

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	Plot 1	Issued on Date	26/02/2025
Assessment Reference	Plot 1 - House 5	Prop Type Ref	Plot 1
Property	5 Primrose Terrace, 199 Wensley Road , READING, RG1 6FR		
SAP Rating	103 A	DER	-1.14
Environmental	102 A	TER	23.16
CO ₂ Emissions (t/year)	-0.52	% DER<TER	104.92
General Requirements Compliance	Pass	DFEE	37.45
		TFEE	51.18
		% DFEE<TFEE	26.84
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	23.16	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-1.14	kgCO ₂ /m ²	Pass
	-24.30 (-104.9%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	51.18	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	37.45	kWh/m ² /yr	
	-13.8 (-27.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	7.76 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Windows facing West	4.35 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 2	Issued on Date	26/02/2025
Assessment Reference	Plot 2 - House 4	Prop Type Ref	Plot 2
Property	4 Primrose Terrace, 199 Wensley Road , READING, RG1 6FR		
SAP Rating	104 A	DER	-2.04
Environmental	103 A	TER	20.60
CO ₂ Emissions (t/year)	-0.62	% DER<TER	109.90
General Requirements Compliance	Pass	DFEE	30.32
		TFEE	42.60
		% DFEE<TFEE	28.82
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-2.04	kgCO ₂ /m ²	Pass
	-22.64 (-109.9%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.32	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.91 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.91 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 3	Issued on Date	06/03/2025
Assessment Reference	Plot 3 - House 3	Prop Type Ref	Plot 3
Property	3 Primrose Terrace, 199 Wensley Road , READING, RG1 6FR		
SAP Rating	104 A	DER	-2.01
Environmental	103 A	TER	20.60
CO ₂ Emissions (t/year)	-0.62	% DER<TER	109.76
General Requirements Compliance	Pass	DFEE	30.36
		TFEE	42.60
		% DFEE<TFEE	28.74
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-2.01	kgCO ₂ /m ²	Pass
	-22.61 (-109.8%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.36	kWh/m ² /yr	
	-12.2 (-28.6%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.98 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.98 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	1.0	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 4	Issued on Date	06/03/2025
Assessment Reference	Plot 4 - House 4	Prop Type Ref	Plot 4
Property	2 Primrose Terrace, 199 Wensley Road , READING, RG1 6FR		
SAP Rating	104 A	DER	-2.04
Environmental	103 A	TER	20.60
CO ₂ Emissions (t/year)	-0.62	% DER<TER	109.90
General Requirements Compliance	Pass	DFEE	30.33
		TFEE	42.60
		% DFEE<TFEE	28.81
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-2.04	kgCO ₂ /m ²	Pass
	-22.64 (-109.9%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.33	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 5	Issued on Date	06/03/2025
Assessment Reference	Plot 5 - House 1	Prop Type Ref	Plot 5
Property	1 Primrose Terrace, 199 Wensley Road , READING, RG1 6FR		
SAP Rating	103 A	DER	-1.04
Environmental	102 A	TER	23.41
CO ₂ Emissions (t/year)	-0.51	% DER<TER	104.44
General Requirements Compliance	Pass	DFEE	38.16
		TFEE	52.05
		% DFEE<TFEE	26.68
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	23.41	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-1.04	kgCO ₂ /m ²	Pass
	-24.45 (-104.4%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	52.05	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	38.16	kWh/m ² /yr	
	-13.9 (-26.7%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.89 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Windows facing West	1.80 m ² , No overhang	
Air change rate	4.00 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	0.89 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 6	Issued on Date	06/03/2025
Assessment Reference	Plot 6 - 209	Prop Type Ref	Plot 6
Property	209 Wensley Road , READING, RG1 6EE		
SAP Rating	100 A	DER	1.29
Environmental	100 A	TER	24.50
CO₂ Emissions (t/year)	-0.18	% DER<TER	94.73
General Requirements Compliance	Pass	DFEE	41.63
		TFEE	59.17
		% DFEE<TFEE	29.64
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	24.50	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	1.29	kgCO ₂ /m ²	Pass
	-23.21 (-94.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	59.17	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	41.63	kWh/m ² /yr	
	-17.6 (-29.7%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.72 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Slight	Pass
Based on:		
Overshading	Average	
Windows facing East	10.68 m ² , No overhang	
Windows facing West	19.12 m ² , No overhang	
Air change rate	4.00 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	0.72 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.7	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 7	Issued on Date	06/03/2025
Assessment Reference	Plot 7 - 323	Prop Type Ref	Plot 7
Property	323 Wensley Road , READING, RG1 6EE		
SAP Rating	100 A	DER	1.29
Environmental	100 A	TER	24.50
CO ₂ Emissions (t/year)	-0.18	% DER<TER	94.73
General Requirements Compliance	Pass	DFEE	41.63
		TFEE	59.17
		% DFEE<TFEE	29.64
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	24.50	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	1.29	kgCO ₂ /m ²	Pass
	-23.21 (-94.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	59.17	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	41.63	kWh/m ² /yr	
	-17.6 (-29.7%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.72 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Slight	Pass
Based on:		
Overshading	Average	
Windows facing East	19.12 m ² , No overhang	
Windows facing West	10.68 m ² , No overhang	
Air change rate	4.00 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	0.72 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.7	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 8	Issued on Date	06/03/2025
Assessment Reference	Plot 1 - 7	Prop Type Ref	Plot 8
Property	7 Aster Terrace, 197 Wensley Road , READING, RG1 6FQ		
SAP Rating	101 A	DER	0.78
Environmental	101 A	TER	23.16
CO ₂ Emissions (t/year)	-0.27	% DER<TER	96.63
General Requirements Compliance	Pass	DFEE	37.45
		TFEE	51.18
		% DFEE<TFEE	26.84
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	23.16	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	0.78	kgCO ₂ /m ²	Pass
	-22.38 (-96.6%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	51.18	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	37.45	kWh/m ² /yr	
	-13.8 (-27.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	7.76 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Windows facing West	4.35 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 9	Issued on Date	07/03/2025
Assessment Reference	Plot 9	Prop Type Ref	Plot 9
Property	6 Aster Terrace, 197 Wensley Road , READING, RG1 6FQ		
SAP Rating	102 A	DER	-0.15
Environmental	102 A	TER	20.60
CO ₂ Emissions (t/year)	-0.38	% DER<TER	100.73
General Requirements Compliance	Pass	DFEE	30.33
		TFEE	42.60
		% DFEE<TFEE	28.80
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-0.15	kgCO ₂ /m ²	Pass
	-20.75 (-100.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.33	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.93 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.93 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 10	Issued on Date	07/03/2025
Assessment Reference	Plot 10 - 5	Prop Type Ref	Plot 10
Property	5 Aster Terrace, 197 Wensley Road , READING, RG1 6FQ		
SAP Rating	102 A	DER	-0.15
Environmental	102 A	TER	20.60
CO ₂ Emissions (t/year)	-0.38	% DER<TER	100.73
General Requirements Compliance	Pass	DFEE	30.33
		TFEE	42.60
		% DFEE<TFEE	28.81
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-0.15	kgCO ₂ /m ²	Pass
	-20.75 (-100.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.33	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 11			Issued on Date	07/03/2025
Assessment Reference	Plot 11 - 4	Prop Type Ref	Plot 11		
Property	4 Aster Terrace, 197 Wensley Road , READING, RG1 6FQ				
SAP Rating	102 A	DER	-0.19	TER	20.60
Environmental	102 A	% DER<TER	100.92		
CO ₂ Emissions (t/year)	-0.38	DFEE	30.29	TFEE	42.60
General Requirements Compliance	Pass	% DFEE<TFEE	28.89		
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk			Assessor ID	AC35-0001
Client	Firat Pirbudak, Firat Pirbudak				

