

Our Ref: D1931

31st May 2021

As built SAP Assessment Report

Beech Tree Court, 229 Moseley Road, Manchester

Site Address: Flats 1-27
Beech Tree Court
229 Moseley Road
Manchester
M19 2JT

Contractor: R P Tyson Construction Ltd
1 Mitcham Road
Blackpool
FY4 4QN

SAP Assessor: Neil Unsworth
Bridgewater Energy Ltd
Accreditation ref EES/004187

1.0 Assessment Summary

An individual as built SAP assessment has been carried out on each flat using Elmhurst Energy Systems SAP Calculator 2012 software, which is in compliance with the Building regulations Approved Document L1A 2013.

All the flats have then undergone a block compliance assessment. Using this method, the average DER (dwelling emission rate of CO₂) must be no greater than the average TER (target emission rate) and the average DFEE (dwelling fabric energy efficiency) must be no greater than the average TFEE (target fabric energy efficiency).

Please note that each flat does not have to pass its own individual SAP assessment provided that the block as a whole passes.

A summary of the block compliance assessment for the flats is given below:

Plot nos.	Dwelling type	TER	DER	TFEE	DFEE	Pass / Fail
Flats 1-27	Flats	25.36	24.83	42.54	41.29	Pass

Copies of the Block Compliance report for the full block and Compliance Reports for each flat are attached to this report.

BLOCK COMPLIANCE

Calculation Type: New Build (As Built)

Block Reference	D1931	Issued on Date	17/05/2019
Block Name	Flats 1-27, Beech Tree Court, Manchester		
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID 5906-0001
Client			

Block Compliance Report - DER

Block Reference: D1931		Block Name: Flats 1-27, Beech Tree Court, Manchester			
Property-Assessment Reference	Multiplier	Floor Area (m ²)	DER (kgCO ₂ /m ²)	TER (kgCO ₂ /m ²)	% DER/TER
D1931-01-As built 1	1	66.49	28.18	27.25	-3.41 %
D1931-02-As built 2	1	67.66	26.02	26.97	3.51 %
D1931-03-As built 3	1	60.86	27.58	26.69	-3.35 %
D1931-04-As built 4	1	41.69	30.71	30.90	0.63 %
D1931-05-As built 5	1	60.85	30.49	28.76	-6.02 %
D1931-06-As built 6	1	61.19	28.29	27.23	-3.90 %
D1931-07-As built 7	1	66.49	22.34	23.85	6.35 %
D1931-08-As built 8	1	67.66	22.58	23.69	4.70 %
D1931-09-As built 9	1	60.86	19.38	23.26	16.69 %
D1931-10-As built 10	1	61.35	18.65	21.57	13.52 %
D1931-11-As built 11	1	60.85	24.92	25.44	2.06 %
D1931-12-As built 12	1	61.19	22.96	24.02	4.43 %
D1931-13-As built 13	1	66.49	22.34	23.85	6.35 %
D1931-14-As built 14	1	67.66	22.58	23.69	4.70 %
D1931-15-As built 15	1	60.86	21.47	23.26	7.71 %
D1931-16-As built 16	1	61.35	18.65	21.57	13.52 %
D1931-17-As built 17	1	60.85	24.93	25.44	2.02 %
D1931-18-As built 18	1	61.19	27.62	26.81	-3.03 %
D1931-19-As built 19	1	66.49	23.09	23.99	3.74 %
D1931-20-As built 20	1	67.66	23.37	23.87	2.11 %
D1931-21-As built 21	1	60.86	21.47	23.26	7.71 %
D1931-22-As built 22	1	61.96	23.90	24.66	3.09 %
D1931-23-As built 23	1	60.98	28.50	28.38	-0.42 %
D1931-24-As built 24	1	66.49	28.13	27.26	-3.19 %
D1931-25-As built 25	1	67.66	27.50	26.29	-4.61 %
D1931-26-As built 26	1	60.86	28.95	27.54	-5.12 %
D1931-27-As built 27	1	61.96	27.87	27.22	-2.37 %
Totals:	27	1690.46	672.47	686.75	
Average DER = 24.83 kgCO ₂ /m ²		% DER/TER	PASS		
Average TER = 25.36 kgCO ₂ /m ²		2.09 %			

