.22	96.04
Total emissions [kg/m^2]	7.93	8.87

HVAC Systems Performance

System Type		Heat dem MJ/m2	Cool dem MJ/m2	Heat con kWh/m2	Cool con kWh/m2	Aux con kWh/m2	Heat SSEEF	Cool SSEER	Heat gen SEFF	Cool gen SEER
[ST] Central heating using water: floor heating, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
	Actual	57.7	0	5.2	0	3	3.07	0	3.2	0
	Notional	47.2	0	5	0	1.9	2.64	0	----	----
[ST] Central heating using water: floor heating, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
	Actual	148.3	0	13.4	0	7.3	3.07	0	3.2	0
	Notional	112.5	0	11.8	0	9.1	2.64	0	----	----
[ST] Central heating using water: floor heating, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
	Actual	95.2	0	8.6	0	9.3	3.07	0	3.2	0
	Notional	20.8	0	2.2	0	22.8	2.64	0	----	----
[ST] Split or multi-split system, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
	Actual	37.2	234	3	13	0	3.5	5	3.5	5
	Notional	3.1	399.4	0.3	25.2	0	2.64	4.4	----	----
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
	Actual	0	425.7	0	23.7	9.6	0	5	0	5
	Notional	0	530	0	33.5	6.8	0	4.4	----	----
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
	Actual	0	2748.3	0	152.7	27.9	0	5	0	5
	Notional	0	2690.2	0	169.8	50.2	0	4.4	----	----

Key to terms

Heat dem [MJ/m2] = Heating energy demand
Cool dem [MJ/m2] = Cooling energy demand
Heat con [kWh/m2] = Heating energy consumption
Cool con [kWh/m2] = Cooling energy consumption
Aux con [kWh/m2] = Auxiliary energy consumption
Heat SSEFF = Heating system seasonal efficiency (for notional building, value depends on activity glazing class)
Cool SSEER = Cooling system seasonal energy efficiency ratio
Heat gen SSEFF = Heating generator seasonal efficiency
Cool gen SSEER = Cooling generator seasonal energy efficiency ratio
ST = System type
HS = Heat source
HFT = Heating fuel type
CFT = Cooling fuel type

Energy Performance Certificate

Non-Domestic Building

HM Government

Certificate Reference Number:
9972-4114-6080-9762-1403

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 in the guidance document *Energy Performance Certificates for the construction, sale and let of non-dwellings* available on the Government's website at www.gov.uk/government/collections/energy-performance-certificates.

Energy Performance Asset Rating

More energy efficient

A+

Net zero CO_2 emissions

A 0-25

B 26-50

C 51-75

D 76-100

E 101-125

F 126-150

G Over 150

8 This is how energy efficient the building is.

Less energy efficient

Technical information

Main heating fuel:	Grid Supplied Electricity
Building environment:	Heating and Natural Ventilation
Total useful floor area (m^2):	3114
Building complexity:	Level 5
Building emission rate ($kgCO_2/m^2$ per year):	7.93
Primary energy use (kWh_{PE}/m^2 per year):	85.22

Benchmarks

Buildings similar to this one could have ratings as follows:

9 If newly built

36 If typical of the existing stock

Administrative information

This is an Energy Performance Certificate as defined in the Energy Performance of Buildings Regulations 2012 as amended.

Assessment Software:	TAS v9.5.6 using calculation engine TAS v9.5.6
Property Reference:	UPRN-123456789012
Assessor Name:	John Ward
Assessor Number:	LCEA031715
Accreditation Scheme:	CIBSE Certification Limited
Assessor Qualifications:	NOS5
Employer/Trading Name:	Betton Consulting Ltd
Employer/Trading Address:	4 Langley House, Main Street, Wykeham Business Centre, Wykeham, Scarborough, YO13 9QP
Issue Date:	21 Jan 2025
Valid Until:	20 Jan 2035 (unless superseded by a later certificate)
Related Party Disclosure:	Not related to the owner

Recommendations for improving the energy performance of the building are contained in the associated Recommendation Report: 7051-9899-6612-7844-5990

About this document and the data in it

This document has been produced following an energy assessment undertaken by a qualified Energy Assessor, accredited by CIBSE Certification Limited. You can obtain contact details of the Accreditation Scheme at www.cibsecertification.com.

A copy of this certificate has been lodged on a national register as a requirement under the Energy Performance of Buildings Regulations 2012 as amended. It will be made available via the online search function at www.ndepcregister.com. The certificate (including the building address) and other data about the building collected during the energy assessment but not shown on the certificate, for instance heating system data, will be made publicly available at www.opendatacommunities.org.

This certificate and other data about the building may be shared with other bodies (including government departments and enforcement agencies) for research, statistical and enforcement purposes. For further information about how data about the property are used, please visit www.ndepcregister.com. To opt out of having information about your building made publicly available, please visit www.ndepcregister.com/optout.

There is more information in the guidance document *Energy Performance Certificates for the construction, sale and let of non-dwellings* available on the Government website at: www.gov.uk/government/collections/energy-performance-certificates. It explains the content and use of this document and advises on how to identify the authenticity of a certificate and how to make a complaint.

Opportunity to benefit from a Green Deal on this property

The Green Deal can help you cut your energy bills by making energy efficiency improvements at no upfront costs. Use the Green Deal to find trusted advisors who will come to your property, recommend measures that are right for you and help you access a range of accredited installers. Responsibility for repayments stays with the property - whoever pays the energy bills benefits so they are responsible for the payments.

To find out how you could use Green Deal finance to improve your property please call 0300 123 1234.