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-0.19	kgCO ₂ /m ²	Pass
	-20.79 (-100.9%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.29	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.84 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.84 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.8	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 12	Issued on Date	07/03/2025
Assessment Reference	Plot 12 - 3	Prop Type Ref	Plot 12
Property	3 Aster Terrace, 197 Wensley Road , READING, RG1 6FQ		
SAP Rating	102 A	DER	-0.14
Environmental	102 A	TER	20.60
CO ₂ Emissions (t/year)	-0.38	% DER<TER	100.68
General Requirements Compliance	Pass	DFEE	30.34
		TFEE	42.60
		% DFEE<TFEE	28.79
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-0.14	kgCO ₂ /m ²	Pass
	-20.74 (-100.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.34	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.94 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.94 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 13	Issued on Date	07/03/2025
Assessment Reference	Plot 13 - 2	Prop Type Ref	Plot 13
Property	2 Aster Terrace, 197 Wensley Road , READING, RG1 6FQ		
SAP Rating	102 A	DER	-0.19
Environmental	102 A	TER	20.60
CO ₂ Emissions (t/year)	-0.38	% DER<TER	100.92
General Requirements Compliance	Pass	DFEE	30.29
		TFEE	42.60
		% DFEE<TFEE	28.89
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TFE rate

1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-0.19	kgCO ₂ /m ²	Pass
	-20.79 (-100.9%)	kgCO ₂ /m ²	

1b TFE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.29	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.84 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.84 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.8	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 14	Issued on Date	06/03/2025
Assessment Reference	Plot 14 - 1	Prop Type Ref	Plot 14
Property	1 Aster Terrace, 197 Wensley Road , READING, RG1 6FQ		
SAP Rating	101 A	DER	0.92
Environmental	100 A	TER	23.41
CO ₂ Emissions (t/year)	-0.26	% DER<TER	96.07
General Requirements Compliance	Pass	DFEE	38.21
		TFEE	52.05
		% DFEE<TFEE	26.60
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	23.41	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	0.92	kgCO ₂ /m ²	Pass
	-22.49 (-96.1%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	52.05	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	38.21	kWh/m ² /yr	
	-13.9 (-26.7%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.99 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Windows facing West	1.80 m ² , No overhang	
Air change rate	4.00 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	0.99 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	1.0	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 15	Issued on Date	07/03/2025
Assessment Reference	Plot 15	Prop Type Ref	Plot 15
Property	1 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	97 A	DER	5.30
Environmental	97 A	TER	26.66
CO ₂ Emissions (t/year)	0.15	% DER<TER	80.12
General Requirements Compliance	Pass	DFEE	33.29
		TFEE	47.76
		% DFEE<TFEE	30.29
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	26.66	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	5.30	kgCO ₂ /m ²	Pass
	-21.36 (-80.1%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	47.76	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	33.29	kWh/m ² /yr	
	-14.5 (-30.3%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Slight	Pass
Based on:		
Overshading	Average	
Windows facing South	6.00 m ² , No overhang	
Windows facing West	3.08 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Floor U-value	0.11	W/m ² K
Door U-value	0.80	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	1.26	kW