BLOCK COMPLIANCE

Calculation Type: New Build (As Built)

Block Compliance Report - DFEE

Block Reference: D1931		Block Name: Flats 1-27, Beech Tree Court, Manchester			
Property-Assessment Reference	Multiplier	Floor Area (m ²)	DFEE (kWh/m ² /yr)	TFEE (kWh/m ² /yr)	% DFEE/TFEE
D1931-01-As built 1	1	66.49	48.38	50.91	4.97 %
D1931-02-As built 2	1	67.66	47.08	50.17	6.15 %
D1931-03-As built 3	1	60.86	45.73	45.58	-0.34 %
D1931-04-As built 4	1	41.69	47.32	47.89	1.20 %
D1931-05-As built 5	1	60.85	52.37	53.65	2.38 %
D1931-06-As built 6	1	61.19	47.67	48.62	1.94 %
D1931-07-As built 7	1	66.49	37.25	39.49	5.66 %
D1931-08-As built 8	1	67.66	38.11	39.31	3.04 %
D1931-09-As built 9	1	60.86	31.85	34.07	6.52 %
D1931-10-As built 10	1	61.35	27.88	28.25	1.31 %
D1931-11-As built 11	1	60.85	41.47	42.58	2.61 %
D1931-12-As built 12	1	61.19	37.12	37.88	2.02 %
D1931-13-As built 13	1	66.49	37.25	39.49	5.66 %
D1931-14-As built 14	1	67.66	38.11	39.31	3.04 %
D1931-15-As built 15	1	60.86	33.74	34.07	0.95 %
D1931-16-As built 16	1	61.35	27.88	28.25	1.31 %
D1931-17-As built 17	1	60.85	41.47	42.58	2.61 %
D1931-18-As built 18	1	61.19	46.50	47.21	1.51 %
D1931-19-As built 19	1	66.49	37.93	39.56	4.13 %
D1931-20-As built 20	1	67.66	39.15	39.92	1.93 %
D1931-21-As built 21	1	60.86	33.74	34.07	0.95 %
D1931-22-As built 22	1	61.96	38.71	40.02	3.27 %
D1931-23-As built 23	1	60.98	50.57	52.45	3.58 %
D1931-24-As built 24	1	66.49	48.04	50.53	4.93 %
D1931-25-As built 25	1	67.66	46.82	47.32	1.05 %
D1931-26-As built 26	1	60.86	47.49	47.53	0.07 %
D1931-27-As built 27	1	61.96	46.76	48.64	3.87 %
Totals:	27	1690.46	1,116.41	1,149.33	
Average DFEE = 41.29 kWh/m ² /yr		% DFEE/TFEE	PASS		
Average TFEE = 42.54 kWh/m ² /yr		2.94 %			

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-01		Issued on Date	31/05/2021	
Assessment Reference	As built 1	Prop Type Ref			
Property	FLAT 1, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT				
SAP Rating	72 C	DER	28.18	TER	27.25
Environmental	80 C	% DER<TER	-3.41		
CO₂ Emissions (t/year)	1.48	DFEE	48.38	TFEE	50.91
General Requirements Compliance	Fail	% DFEE<TFEE	4.97		
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk			Assessor ID	5906-0001
Client					

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	27.25	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	28.18	kgCO ₂ /m ²	
Excess emissions	0.93 (3.4%)	kgCO ₂ /m ²	Fail

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	50.91	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	48.38	kWh/m ² /yr	
	-2.5 (-4.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Floor	0.15 (max. 0.25)	0.15 (max. 0.70)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	7.95 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing South East	9.75 m ² , No overhang	
Windows facing South West	5.02 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	7.95 (average for dwelling type)	
Maximum	10.0	Pass

10 Key features

Photovoltaic array	931.00	kWh/Year
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This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-02		Issued on Date	31/05/2021	
Assessment Reference	As built 2		Prop Type Ref		
Property	FLAT 2, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT				
SAP Rating	74 C	DER	26.02	TER	26.97
Environmental	82 B	% DER<TER	3.51		
CO₂ Emissions (t/year)	1.37	DFEE	47.08	TFEE	50.17
General Requirements Compliance	Pass	% DFEE<TFEE	6.15		
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk			Assessor ID	5906-0001
Client					

