# Summary for Input Data

| | | | |
|---|---|---|---|
| Property Reference | Plot 6 | Issued on Date | 06/11/2025 |
| Assessment Reference | v1 | Prop Type Ref | |
| Property | Plot 1, Dee Road/Water Road, Reading | | |

| | | | | | |
|---|---|---|---|---|---|
| SAP Rating | 88 B | DER | 2.64 | TER | 9.27 |
| Environmental | 98 A | % DER < TER | | | 71.52 |
| $CO_2$ Emissions (t/year) | 0.26 | DFEE | 27.31 | TFEE | 29.09 |
| Compliance Check | See BREL | % DFEE < TFEE | | | 6.12 |
| % DPER < TPER | 42.98 | DPER | 27.56 | TPER | 48.33 |

| | | | |
|---|---|---|---|
| Assessor Details | Mr. Joe Cantwell Dillon | Assessor ID | BL89-0001 |
| Client | | | |

## SUMMARY FOR INPUT DATA FOR: New Build (As Designed)

| | | |
|---|---|---|
| **Orientation** | Northeast | |
| **Property Tenture** | ND | |
| **Transaction Type** | 6 | |
| **Terrain Type** | Suburban | |
| **1.0 Property Type** | House, Mid-Terrace | |
| Which Floor | 0 | |
| **2.0 Number of Storeys** | 3 | |
| **3.0 Date Built** | 2025 | |
| **3.0 Property Age Band** | L | |
| **4.0 Sheltered Sides** | 2 | |
| **5.0 Sunlight/Shade** | Average or unknown | |
| **6.0 Thermal Mass Parameter** | Precise calculation | |
| Thermal Mass | 0.00 | kJ/m²K |
| **7.0 Electricity Tariff** | Standard | |
| Smart electricity meter fitted | No | |
| Smart gas meter fitted | No | |

**7.0 Measurements**

| | Heat Loss Perimeter | Internal Floor Area | Average Storey Height |
|---|---|---|---|
| **Ground floor:** | 8.56 m | 37.08 m² | 2.37 m |
| **1st Storey:** | 8.56 m | 37.08 m² | 2.60 m |
| **2nd Storey:** | 8.56 m | 37.08 m² | 2.47 m |

| | | |
|---|---|---|
| **8.0 Living Area** | 26.42 | m² |

**9.0 External Walls**

| Description | Type | Construction | U-Value (W/m²K) | Kappa (kJ/m²K) | Gross Area(m²) | Nett Area (m²) | Shelter Res | Shelter | Openings | Area Calculation Type |
|---|---|---|---|---|---|---|---|---|---|---|
| External Wall 1 | Cavity Wall | Cavity wall; plasterboard on dabs or battens, lightweight aggregate block, filled cavity, any outside structure | 0.18 | 110.00 | 74.17 | 56.34 | 0.00 | None | 17.83 | Enter Gross Area |

**9.1 Party Walls**

| Description | Type | Construction | U-Value (W/m²K) | Kappa (kJ/m²K) | Area (m²) | Shelter Res | Shelter |
|---|---|---|---|---|---|---|---|
| Party Wall 1 | Filled Cavity with Edge Sealing | Dense plaster both sides. lightweight aggregate blocks, cavity or cavity fill | 0.00 | 140.00 | 130.75 | 0.00 | None |

**9.2 Internal Walls**

| Description | Construction | Kappa (kJ/m²K) | Area (m²) |
|---|---|---|---|
| Internal Wall 1 | Plasterboard on timber frame | 9.00 | 162.94 |

**10.0 External Roofs**

| Description | Type | Construction | U-Value (W/m²K) | Kappa (kJ/m²K) | Gross Area(m²) | Nett Area (m²) | Shelter Code | Shelter Factor | Calculation Type | Openings |
|---|---|---|---|---|---|---|---|---|---|---|
| Sloped Roof | External Slope Roof | Plasterboard, insulated slope | 0.11 | 9.00 | 10.05 | 10.05 | None | 0.00 | Enter Gross Area | 0.00 |
| Ashlar Roof | External Plane Roof | Plasterboard, insulated at ceiling level | 0.08 | 9.00 | 29.94 | 29.94 | None | 0.00 | Enter Gross Area | 0.00 |