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	Plot 16	Issued on Date	07/03/2025
Assessment Reference	Plot 16	Prop Type Ref	Plot 16
Property	2 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	100 A	DER	1.01
Environmental	100 A	TER	27.12
CO ₂ Emissions (t/year)	-0.08	% DER<TER	96.28
General Requirements Compliance	Pass	DFEE	24.05
		TFEE	38.41
		% DFEE<TFEE	37.38
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	27.12	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	1.01	kgCO ₂ /m ²	Pass
	-26.11 (-96.3%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	38.41	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	24.05	kWh/m ² /yr	
	-14.3 (-37.2%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Medium	Pass
Based on:		
Overshading	Average	
Windows facing South	8.00 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Floor U-value	0.11	W/m ² K
Door U-value	0.80	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	1.26	kW

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	Plot 17	Issued on Date	07/03/2025
Assessment Reference	Plot 17	Prop Type Ref	Plot 17
Property	3 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	100 A	DER	1.01
Environmental	100 A	TER	27.12
CO ₂ Emissions (t/year)	-0.08	% DER<TER	96.28
General Requirements Compliance	Pass	DFEE	24.05
		TFEE	38.41
		% DFEE<TFEE	37.38
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	27.12	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	1.01	kgCO ₂ /m ²	Pass
	-26.11 (-96.3%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	38.41	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	24.05	kWh/m ² /yr	
	-14.3 (-37.2%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Medium	Pass
Based on:		
Overshading	Average	
Windows facing South	8.00 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Floor U-value	0.11	W/m ² K
Door U-value	0.80	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	1.26	kW

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	Plot 18	Issued on Date	07/03/2025
Assessment Reference	Plot 18	Prop Type Ref	Plot 18
Property	4 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	97 A	DER	5.30
Environmental	97 A	TER	26.66
CO ₂ Emissions (t/year)	0.15	% DER<TER	80.12
General Requirements Compliance	Pass	DFEE	33.29
		TFEE	47.76
		% DFEE<TFEE	30.29
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	26.66	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	5.30	kgCO ₂ /m ²	Pass
	-21.36 (-80.1%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	47.76	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	33.29	kWh/m ² /yr	
	-14.5 (-30.3%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Slight	Pass
Based on:		
Overshading	Average	
Windows facing East	3.08 m ² , No overhang	
Windows facing South	6.00 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Floor U-value	0.11	W/m ² K
Door U-value	0.80	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	1.26	kW

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	Plot 19	Issued on Date	07/03/2025
Assessment Reference	Plot 19	Prop Type Ref	Plot 19
Property	5 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	99 A	DER	2.61
Environmental	99 A	TER	22.88
CO ₂ Emissions (t/year)	0.04	% DER<TER	88.59
General Requirements Compliance	Pass	DFEE	22.35
		TFEE	36.91
		% DFEE<TFEE	39.46
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	22.88	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	2.61	kgCO ₂ /m ²	Pass
	-20.27 (-88.6%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	36.91	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	22.35	kWh/m ² /yr	
	-14.6 (-39.6%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.88 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
-------------------	---	------

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Primary pipework insulated

Yes

Pass

6 Controls

Space heating controls

Time and temperature zone control

Pass

Hot water controls

Cylinderstat

Pass

Independent timer for DHW

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

0.80

Maximum

1.5

Pass

MVHR efficiency

87

%

Minimum

70

%

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)

Medium

Pass

Based on:

Overshading

Average

Windows facing North

3.68 m², No overhang

Windows facing South

7.77 m², No overhang

Windows facing West

5.52 m², No overhang

Air change rate

4.00 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

0.88 (measured in this dwelling)

Maximum

10.0

Pass

10 Key features

External wall U-value

0.14

W/m²K

Door U-value

0.80

W/m²K

Window U-value

0.80

W/m²K

Air permeability

0.9

m³/m²h

Photovoltaic array

1.26

kW

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	Plot 20	Issued on Date	07/03/2025
Assessment Reference	Plot 16	Prop Type Ref	Plot 20
Property	6 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	97 A	DER	4.17
Environmental	97 A	TER	22.48
CO ₂ Emissions (t/year)	0.14	% DER<TER	81.45
General Requirements Compliance	Pass	DFEE	10.13
		TFEE	22.17
		% DFEE<TFEE	54.30
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	22.48	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	4.17	kgCO ₂ /m ²	Pass
	-18.31 (-81.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	22.17	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	10.13	kWh/m ² /yr	
	-12.1 (-54.5%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Air-to-water heat pump	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	No cylinder	
-------------------	-------------	--