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	26.97	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	26.02	kgCO ₂ /m ²	Pass
	-0.95 (-3.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	50.17	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	47.08	kWh/m ² /yr	
	-3.1 (-6.2%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Floor	0.15 (max. 0.25)	0.15 (max. 0.70)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	5.95 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing South	3.09 m ² , No overhang	
Windows facing South West	0.95 m ² , No overhang	
Windows facing West	3.82 m ² , No overhang	
Windows facing North West	7.64 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	5.95 (measured in this dwelling)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K
Photovoltaic array	948.00	kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-03	Issued on Date	31/05/2021
Assessment Reference	As built 3	Prop Type Ref	
Property	FLAT 3, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	74 C	DER	27.58
Environmental	82 B	TER	26.69
CO ₂ Emissions (t/year)	1.26	% DER<TER	-3.35
General Requirements Compliance	Fail	DFEE	45.73
		TFEE	45.58
		% DFEE<TFEE	-0.34
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	26.69	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	27.58	kgCO ₂ /m ²	
Excess emissions	0.89 (3.3%)	kgCO ₂ /m ²	Fail

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	45.58	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	45.73	kWh/m ² /yr	
Excess energy	0.1 (0.2%)	kWh/m ² /yr	Fail

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Floor	0.15 (max. 0.25)	0.15 (max. 0.70)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	7.95 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.69 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North West	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	7.95 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K	
Photovoltaic array	852.00	kWh/Year	

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-04	Issued on Date	31/05/2021
Assessment Reference	As built 4	Prop Type Ref	
Property	FLAT 4, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	76 C	DER	30.71
Environmental	83 B	TER	30.90
CO ₂ Emissions (t/year)	1.01	% DER<TER	0.63
General Requirements Compliance	Pass	DFEE	47.32
		TFEE	47.89
		% DFEE<TFEE	1.20
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	30.90	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	30.71	kgCO ₂ /m ²	Pass
	-0.19 (-0.6%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	47.89	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	47.32	kWh/m ² /yr	
	-0.6 (-1.3%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.18 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Floor	0.15 (max. 0.25)	0.15 (max. 0.70)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	7.95 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.58		
Maximum	1.5		Pass
MVHR efficiency	93	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing South East	6.17 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	7.95 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K	
Photovoltaic array	584.00	kWh/Year	

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-05	Issued on Date	31/05/2021
Assessment Reference	As built 5	Prop Type Ref	
Property	FLAT 5, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	71 C	DER	30.49
Environmental	80 C	TER	28.76
CO ₂ Emissions (t/year)	1.44	% DER<TER	-6.02
General Requirements Compliance	Fail	DFEE	52.37
		TFEE	53.65
		% DFEE<TFEE	2.38
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	28.76	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	30.49	kgCO ₂ /m ²	
Excess emissions	1.73 (6.0%)	kgCO ₂ /m ²	Fail

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	53.65	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	52.37	kWh/m ² /yr	
	-1.2 (-2.2%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Floor	0.15 (max. 0.25)	0.15 (max. 0.70)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	7.95 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North East	5.02 m ² , No overhang	
Windows facing North West	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	7.95 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K	
Photovoltaic array	852.00	kWh/Year	

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-06	Issued on Date	31/05/2021
Assessment Reference	As built 6	Prop Type Ref	
Property	FLAT 6, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	73 C	DER	28.29
Environmental	81 B	TER	27.23
CO ₂ Emissions (t/year)	1.35	% DER<TER	-3.90
General Requirements Compliance	Fail	DfEE	47.67
		TfEE	48.62
		% DfEE<TfEE	1.94
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TfEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	27.23	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	28.29	kgCO ₂ /m ²	
Excess emissions	1.06 (3.9%)	kgCO ₂ /m ²	Fail