# Summary for Input Data

elmhurst energy

### 10.2 Internal Ceilings

| Description | Storey | Construction | Area (m²) |
|---|---|---|---|
| Internal Ceiling 1 | Lowest occupied | Plasterboard ceiling, carpeted chipboard floor | 37.08 |
| Internal Ceiling 2 | +1 | Plasterboard ceiling, carpeted chipboard floor | 37.08 |

### 11.0 Heat Loss Floors

| Description | Type | Storey Index | Construction | U-Value (W/m²K) | Shelter Code | Shelter Factor | Kappa (kJ/m²K) | Area (m²) |
|---|---|---|---|---|---|---|---|---|
| Heatloss Floor 1 | Ground Floor - Solid | Lowest occupied | Slab on ground, screed over insulation | 0.10 | None | 0.00 | 110.00 | 37.08 |

### 11.2 Internal Floors

| Description | Storey Index | Construction | Kappa (kJ/m²K) | Area (m²) |
|---|---|---|---|---|
| Internal Floor 1 | | Plasterboard ceiling, carpeted chipboard floor | 18.00 | 37.08 |
| Internal Floor 2 | | Plasterboard ceiling, carpeted chipboard floor | 18.00 | 37.08 |

### 12.0 Opening Types

| Description | Data Source | Type | Glazing | Glazing Gap | Filling Type | G-value | Frame Type | Frame Factor | U Value (W/m²K) |
|---|---|---|---|---|---|---|---|---|---|
| Window | Manufacturer | Window | Double Low-E Soft 0.1 | | | 0.63 | | 0.70 | 1.30 |
| Glazed Door | Manufacturer | Window | Double Low-E Soft 0.1 | | | 0.63 | | 0.70 | 1.40 |
| Solid Door | Manufacturer | Solid Door | | | | 0.00 | | | 1.10 |

### 13.0 Openings

| Name | Opening Type | Location | Orientation | Area (m²) | Pitch |
|---|---|---|---|---|---|
| FW | Window | External Wall 1 | North East | 5.18 | 0 |
| RW | Window | External Wall 1 | South West | 7.44 | 0 |
| RGD | Glazed Door | External Wall 1 | South West | 3.47 | 0 |
| FSD | Solid Door | External Wall 1 | North East | 1.74 | 0 |

| | | |
|---|---|---|
| **14.0 Conservatory** | None | |
| **15.0 Draught Proofing** | 100 | % |
| **16.0 Draught Lobby** | No | |

| | |
|---|---|
| **17.0 Thermal Bridging** | Calculate Bridges |

### 17.1 List of Bridges

| Bridge Type | Source Type | Length | Psi | Adjusted Reference: | Imported |
|---|---|---|---|---|---|
| E2 Other lintels (including other steel lintels) | Gov Approved Scheme | 12.02 | 0.02 | 0.02 | No |
| E3 Sill | Gov Approved Scheme | 9.49 | 0.02 | 0.02 | No |
| E4 Jamb | Gov Approved Scheme | 21.88 | 0.01 | 0.01 | No |
| E5 Ground floor (normal) | Gov Approved Scheme | 8.56 | 0.06 | 0.06 | No |
| E6 Intermediate floor within a dwelling | Gov Approved Scheme | 17.12 | 0.00 | 0.00 | No |
| E12 Gable (insulation at ceiling level) | Gov Approved Scheme | 8.46 | 0.04 | 0.04 | No |
| E13 Gable (insulation at rafter level) | Gov Approved Scheme | 10.36 | 0.04 | 0.04 | No |
| E16 Corner (normal) | Gov Approved Scheme | 13.00 | 0.04 | 0.04 | No |
| E18 Party wall between dwellings | Gov Approved Scheme | 13.00 | 0.04 | 0.04 | No |
| P1 Party wall - Ground floor | Gov Approved Scheme | 18.78 | 0.04 | 0.04 | No |
| P2 Party wall - Intermediate floor within a dwelling | Table K1 - Default | 37.56 | 0.00 | 0.00 | No |
| P4 Party wall - Roof (insulation at ceiling level) | Gov Approved Scheme | 5.89 | 0.04 | 0.04 | No |
| P5 Party wall - Roof (insulation at rafter level) | Gov Approved Scheme | 5.47 | 0.03 | 0.03 | No |
| R5 Ridge (inverted) | Table K1 - Default | 11.30 | 0.12 | 0.12 | No |
| R6 Flat ceiling | Table K1 - Default | 12.99 | 0.12 | 0.12 | No |