6 Controls

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Space heating controls

Time and temperature zone control

Pass

Hot water controls

No cylinder

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

0.80

Maximum

1.5

Pass

MVHR efficiency

87

%

Minimum

70

%

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)

Medium

Pass

Based on:

Overshading

Average

Windows facing South

7.60 m², No overhang

Air change rate

4.00 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

0.92 (measured in this dwelling)

Maximum

10.0

Pass

10 Key features

External wall U-value

0.14

W/m²K

Door U-value

0.80

W/m²K

Window U-value

0.80

W/m²K

Air permeability

0.9

m³/m²h

Photovoltaic array

1.26

kW

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	Plot 21	Issued on Date	07/03/2025
Assessment Reference	Plot 21	Prop Type Ref	Plot 21
Property	7 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	97 A	DER	4.17
Environmental	97 A	TER	22.48
CO ₂ Emissions (t/year)	0.14	% DER<TER	81.45
General Requirements Compliance	Pass	DFEE	10.13
		TFEE	22.17
		% DFEE<TFEE	54.30
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	22.48	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	4.17	kgCO ₂ /m ²	Pass
	-18.31 (-81.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	22.17	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	10.13	kWh/m ² /yr	
	-12.1 (-54.5%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Air-to-water heat pump	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	No cylinder	
-------------------	-------------	--

6 Controls

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Space heating controls

Time and temperature zone control

Pass

Hot water controls

No cylinder

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

0.80

Maximum

1.5

Pass

MVHR efficiency

87

%

Minimum

70

%

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)

Medium

Pass

Based on:

Overshading

Average

Windows facing South

7.60 m², No overhang

Air change rate

4.00 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

0.92 (measured in this dwelling)

Maximum

10.0

Pass

10 Key features

External wall U-value

0.14

W/m²K

Door U-value

0.80

W/m²K

Window U-value

0.80

W/m²K

Air permeability

0.9

m³/m²h

Photovoltaic array

1.26

kW

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	Plot 22	Issued on Date	07/03/2025
Assessment Reference	Plot 22	Prop Type Ref	Plot 22
Property	8 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	99 A	DER	1.81
Environmental	99 A	TER	21.21
CO ₂ Emissions (t/year)	0.02	% DER<TER	91.47
General Requirements Compliance	Pass	DFEE	15.82
		TFEE	31.01
		% DFEE<TFEE	48.99
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	21.21	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	1.81	kgCO ₂ /m ²	Pass
	-19.40 (-91.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	31.01	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	15.82	kWh/m ² /yr	
	-15.2 (-49.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.69 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
-------------------	---	------

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Primary pipework insulated

Yes

Pass

6 Controls

Space heating controls

Time and temperature zone control

Pass

Hot water controls

Cylinderstat

Pass

Independent timer for DHW

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

0.80

Maximum

1.5

Pass

MVHR efficiency

87

%

Minimum

70

%

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)

Medium

Pass

Based on:

Overshading

Average

Windows facing East

6.44 m², No overhang

Windows facing South

7.77 m², No overhang

Air change rate

4.00 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

0.69 (measured in this dwelling)

Maximum

10.0

Pass

10 Key features

External wall U-value

0.14

W/m²K

Door U-value

0.80

W/m²K

Window U-value

0.80

W/m²K

Air permeability

0.7

m³/m²h

Photovoltaic array

1.26

kW

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	Plot 23	Issued on Date	07/03/2025
Assessment Reference	Plot 23	Prop Type Ref	Plot 23
Property	9 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	98 A	DER	4.66
Environmental	98 A	TER	26.04
CO ₂ Emissions (t/year)	0.11	% DER<TER	82.11
General Requirements Compliance	Pass	DFEE	30.60
		TFEE	47.02
		% DFEE<TFEE	34.92
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	26.04	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	4.66	kgCO ₂ /m ²	Pass
	-21.38 (-82.1%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	47.02	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.60	kWh/m ² /yr	
	-16.4 (-34.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.72 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Medium	Pass
Based on:		
Overshading	Average	
Windows facing East	8.02 m ² , No overhang	
Windows facing West	4.09 m ² , No overhang	
Air change rate	4.00 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	0.72 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Floor U-value	0.11	W/m ² K
Door U-value	0.80	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.7	m ³ /m ² h
Photovoltaic array	1.26	kW

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	Plot 24	Issued on Date	07/03/2025
Assessment Reference	Plot 24	Prop Type Ref	Plot 24
Property	10 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	99 A	DER	2.61
Environmental	99 A	TER	22.88
CO ₂ Emissions (t/year)	0.04	% DER<TER	88.59
General Requirements Compliance	Pass	DFEE	22.35
		TFEE	36.91
		% DFEE<TFEE	39.46
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	22.88	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	2.61	kgCO ₂ /m ²	Pass
	-20.27 (-88.6%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	36.91	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	22.35	kWh/m ² /yr	
	-14.6 (-39.6%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.88 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
-------------------	---	------

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Primary pipework insulated

Yes

Pass

6 Controls

Space heating controls

Time and temperature zone control

Pass

Hot water controls

Cylinderstat

Pass

Independent timer for DHW

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

0.80

Maximum

1.5

Pass

MVHR efficiency

87

%

Minimum

70

%

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)