1b TfEE and DfEE

Target Fabric Energy Efficiency (TfEE)	48.62	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DfEE)	47.67	kWh/m ² /yr	
	-0.9 (-1.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Floor	0.15 (max. 0.25)	0.15 (max. 0.70)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	7.95 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North East	5.02 m ² , No overhang	
Windows facing South East	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	7.95 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K
Photovoltaic array	857.00	kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-07	Issued on Date	31/05/2021
Assessment Reference	As built 7	Prop Type Ref	
Property	FLAT 7, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	77 C	DER	22.34
Environmental	85 B	TER	23.85
CO ₂ Emissions (t/year)	1.15	% DER<TER	6.35
General Requirements Compliance	Pass	DFEE	37.25
		TFEE	39.49
		% DFEE<TFEE	5.66
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	23.85	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	22.34	kgCO ₂ /m ²	Pass
	-1.51 (-6.3%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	39.49	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	37.25	kWh/m ² /yr	
	-2.2 (-5.6%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
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BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Primary pipework insulated

No primary pipework

6 Controls

Space heating controls

Programmer and appliance thermostats

Pass

Hot water controls

Cylinderstat

Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings

100

%

Minimum

75

%

Pass

8 Mechanical ventilation

Continuous supply and extract system

Specific fan power

0.70

Maximum

1.5

Pass

MVHR efficiency

91

%

Minimum

70

%

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))

Slight

Pass

Based on:

Overshading

Average

Windows facing South East

9.75 m², No overhang

Windows facing South West

5.02 m², No overhang

Air change rate

3.00 ach

Blinds/curtains

None

Criterion 4 – Building performance consistent with DER and DFEE rate

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals

8.09 (average for dwelling type)

Maximum

10.0

Pass

10 Key features

Photovoltaic array

931.00

kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-08		Issued on Date	31/05/2021	
Assessment Reference	As built 8	Prop Type Ref			
Property	FLAT 8, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT				
SAP Rating	77 C	DER	22.58	TER	23.69
Environmental	85 B	% DER<TER	4.70		
CO₂ Emissions (t/year)	1.15	DFEE	38.11	TFEE	39.31
General Requirements Compliance	Pass	% DFEE<TFEE	3.04		
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk			Assessor ID	5906-0001
Client					

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	23.69	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	22.58	kgCO ₂ /m ²	Pass
	-1.11 (-4.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	39.31	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	38.11	kWh/m ² /yr	
	-1.2 (-3.1%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing South	3.09 m ² , No overhang	
Windows facing South West	0.95 m ² , No overhang	
Windows facing West	3.82 m ² , No overhang	
Windows facing North West	7.64 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K
Photovoltaic array	948.00	kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-09		Issued on Date	31/05/2021	
Assessment Reference	As built 9	Prop Type Ref			
Property	FLAT 9, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT				
SAP Rating	80 C	DER	19.38	TER	23.26
Environmental	88 B	% DER<TER	16.69		
CO₂ Emissions (t/year)	0.87	DFEE	31.85	TFEE	34.07
General Requirements Compliance	Pass	% DFEE<TFEE	6.52		
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk			Assessor ID	5906-0001
Client					

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	23.26	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	19.38	kgCO ₂ /m ²	Pass
	-3.88 (-16.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	34.07	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	31.85	kWh/m ² /yr	
	-2.3 (-6.7%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	6.09 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North West	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	6.09 (measured in this dwelling)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K	
Photovoltaic array	852.00	kWh/Year	

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-10	Issued on Date	31/05/2021
Assessment Reference	As built 10	Prop Type Ref	
Property	FLAT 10, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	80 C	DER	18.65
Environmental	88 B	TER	21.57
CO ₂ Emissions (t/year)	0.86	% DER<TER	13.52
General Requirements Compliance	Pass	DFEE	27.88
		TFEE	28.25
		% DFEE<TFEE	1.31
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
Client	5906-0001		

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	21.57	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	18.65	kgCO ₂ /m ²	Pass
	-2.92 (-13.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	28.25	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	27.88	kWh/m ² /yr	
	-0.4 (-1.4%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing South East	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K	
Photovoltaic array	859.00	kWh/Year	