### 19.0 Mechanical Ventilation

**Mechanical Ventilation**

| | |
|---|---|
| Mechanical Ventilation System Present | No |

### 20.0 Fans, Open Fireplaces, Flues

| | |
|---|---|
| Number of open chimneys | 0 |
| Number of open flues | 0 |
| Number of chimneys/flues attached to closed fire | 0 |
| Number of flues attached to solid fuel boiler | 0 |
| Number of flues attached to other heater | 0 |
| Number of blocked chimneys | 0 |
| Number of intermittent extract fans | 5 |
| Number of passive vents | 0 |
| Number of flueless gas fires | 0 |

| | | |
|---|---|---|
| **21.0 Fixed Cooling System** | No | |
| **22.0 Pressure Testing** | Yes | |
| Designed $AP_{50}$ | 5.00 | m³/(h.m²) @ 50 Pa |
| Property Tested? | Yes | |

# Summary for Input Data

| | |
|---|---|
| Test Method | Blower Door |

**22.0 Lighting**

| | |
|---|---|
| No Fixed Lighting | No |

| Name | Efficacy | Power | Capacity | Count |
|---|---|---|---|---|
| Lighting 1 | 80.00 | 5.00 | 400.00 | 25 |

| | | |
|---|---|---|
| **24.0 Main Heating 1** | Database | |
| Percentage of Heat | 100.00 | % |
| Database Ref. No. | 108382 | |
| Fuel Type | Electricity | |
| SAP Code | 0 | |
| Model Name | PUZ-WZ80VAA and EHPT20X-MEHEW | |
| Manufacturer | Mitsubishi Electric Europe B.V. | |
| Controls SAP Code | 2207 | |
| Delayed Start Stat | No | |
| HETAS approved System | No | |
| Is MHS Pumped | Pump in heated space | |
| Heating Pump Age | 2013 or later | |
| Heat Emitter | Radiators and Underfloor | |
| Underfloor Heating | Yes - Pipes in thin screed | |
| Flow Temperature | Enter value | |
| Flow Temperature Value | 35.00 | |
| **25.0 Main Heating 2** | None | |
| **26.0 Heat Networks** | None | |
| **27.0 Secondary Heating** | None | |

**28.0 Water Heating**

| | |
|---|---|
| Water Heating | Main Heating 1 |
| SAP Code | 901 |
| Flue Gas Heat Recovery System | No |
| Waste Water Heat Recovery Instantaneous System 1 | No |
| Waste Water Heat Recovery Instantaneous System 2 | No |
| Waste Water Heat Recovery Storage System | No |
| Solar Panel | No |
| Water use <= 125 litres/person/day | Yes |
| Summer Immersion | No |
| Cold Water Source | From mains |
| Bath Count | 2 |
| Supplementary Immersion | No |
| Immersion Only Heating Hot Water | No |

**28.1 Showers**

| Description | Shower Type | Flow Rate [l/min] | Rated Power [kW] | Connected | Connected To |
|---|---|---|---|---|---|
| s1 | Vented hot water system | 7.00 | | No | |
| s2 | Vented hot water system | 7.00 | | No | |
| s3 | Vented hot water system | 7.00 | | No | |

**28.3 Waste Water Heat Recovery System**

| | |
|---|---|
| **29.0 Hot Water Cylinder** | Internal Store |
| Cylinder Stat | No |
| Cylinder In Heated Space | No |
| Independent Time Control | No |