Medium

Pass

Based on:

Overshading

Average

Windows facing North

3.68 m², No overhang

Windows facing South

7.77 m², No overhang

Windows facing West

5.52 m², No overhang

Air change rate

4.00 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

0.88 (measured in this dwelling)

Maximum

10.0

Pass

10 Key features

External wall U-value

0.14

W/m²K

Door U-value

0.80

W/m²K

Window U-value

0.80

W/m²K

Air permeability

0.9

m³/m²h

Photovoltaic array

1.26

kW

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	Plot 25	Issued on Date	07/03/2025
Assessment Reference	Plot 21	Prop Type Ref	Plot 25
Property	11 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	97 A	DER	4.17
Environmental	97 A	TER	22.48
CO ₂ Emissions (t/year)	0.14	% DER<TER	81.45
General Requirements Compliance	Pass	DFEE	10.13
		TFEE	22.17
		% DFEE<TFEE	54.30
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	22.48	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	4.17	kgCO ₂ /m ²	Pass
	-18.31 (-81.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	22.17	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	10.13	kWh/m ² /yr	
	-12.1 (-54.5%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Air-to-water heat pump	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	No cylinder	
-------------------	-------------	--

6 Controls

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Space heating controls	Time and temperature zone control	Pass
Hot water controls	No cylinder	

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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Medium	Pass
Based on:		
Overshading	Average	
Windows facing South	7.60 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Door U-value	0.80	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	1.26	kW

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	Plot 26	Issued on Date	07/03/2025
Assessment Reference	Plot 21	Prop Type Ref	Plot 26
Property	12 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	97 A	DER	4.17
Environmental	97 A	TER	22.48
CO ₂ Emissions (t/year)	0.14	% DER<TER	81.45
General Requirements Compliance	Pass	DFEE	10.13
		TFEE	22.17
		% DFEE<TFEE	54.32
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	22.48	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	4.17	kgCO ₂ /m ²	Pass
	-18.31 (-81.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	22.17	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	10.13	kWh/m ² /yr	
	-12.1 (-54.5%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.91 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Air-to-water heat pump	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	No cylinder	
-------------------	-------------	--

6 Controls

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Space heating controls

Time and temperature zone control

Pass

Hot water controls

No cylinder

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

0.80

Maximum

1.5

Pass

MVHR efficiency

87 %

Minimum

70 %

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)

Medium

Pass

Based on:

Overshading

Average

Windows facing South

7.60 m², No overhang

Air change rate

4.00 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

0.91 (measured in this dwelling)

Maximum

10.0

Pass

10 Key features

External wall U-value

0.14

W/m²K

Door U-value

0.80

W/m²K

Window U-value

0.80

W/m²K

Air permeability

0.9

m³/m²h

Photovoltaic array

1.26

kW

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	Plot 27	Issued on Date	07/03/2025
Assessment Reference	Plot 27	Prop Type Ref	Plot 27
Property	14 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	99 A	DER	1.80
Environmental	99 A	TER	21.21
CO ₂ Emissions (t/year)	0.02	% DER<TER	91.51
General Requirements Compliance	Pass	DFEE	15.82
		TFEE	31.01
		% DFEE<TFEE	49.00
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	21.21	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	1.80	kgCO ₂ /m ²	Pass
	-19.41 (-91.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	31.01	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	15.82	kWh/m ² /yr	
	-15.2 (-49.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.14 (max. 0.70)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.68 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
-------------------	---	------

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Primary pipework insulated

Yes

Pass

6 Controls

Space heating controls

Time and temperature zone control

Pass

Hot water controls

Cylinderstat

Pass

Independent timer for DHW

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

0.80

Maximum

1.5

Pass

MVHR efficiency

87

%

Minimum

70

%

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)

Medium

Pass

Based on:

Overshading

Average

Windows facing East

6.44 m², No overhang

Windows facing South

7.77 m², No overhang

Air change rate

4.00 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

0.68 (measured in this dwelling)

Maximum

10.0

Pass

10 Key features

External wall U-value

0.14

W/m²K

Door U-value

0.80

W/m²K

Window U-value

0.80

W/m²K

Air permeability

0.7

m³/m²h

Photovoltaic array

1.26

kW

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	Plot 28	Issued on Date	07/03/2025
Assessment Reference	Plot 28	Prop Type Ref	Plot 28
Property	15 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	98 A	DER	3.48
Environmental	98 A	TER	24.09
CO ₂ Emissions (t/year)	0.07	% DER<TER	85.55
General Requirements Compliance	Pass	DFEE	26.45
		TFEE	41.05
		% DFEE<TFEE	35.56
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	24.09	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	3.48	kgCO ₂ /m ²	Pass
	-20.61 (-85.6%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	41.05	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	26.45	kWh/m ² /yr	
	-14.6 (-35.6%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.15 (max. 0.30)	0.16 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.73 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Medium	Pass
Based on:		
Overshading	Average	
Windows facing East	8.02 m ² , No overhang	
Windows facing West	2.86 m ² , No overhang	
Air change rate	4.00 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	0.73 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.10	W/m ² K
Door U-value	0.80	W/m ² K
Window U-value	0.80	W/m ² K
Roof window U-value	0.80	W/m ² K
Air permeability	0.7	m ³ /m ² h
Photovoltaic array	1.26	kW