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-11	Issued on Date	31/05/2021
Assessment Reference	As built 11	Prop Type Ref	
Property	FLAT 11, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	76 C	DER	24.92
Environmental	84 B	TER	25.44
CO ₂ Emissions (t/year)	1.14	% DER<TER	2.06
General Requirements Compliance	Pass	DFEE	41.47
		TFEE	42.58
		% DFEE<TFEE	2.61
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	25.44	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	24.92	kgCO ₂ /m ²	Pass
	-0.52 (-2.0%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.58	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	41.47	kWh/m ² /yr	
	-1.1 (-2.6%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North East	5.02 m ² , No overhang	
Windows facing North West	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K
Photovoltaic array	853.00	kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-12	Issued on Date	31/05/2021
Assessment Reference	As built 12	Prop Type Ref	
Property	FLAT 12, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	77 C	DER	22.96
Environmental	85 B	TER	24.02
CO ₂ Emissions (t/year)	1.08	% DER<TER	4.43
General Requirements Compliance	Pass	DFEE	37.12
		TFEE	37.88
		% DFEE<TFEE	2.02
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	24.02	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	22.96	kgCO ₂ /m ²	Pass
	-1.06 (-4.4%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	37.88	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	37.12	kWh/m ² /yr	
	-0.8 (-2.1%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.69 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North East	5.02 m ² , No overhang	
Windows facing South East	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K
Photovoltaic array	857.00	kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-13	Issued on Date	31/05/2021
Assessment Reference	As built 13	Prop Type Ref	
Property	FLAT 13, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	77 C	DER	22.34
Environmental	85 B	TER	23.85
CO ₂ Emissions (t/year)	1.15	% DER<TER	6.35
General Requirements Compliance	Pass	DFEE	37.25
		TFEE	39.49
		% DFEE<TFEE	5.66
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	23.85	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	22.34	kgCO ₂ /m ²	Pass
	-1.51 (-6.3%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	39.49	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	37.25	kWh/m ² /yr	
	-2.2 (-5.6%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
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BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Primary pipework insulated

No primary pipework

6 Controls

Space heating controls

Programmer and appliance thermostats

Pass

Hot water controls

Cylinderstat

Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings

100

%

Minimum

75

%

Pass

8 Mechanical ventilation

Continuous supply and extract system

Specific fan power

0.70

Maximum

1.5

Pass

MVHR efficiency

91

%

Minimum

70

%

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))

Slight

Pass

Based on:

Overshading

Average

Windows facing South East

9.75 m², No overhang

Windows facing South West

5.02 m², No overhang

Air change rate

3.00 ach

Blinds/curtains

None

Criterion 4 – Building performance consistent with DER and DFEE rate

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals

8.09 (average for dwelling type)

Maximum

10.0

Pass

10 Key features

Photovoltaic array

931.00

kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-14	Issued on Date	31/05/2021
Assessment Reference	As built 14	Prop Type Ref	
Property	FLAT 14, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	77 C	DER	22.58
Environmental	85 B	TER	23.69
CO ₂ Emissions (t/year)	1.15	% DER<TER	4.70
General Requirements Compliance	Pass	DFEE	38.11
		TFEE	39.31
		% DFEE<TFEE	3.04
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	23.69	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	22.58	kgCO ₂ /m ²	Pass
	-1.11 (-4.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	39.31	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	38.11	kWh/m ² /yr	
	-1.2 (-3.1%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing South	3.09 m ² , No overhang	
Windows facing South West	0.95 m ² , No overhang	
Windows facing West	3.82 m ² , No overhang	
Windows facing North West	7.64 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K
Photovoltaic array	948.00	kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-15	Issued on Date	31/05/2021
Assessment Reference	As built 15	Prop Type Ref	
Property	FLAT 15, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	79 C	DER	21.47
Environmental	87 B	TER	23.26
CO ₂ Emissions (t/year)	0.95	% DER<TER	7.71
General Requirements Compliance	Pass	DFEE	33.74
		TFEE	34.07
		% DFEE<TFEE	0.95
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	23.26	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	21.47	kgCO ₂ /m ²	Pass
	-1.79 (-7.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	34.07	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	33.74	kWh/m ² /yr	
	-0.4 (-1.2%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North West	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K	
Photovoltaic array	852.00	kWh/Year	

