Regulations Compliance Report

Approved Document L1A, 2013 Edition, England assessed by Stroma FSAP 2012 program, Version: 1.0.5.41
Printed on 28 May 2021 at 14:05:09

Project Information:

Assessed By: Gideon Griffiths (STRO030315) **Building Type:** Flat

Dwelling Details:

NEW DWELLING DESIGN STAGE Total Floor Area: 54.81m²

Site Reference : Station Road, Sidcup (Be-Green) **Plot Reference:** F-1B-1or2P-TF (Be-Green)

Address : Former Lamorbey Cinema, Station Road, SIDCUP, DA15 7AA

Client Details:

Name:

Address :

This report covers items included within the SAP calculations.
It is not a complete report of regulations compliance.

1a TER and DER

Fuel for main heating system: Electricity
Fuel factor: 1.55 (electricity)

Target Carbon Dioxide Emission Rate (TER)	32.69 kg/m²	
Dwelling Carbon Dioxide Emission Rate (DER)	24.46 kg/m²	**OK**

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	63.3 kWh/m²	
Dwelling Fabric Energy Efficiency (DFEE)	64.5 kWh/m²	
		Fail

Excess energy = 1.19 kg/m² (01.9 %)

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.17 (max. 0.70)	**OK**
Party wall	0.00 (max. 0.20)	-	**OK**
Floor	(no floor)		
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	**OK**
Openings	1.37 (max. 2.00)	1.80 (max. 3.30)	**OK**

2a Thermal bridging

Thermal bridging calculated using user-specified y-value of 0.15

3 Air permeability

Air permeability at 50 pascals	3.00 (design value)	
Maximum	10.0	**OK**

4 Heating efficiency

Main Heating system:

Heat pumps with radiators or underfloor heating - electric
Mitsubishi Ecodan 4kW

Secondary heating system: None

5 Cylinder insulation

Hot water Storage: Measured cylinder loss: 1.63 kWh/day
Permitted by DBSCG: 2.24 kWh/day **OK**

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Primary pipework insulated:	Yes	OK

6 Controls

Space heating controls	TTZC by plumbing and electrical services	OK
Hot water controls:	Cylinderstat	OK
	Independent timer for DHW	OK
Boiler interlock:	Yes	OK

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100.0%	
Minimum	75.0%	OK

8 Mechanical ventilation

Continuous extract system		
Specific fan power:	0.41	
Maximum	0.7	OK

9 Summertime temperature

Overheating risk (Thames valley):	Slight	OK

Based on:

Overshading:	Average or unknown
Windows facing: South West	2.1m²
Windows facing: North West	2.1m²
Windows facing: North East	8.96m²
Ventilation rate:	4.00

10 Key features

Air permeablility	3.0 m³/m²h
Roofs U-value	0.11 W/m²K
Party Walls U-value	0 W/m²K
Photovoltaic array	

SAP Input

Property Details: F-1B-1or2P-TF (Be-Green)

Address:	Former Lamorbey Cinema, Station Road, SIDCUP, DA15 7AA
Located in:	England
Region:	Thames valley
UPRN:	3011235678
Date of assessment:	28 June 2019
Date of certificate:	28 May 2021
Assessment type:	New dwelling design stage
Transaction type:	New dwelling
Tenure type:	Unknown
Related party disclosure:	No related party
Thermal Mass Parameter:	Indicative Value Medium
Water use <= 125 litres/person/day:	True
PCDF Version:	477

Property description:

Dwelling type:	Flat	
Detachment:		
Year Completed:	2019	
Floor Location:	Floor area:	Storey height:
Floor 0	54.81 m²	2.7 m
Living area:	24.21 m² (fraction 0.442)	
Front of dwelling faces:	Unspecified	

Opening types:

Name:	Source:	Type:	Glazing:	Argon:	Frame:
Corridor Door	Manufacturer	Solid			Wood
SW	Manufacturer	Windows	double-glazed	Yes	
NW	Manufacturer	Windows	double-glazed	Yes	
NE	Manufacturer	Windows	double-glazed	Yes	

Name:	**Gap:**	**Frame Factor:**	**g-value:**	**U-value:**	**Area:**	**No. of Openings:**
Corridor Door	mm	0.7	0	1.8	2	1
SW		0.85	0.6	1.3	2.1	1
NW		0.85	0.6	1.3	2.1	1
NE		0.85	0.6	1.3	8.96	1

Name:	Type-Name:	Location:	Orient:	Width:	Height:
Corridor Door		Corridor Wall	South West	0	0
SW		External Wall	South West	0	0
NW		External Wall	North West	0	0
NE		External Wall	North East	0	0

Overshading: Average or unknown

Opaque Elements:

Type:	Gross area:	Openings:	Net area:	U-value:	Ru value:	Curtain wall:	Kappa:
External Elements							
External Wall	54.81	13.16	41.65	0.17	0	False	N/A
Corridor Wall	26	2	24	0.17	0.43	False	N/A
Flat Roof	54.68	0	54.68	0.11	0		N/A
Internal Elements							
Party Elements							
Party Wall	22.2						N/A

Thermal bridges:

SAP Input

Thermal bridges:	No information on thermal bridging (y=0.15) (y =0.15)

Ventilation:

Pressure test:	Yes (As designed)
Ventilation:	Centralised whole house extract Number of wet rooms: Kitchen + 2 Ductwork: , rigid Approved Installation Scheme: True
Number of chimneys:	0
Number of open flues:	0
Number of fans:	0
Number of passive stacks:	0
Number of sides sheltered:	1
Pressure test:	3

Main heating system:

Main heating system:	Heat pumps with radiators or underfloor heating Electric heat pumps Fuel: Electricity Info Source: Boiler Database Database: (rev 477, product index 102571, SEDBUK 238%): Brand name: Mitsubishi Model: Ecodan 4kW Model qualifier: QUHZ-W40VA - Radiators (provides DHW all year) Systems with radiators Central heating pump : 2013 or later Design flow temperature: Design flow temperature >45°C Room-sealed Boiler interlock: Yes

Main heating Control:

Main heating Control:	Time and temperature zone control by suitable arrangement of plumbing and electrical services Control code: 2207

Secondary heating system:

Secondary heating system:	None

Water heating:

Water heating:	From main heating system Water code: 901 Fuel :Electricity Hot water cylinder Cylinder volume: 200 litres Cylinder insulation: Measured loss, 1.63kWh/day Primary pipework insulation: True Cylinderstat: True Cylinder in heated space: True Solar panel: False

Others:

Electricity tariff:	Standard Tariff
In Smoke Control Area:	No
Conservatory:	No conservatory
Low energy lights:	100%
Terrain type:	Low rise urban / suburban
EPC language:	English
Wind turbine:	No
Photovoltaics:	Photovoltaic 1 Installed Peak power: 0.6

SAP Input

	Tilt of collector: 30° Overshading: None or very little Collector Orientation: South
Assess Zero Carbon Home:	No