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	Plot 29	Issued on Date	07/03/2025
Assessment Reference	Plot 29	Prop Type Ref	Plot 29
Property	16 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	94 A	DER	8.59
Environmental	94 A	TER	26.46
CO ₂ Emissions (t/year)	0.41	% DER<TER	67.53
General Requirements Compliance	Pass	DFEE	31.32
		TFEE	49.25
		% DFEE<TFEE	36.40
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	26.46	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	8.59	kgCO ₂ /m ²	Pass
	-17.87 (-67.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	49.25	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	31.32	kWh/m ² /yr	
	-18.0 (-36.5%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.15 (max. 0.30)	0.16 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.78 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Air-to-water heat pump	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	No cylinder	
-------------------	-------------	--

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	No cylinder	

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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Medium	Pass
Based on:		
Overshading	Average	
Windows facing North	2.86 m ² , No overhang	
Windows facing South	7.24 m ² , No overhang	
Windows facing West	4.29 m ² , No overhang	
Air change rate	4.00 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	0.78 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Door U-value	0.80	W/m ² K
Window U-value	0.80	W/m ² K
Roof window U-value	0.80	W/m ² K
Air permeability	0.8	m ³ /m ² h
Photovoltaic array	1.26	kW

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	Plot 30	Issued on Date	07/03/2025
Assessment Reference	Plot 20	Prop Type Ref	Plot 30
Property	17 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	97 A	DER	5.20
Environmental	97 A	TER	25.56
CO ₂ Emissions (t/year)	0.16	% DER<TER	79.66
General Requirements Compliance	Pass	DFEE	20.34
		TFEE	33.07
		% DFEE<TFEE	38.50
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	25.56	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	5.20	kgCO ₂ /m ²	Pass
	-20.36 (-79.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	33.07	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	20.34	kWh/m ² /yr	
	-12.8 (-38.7%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.15 (max. 0.30)	0.16 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.99 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Air-to-water heat pump	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	No cylinder	
-------------------	-------------	--

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	No cylinder	

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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Medium	Pass
Based on:		
Overshading	Average	
Windows facing South	7.24 m ² , No overhang	
Air change rate	4.00 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	0.99 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Door U-value	0.80	W/m ² K
Window U-value	0.80	W/m ² K
Thermal bridging ψ -value	0.032	W/m ² K
Air permeability	1.0	m ³ /m ² h
Photovoltaic array	1.26	kW

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	Plot 31	Issued on Date	07/03/2025
Assessment Reference	Plot 31	Prop Type Ref	Plot 31
Property	18 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	97 A	DER	5.20
Environmental	97 A	TER	25.56
CO ₂ Emissions (t/year)	0.16	% DER<TER	79.66
General Requirements Compliance	Pass	DFEE	20.34
		TFEE	33.07
		% DFEE<TFEE	38.50
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	25.56	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	5.20	kgCO ₂ /m ²	Pass
	-20.36 (-79.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	33.07	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	20.34	kWh/m ² /yr	
	-12.8 (-38.7%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.15 (max. 0.30)	0.16 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.99 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Air-to-water heat pump	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	No cylinder	
-------------------	-------------	--

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	No cylinder	

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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Medium	Pass
Based on:		
Overshading	Average	
Windows facing South	7.24 m ² , No overhang	
Air change rate	4.00 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	0.99 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Door U-value	0.80	W/m ² K
Window U-value	0.80	W/m ² K
Thermal bridging ψ -value	0.032	W/m ² K
Air permeability	1.0	m ³ /m ² h
Photovoltaic array	1.26	kW

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	Plot 32	Issued on Date	07/03/2025
Assessment Reference	Plot 32	Prop Type Ref	Plot 32
Property	19 Marigold Court, 207 Wensley Road , READING, RG1 6FS		
SAP Rating	94 A	DER	8.35
Environmental	94 A	TER	25.95
CO ₂ Emissions (t/year)	0.40	% DER<TER	67.82
General Requirements Compliance	Pass	DFEE	30.40
		TFEE	47.14
		% DFEE<TFEE	35.50
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	25.95	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	8.35	kgCO ₂ /m ²	Pass
	-17.60 (-67.8%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	47.14	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.40	kWh/m ² /yr	
	-16.7 (-35.5%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.15 (max. 0.30)	0.16 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.69 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Air-to-water heat pump	
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	No cylinder	
-------------------	-------------	--

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	No cylinder	

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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Medium	Pass
Based on:		
Overshading	Average	
Windows facing East	4.29 m ² , No overhang	
Windows facing South	7.24 m ² , No overhang	
Air change rate	4.00 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	0.69 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Door U-value	0.80	W/m ² K
Window U-value	0.80	W/m ² K
Roof window U-value	0.80	W/m ² K
Air permeability	0.7	m ³ /m ² h
Photovoltaic array	1.26	kW