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-16		Issued on Date	31/05/2021	
Assessment Reference	As built 16		Prop Type Ref		
Property	FLAT 16, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT				
SAP Rating	80 C	DER	18.65	TER	21.57
Environmental	88 B	% DER<TER	13.52		
CO₂ Emissions (t/year)	0.86	DFEE	27.88	TFEE	28.25
General Requirements Compliance	Pass	% DFEE<TFEE	1.31		
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk			Assessor ID	5906-0001
Client					

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	21.57	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	18.65	kgCO ₂ /m ²	Pass
	-2.92 (-13.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	28.25	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	27.88	kWh/m ² /yr	
	-0.4 (-1.4%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing South East	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K	
Photovoltaic array	859.00	kWh/Year	

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-17	Issued on Date	31/05/2021
Assessment Reference	As built 17	Prop Type Ref	
Property	FLAT 17, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	76 C	DER	24.93
Environmental	84 B	TER	25.44
CO ₂ Emissions (t/year)	1.14	% DER<TER	2.02
General Requirements Compliance	Pass	DFEE	41.47
		TFEE	42.58
		% DFEE<TFEE	2.61
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	25.44	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	24.93	kgCO ₂ /m ²	Pass
	-0.51 (-2.0%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.58	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	41.47	kWh/m ² /yr	
	-1.1 (-2.6%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North East	5.02 m ² , No overhang	
Windows facing North West	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K
Photovoltaic array	852.00	kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-18	Issued on Date	31/05/2021
Assessment Reference	As built 18	Prop Type Ref	
Property	FLAT 18, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	73 C	DER	27.62
Environmental	82 B	TER	26.81
CO ₂ Emissions (t/year)	1.32	% DER<TER	-3.03
General Requirements Compliance	Fail	DfEE	46.50
		TfEE	47.21
		% DfEE<TfEE	1.51
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TfEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	26.81	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	27.62	kgCO ₂ /m ²	
Excess emissions	0.81 (3.0%)	kgCO ₂ /m ²	Fail

1b TfEE and DfEE

Target Fabric Energy Efficiency (TfEE)	47.21	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DfEE)	46.50	kWh/m ² /yr	
	-0.7 (-1.5%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Roof	0.15 (max. 0.20)	0.15 (max. 0.35)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	7.80 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North East	5.02 m ² , No overhang	
Windows facing South East	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	7.80 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K
Photovoltaic array	857.00	kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-19	Issued on Date	31/05/2021
Assessment Reference	As built 19	Prop Type Ref	
Property	FLAT 19, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	76 C	DER	23.09
Environmental	84 B	TER	23.99
CO ₂ Emissions (t/year)	1.17	% DER<TER	3.74
General Requirements Compliance	Pass	DFEE	37.93
		TFEE	39.56
		% DFEE<TFEE	4.13
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	23.99	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	23.09	kgCO ₂ /m ²	Pass
	-0.90 (-3.8%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	39.56	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	37.93	kWh/m ² /yr	
	-1.7 (-4.3%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
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BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Primary pipework insulated

No primary pipework

6 Controls

Space heating controls

Programmer and appliance thermostats

Pass

Hot water controls

Cylinderstat

Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings

100

%

Minimum

75

%

Pass

8 Mechanical ventilation

Continuous supply and extract system

Specific fan power

0.70

Maximum

1.5

Pass

MVHR efficiency

91

%

Minimum

70

%

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))

Slight

Pass

Based on:

Overshading

Average

Windows facing South East

9.75 m², No overhang

Windows facing South West

3.06 m², No overhang

Air change rate

3.00 ach

Blinds/curtains

None

Criterion 4 – Building performance consistent with DER and DFEE rate

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals

8.09 (average for dwelling type)

Maximum

10.0

Pass

10 Key features

Photovoltaic array

931.00

kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-20	Issued on Date	31/05/2021
Assessment Reference	As built 20	Prop Type Ref	
Property	FLAT 20, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	76 C	DER	23.37
Environmental	84 B	TER	23.87
CO ₂ Emissions (t/year)	1.19	% DER<TER	2.11
General Requirements Compliance	Pass	DFEE	39.15
		TFEE	39.92
		% DFEE<TFEE	1.93
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	23.87	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	23.37	kgCO ₂ /m ²	Pass
	-0.50 (-2.1%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	39.92	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	39.15	kWh/m ² /yr	
	-0.8 (-2.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing South	3.09 m ² , No overhang	
Windows facing South West	0.95 m ² , No overhang	
Windows facing West	3.82 m ² , No overhang	
Windows facing North West	7.64 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K
Photovoltaic array	948.00	kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-21	Issued on Date	31/05/2021
Assessment Reference	As built 21	Prop Type Ref	
Property	FLAT 21, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	79 C	DER	21.47
Environmental	87 B	TER	23.26
CO ₂ Emissions (t/year)	0.95	% DER<TER	7.71
General Requirements Compliance	Pass	DFEE	33.74
		TFEE	34.07
		% DFEE<TFEE	0.95
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	23.26	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	21.47	kgCO ₂ /m ²	Pass
	-1.79 (-7.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	34.07	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	33.74	kWh/m ² /yr	
	-0.4 (-1.2%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North West	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K	
Photovoltaic array	852.00	kWh/Year	

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-22	Issued on Date	31/05/2021
Assessment Reference	As built 22	Prop Type Ref	
Property	FLAT 22, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	76 C	DER	23.90
Environmental	84 B	TER	24.66
CO ₂ Emissions (t/year)	1.13	% DER<TER	3.09
General Requirements Compliance	Pass	DfEE	38.71
		TfEE	40.02
		% DfEE<TfEE	3.27
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TfEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	24.66	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	23.90	kgCO ₂ /m ²	Pass
	-0.76 (-3.1%)	kgCO ₂ /m ²	

1b TfEE and DfEE

Target Fabric Energy Efficiency (TfEE)	40.02	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DfEE)	38.71	kWh/m ² /yr	
	-1.3 (-3.2%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	8.09 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
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BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Primary pipework insulated

No primary pipework

6 Controls

Space heating controls

Programmer and appliance thermostats

Pass

Hot water controls

Cylinderstat

Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings

100

%

Minimum

75

%

Pass

8 Mechanical ventilation

Continuous supply and extract system

Specific fan power

0.70

Maximum

1.5

Pass

MVHR efficiency

91

%

Minimum

70

%

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))

Slight

Pass

Based on:

Overshading

Average

Windows facing North East

3.06 m², No overhang

Windows facing South East

8.80 m², No overhang

Air change rate

3.00 ach

Blinds/curtains

None

Criterion 4 – Building performance consistent with DER and DFEE rate

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals

8.09 (average for dwelling type)

Maximum

10.0

Pass

10 Key features

Photovoltaic array

868.00

kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-23	Issued on Date	31/05/2021
Assessment Reference	As built 23	Prop Type Ref	
Property	FLAT 23, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	73 C	DER	28.50
Environmental	81 B	TER	28.38
CO ₂ Emissions (t/year)	1.36	% DER<TER	-0.42
General Requirements Compliance	Fail	DFEE	50.57
		TFEE	52.45
		% DFEE<TFEE	3.58
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	28.38	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	28.50	kgCO ₂ /m ²	
Excess emissions	0.12 (0.4%)	kgCO ₂ /m ²	Fail

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	52.45	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	50.57	kWh/m ² /yr	
	-1.9 (-3.6%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Roof	0.15 (max. 0.20)	0.15 (max. 0.35)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	5.80 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North East	5.02 m ² , No overhang	
Windows facing South East	1.09 m ² , No overhang	
Windows facing North West	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	5.80 (measured in this dwelling)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K	
Photovoltaic array	854.00	kWh/Year	

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-24	Issued on Date	31/05/2021
Assessment Reference	As built 24	Prop Type Ref	
Property	FLAT 24, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	72 C	DER	28.13
Environmental	81 B	TER	27.26
CO ₂ Emissions (t/year)	1.46	% DER<TER	-3.19
General Requirements Compliance	Fail	DFEE	48.04
		TFEE	50.53
		% DFEE<TFEE	4.93
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	27.26	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	28.13	kgCO ₂ /m ²	
Excess emissions	0.87 (3.2%)	kgCO ₂ /m ²	Fail