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	Plot 33	Issued on Date	07/03/2025
Assessment Reference	Plot 33	Prop Type Ref	Plot 33
Property	7 Orchid Terrace, 191 Wensley Road , READING, RG1 6EL		
SAP Rating	103 A	DER	-1.14
Environmental	102 A	TER	23.16
CO ₂ Emissions (t/year)	-0.52	% DER<TER	104.92
General Requirements Compliance	Pass	DFEE	37.45
		TFEE	51.18
		% DFEE<TFEE	26.84
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	23.16	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-1.14	kgCO ₂ /m ²	Pass
	-24.30 (-104.9%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	51.18	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	37.45	kWh/m ² /yr	
	-13.8 (-27.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	7.76 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Windows facing West	4.35 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 34	Issued on Date	07/03/2025
Assessment Reference	Plot 34	Prop Type Ref	Plot 34
Property	6 Orchid Terrace, 191 Wensley Road , READING, RG1 6EL		
SAP Rating	104 A	DER	-2.05
Environmental	103 A	TER	20.60
CO ₂ Emissions (t/year)	-0.62	% DER<TER	109.95
General Requirements Compliance	Pass	DFEE	30.32
		TFEE	42.60
		% DFEE<TFEE	28.84
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-2.05	kgCO ₂ /m ²	Pass
	-22.65 (-110.0%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.32	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.89 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.89 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 35	Issued on Date	07/03/2025
Assessment Reference	Plot 35	Prop Type Ref	Plot 35
Property	5 Orchid Terrace, 191 Wensley Road , READING, RG1 6EL		
SAP Rating	104 A	DER	-2.06
Environmental	103 A	TER	20.60
CO ₂ Emissions (t/year)	-0.62	% DER<TER	110.00
General Requirements Compliance	Pass	DFEE	30.31
		TFEE	42.60
		% DFEE<TFEE	28.85
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-2.06	kgCO ₂ /m ²	Pass
	-22.66 (-110.0%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.31	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.88 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.88 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 36	Issued on Date	07/03/2025
Assessment Reference	Plot 36	Prop Type Ref	Plot 36
Property	4 Orchid Terrace, 191 Wensley Road , READING, RG1 6EL		
SAP Rating	104 A	DER	-2.08
Environmental	103 A	TER	20.60
CO ₂ Emissions (t/year)	-0.63	% DER<TER	110.10
General Requirements Compliance	Pass	DFEE	30.29
		TFEE	42.60
		% DFEE<TFEE	28.89
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-2.08	kgCO ₂ /m ²	Pass
	-22.68 (-110.1%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.29	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.84 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.84 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.8	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 37	Issued on Date	07/03/2025
Assessment Reference	Plot 37	Prop Type Ref	Plot 37
Property	3 Orchid Terrace, 191 Wensley Road , READING, RG1 6EL		
SAP Rating	104 A	DER	-2.06
Environmental	103 A	TER	20.60
CO ₂ Emissions (t/year)	-0.62	% DER<TER	110.00
General Requirements Compliance	Pass	DFEE	30.31
		TFEE	42.60
		% DFEE<TFEE	28.86
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-2.06	kgCO ₂ /m ²	Pass
	-22.66 (-110.0%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.31	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.87 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.87 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 38	Issued on Date	07/03/2025
Assessment Reference	Plot 38	Prop Type Ref	Plot 38
Property	2 Orchid Terrace, 191 Wensley Road , READING, RG1 6EL		
SAP Rating	104 A	DER	-2.01
Environmental	103 A	TER	20.60
CO ₂ Emissions (t/year)	-0.62	% DER<TER	109.76
General Requirements Compliance	Pass	DFEE	30.36
		TFEE	42.60
		% DFEE<TFEE	28.74
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-2.01	kgCO ₂ /m ²	Pass
	-22.61 (-109.8%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.36	kWh/m ² /yr	
	-12.2 (-28.6%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.98 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.98 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	1.0	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 39	Issued on Date	07/03/2025
Assessment Reference	Plot 39	Prop Type Ref	Plot 39
Property	1 Orchid Terrace, 191 Wensley Road , READING, RG1 6EL		
SAP Rating	103 A	DER	-1.17
Environmental	103 A	TER	23.16
CO ₂ Emissions (t/year)	-0.52	% DER<TER	105.05
General Requirements Compliance	Pass	DFEE	37.41
		TFEE	51.18
		% DFEE<TFEE	26.91
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	23.16	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	-1.17	kgCO ₂ /m ²	Pass
	-24.33 (-105.1%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	51.18	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	37.41	kWh/m ² /yr	
	-13.8 (-27.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.83 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	7.76 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Windows facing West	4.35 m ² , No overhang	
Air change rate	4.00 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	0.83 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.8	m ³ /m ² h
Photovoltaic array	3.40	kW

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	Plot 40	Issued on Date	07/03/2025
Assessment Reference	Plot 40	Prop Type Ref	Plot 40
Property	372 Wensley Road, READING, RG1 6DR		
SAP Rating	99 A	DER	1.87
Environmental	100 A	TER	23.16
CO ₂ Emissions (t/year)	-0.11	% DER<TER	91.93
General Requirements Compliance	Pass	DFEE	37.43
		TFEE	51.18
		% DFEE<TFEE	26.87
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	23.16	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	1.87	kgCO ₂ /m ²	Pass
	-21.29 (-91.9%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	51.18	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	37.43	kWh/m ² /yr	
	-13.8 (-27.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.88 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	7.76 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Windows facing West	4.35 m ² , No overhang	
Air change rate	4.00 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	0.88 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	2.55	kW