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	50.53	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	48.04	kWh/m ² /yr	
	-2.5 (-5.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Roof	0.15 (max. 0.20)	0.15 (max. 0.35)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	7.80 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing South East	9.25 m ² , No overhang	
Windows facing South West	3.33 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	7.80 (average for dwelling type)	
Maximum	10.0	Pass

10 Key features

Photovoltaic array	931.00	kWh/Year
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This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-25	Issued on Date	31/05/2021
Assessment Reference	As built 25	Prop Type Ref	
Property	FLAT 25, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	73 C	DER	27.50
Environmental	81 B	TER	26.29
CO ₂ Emissions (t/year)	1.42	% DER<TER	-4.61
General Requirements Compliance	Fail	DFEE	46.82
		TFEE	47.32
		% DFEE<TFEE	1.05
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	26.29	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	27.50	kgCO ₂ /m ²	
Excess emissions	1.21 (4.6%)	kgCO ₂ /m ²	Fail

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	47.32	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	46.82	kWh/m ² /yr	
	-0.5 (-1.1%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Roof	0.15 (max. 0.20)	0.15 (max. 0.35)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	7.80 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing South	3.09 m ² , No overhang	
Windows facing South West	0.83 m ² , No overhang	
Windows facing West	2.73 m ² , No overhang	
Windows facing North West	5.46 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	7.80 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K
Photovoltaic array	948.00	kWh/Year

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-26		Issued on Date	31/05/2021	
Assessment Reference	As built 26		Prop Type Ref		
Property	FLAT 26, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT				
SAP Rating	73 C	DER	28.95	TER	27.54
Environmental	81 B	% DER<TER	-5.12		
CO₂ Emissions (t/year)	1.31	DFEE	47.49	TFEE	47.53
General Requirements Compliance	Fail	% DFEE<TFEE	0.07		
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk			Assessor ID	5906-0001
Client					

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	27.54	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	28.95	kgCO ₂ /m ²	
Excess emissions	1.41 (5.1%)	kgCO ₂ /m ²	Fail

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	47.53	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	47.49	kWh/m ² /yr	
	0.0 (0.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Roof	0.15 (max. 0.20)	0.15 (max. 0.35)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	7.80 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North West	6.29 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type	U-value		
Filled Cavity with Edge Sealing	0.00	W/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	7.80 (average for dwelling type)		
Maximum	10.0		Pass

10 Key features

Party wall U-value	0.00	W/m ² K	
Photovoltaic array	852.00	kWh/Year	

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	D1931-27	Issued on Date	31/05/2021
Assessment Reference	As built 27	Prop Type Ref	
Property	FLAT 27, BEECH TREE COURT, 229 MOSELEY ROAD, MANCHESTER, M19 2JT		
SAP Rating	73 C	DER	27.87
Environmental	81 B	TER	27.22
CO ₂ Emissions (t/year)	1.34	% DER<TER	-2.37
General Requirements Compliance	Fail	DFEE	46.76
		TFEE	48.64
		% DFEE<TFEE	3.87
Assessor Details	Mr. Neil Unsworth, Bridgewater Energy, Tel: 01942 888092, neil@bridgewaterenergy.co.uk		Assessor ID
			5906-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	27.22	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	27.87	kgCO ₂ /m ²	
Excess emissions	0.65 (2.4%)	kgCO ₂ /m ²	Fail

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	48.64	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	46.76	kWh/m ² /yr	
	-1.8 (-3.7%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.17 (max. 0.30)	0.18 (max. 0.70)	Pass
Roof	0.15 (max. 0.20)	0.15 (max. 0.35)	Pass
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	7.80 (average for dwelling type)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Room heaters - Electric Panel, convector or radiant heaters	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Measured cylinder loss: 1.68 kWh/day Permitted by DBSCG 2.02	Pass
Primary pipework insulated	No primary pipework	

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.70		
Maximum	1.5		Pass
MVHR efficiency	91	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))	Slight	Pass
Based on:		
Overshading	Average	
Windows facing North East	3.06 m ² , No overhang	
Windows facing South East	8.80 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	7.80 (average for dwelling type)	
Maximum	10.0	Pass

10 Key features

Photovoltaic array	868.00	kWh/Year
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This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.