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	Plot 41	Issued on Date	07/03/2025
Assessment Reference	Plot 41	Prop Type Ref	Plot 41
Property	370 Wensley Road, READING, RG1 6DR		
SAP Rating	101 A	DER	0.89
Environmental	100 A	TER	20.60
CO ₂ Emissions (t/year)	-0.21	% DER<TER	95.68
General Requirements Compliance	Pass	DFEE	30.30
		TFEE	42.60
		% DFEE<TFEE	28.88
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	0.89	kgCO ₂ /m ²	Pass
	-19.71 (-95.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.30	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.85 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.85 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	2.55	kW

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	Plot 42	Issued on Date	07/03/2025
Assessment Reference	Plot 42	Prop Type Ref	Plot 42
Property	368 Wensley Road, READING, RG1 6DR		
SAP Rating	100 A	DER	0.93
Environmental	100 A	TER	20.60
CO ₂ Emissions (t/year)	-0.21	% DER<TER	95.49
General Requirements Compliance	Pass	DFEE	30.33
		TFEE	42.60
		% DFEE<TFEE	28.81
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	0.93	kgCO ₂ /m ²	Pass
	-19.67 (-95.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.33	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	2.55	kW

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	Plot 43	Issued on Date	07/03/2025
Assessment Reference	Plot 43	Prop Type Ref	Plot 43
Property	366 Wensley Road, READING, RG1 6DR		
SAP Rating	101 A	DER	0.91
Environmental	100 A	TER	20.60
CO ₂ Emissions (t/year)	-0.21	% DER<TER	95.58
General Requirements Compliance	Pass	DFEE	30.31
		TFEE	42.60
		% DFEE<TFEE	28.85
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	0.91	kgCO ₂ /m ²	Pass
	-19.69 (-95.6%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.31	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.88 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.88 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	2.55	kW

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	Plot 44	Issued on Date	07/03/2025
Assessment Reference	Plot 44	Prop Type Ref	Plot 44
Property	364 Wensley Road, READING, RG1 6DR		
SAP Rating	100 A	DER	0.93
Environmental	100 A	TER	20.60
CO ₂ Emissions (t/year)	-0.21	% DER<TER	95.49
General Requirements Compliance	Pass	DFEE	30.33
		TFEE	42.60
		% DFEE<TFEE	28.81
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	0.93	kgCO ₂ /m ²	Pass
	-19.67 (-95.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.33	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.92 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	2.55	kW

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	Plot 45	Issued on Date	07/03/2025
Assessment Reference	Plot 45	Prop Type Ref	Plot 45
Property	362 Wensley Road, READING, RG1 6DR		
SAP Rating	101 A	DER	0.92
Environmental	100 A	TER	20.60
CO ₂ Emissions (t/year)	-0.21	% DER<TER	95.53
General Requirements Compliance	Pass	DFEE	30.32
		TFEE	42.60
		% DFEE<TFEE	28.82
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	20.60	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	0.92	kgCO ₂ /m ²	Pass
	-19.68 (-95.5%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	42.60	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	30.32	kWh/m ² /yr	
	-12.3 (-28.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.91 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	10.91 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Air change rate	4.00 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	0.91 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	2.55	kW

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	Plot 46	Issued on Date	07/03/2025
Assessment Reference	Plot 46	Prop Type Ref	Plot 46
Property	360 Wensley Road, READING, RG1 6DR		
SAP Rating	99 A	DER	1.87
Environmental	100 A	TER	23.16
CO ₂ Emissions (t/year)	-0.11	% DER<TER	91.93
General Requirements Compliance	Pass	DFEE	37.43
		TFEE	51.18
		% DFEE<TFEE	26.87
Assessor Details	Mr. Andreas Andreou, Assessment Hive Ltd, Tel: 07931 737 186, andrew@assessmenthive.co.uk		Assessor ID
			AC35-0001
Client	Firat Pirbudak, Firat Pirbudak		

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)	23.16	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	1.87	kgCO ₂ /m ²	Pass
	-21.29 (-91.9%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	51.18	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	37.43	kWh/m ² /yr	
	-13.8 (-27.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.14 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	0.80 (max. 2.00)	0.80 (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	0.88 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi Electric Ecodan 6.0 kW PUZ-WM60VAA	
Secondary heating system	None	

5 Cylinder insulation

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Hot water storage	Nominal cylinder loss: 1.46 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	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	0.80		
Maximum	1.5		Pass
MVHR efficiency	87	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	7.76 m ² , No overhang	
Windows facing South	5.95 m ² , No overhang	
Windows facing West	4.35 m ² , No overhang	
Air change rate	4.00 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	0.88 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

External wall U-value	0.14	W/m ² K
Roof U-value	0.10	W/m ² K
Roof U-value	0.11	W/m ² K
Roof U-value	0.11	W/m ² K
Floor U-value	0.11	W/m ² K
Window U-value	0.80	W/m ² K
Air permeability	0.9	m ³ /m ² h
Photovoltaic array	2.55	kW

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