# Summary for Input Data

| | | |
|---|---|---|
| Insulation Type | Measured Loss | |
| Cylinder Volume | 200.00 | L |
| Loss | 1.59 | kWh/day |
| In Airing Cupboard | No | |
| **31.0 Thermal Store** | None | |
| **34.0 Small-scale Hydro** | None | |
| Electricity Generated | 0.00 | |
| Apportioned | 0.00 | kWh/Year |
| Connected to dwelling's electricity meter | Yes | |
| Electricity Generation | Annual | |

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Recommendations**

**Lower cost measures**

**None**

**Further measures to achieve even higher standards**

**None**

# Predicted Energy Assessment

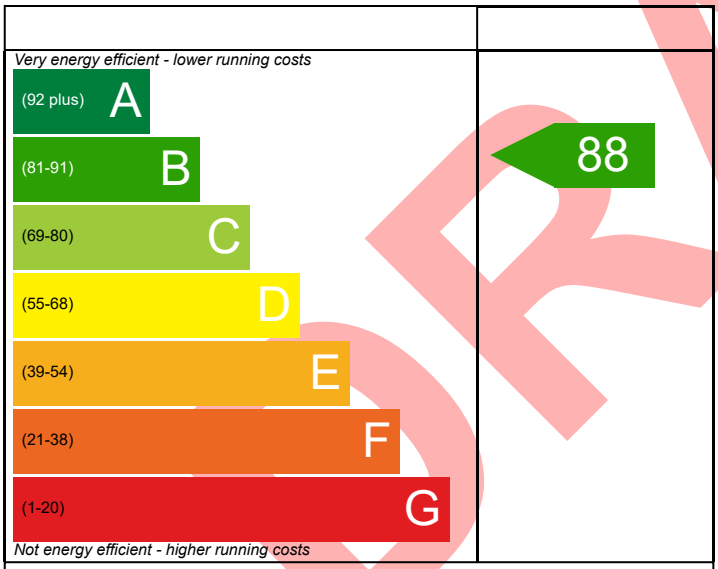
Plot 1, Dee Road/Water Road, Reading

| | |
|---|---|
| Dwelling type: | House, Mid-Terrace |
| Date of assessment: | 06/11/2025 |
| Produced by: | Joe Cantwell Dillon |
| Total floor area: | 111.24 m² |
| DRRN: | |

This document is a Predicted Energy Assessment for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, this rating will be updated and an official Energy Performance Certificate will be created for the property. This will include more detailed information about the energy performance of the completed property.

The energy performance has been assessed using the Government approved SAP 10 methodology and is rated in terms of the energy use per square meter of floor area; the energy efficiency is based on fuel costs and the environmental impact is based on carbon dioxide (CO2) emissions.

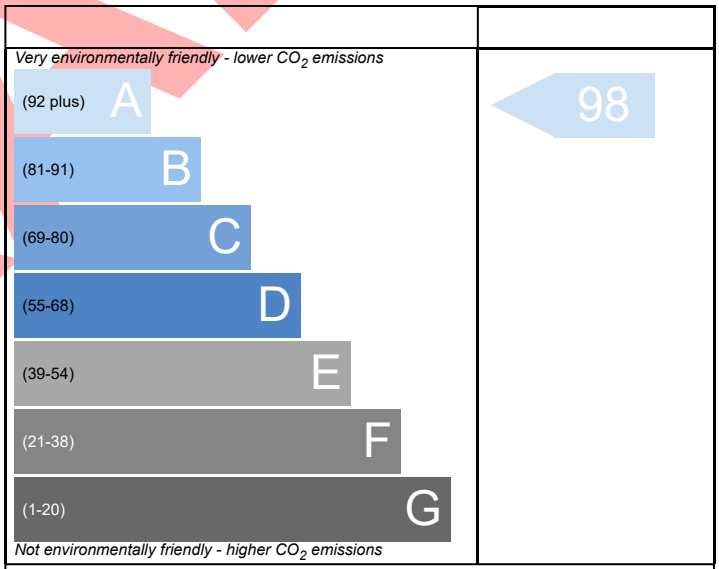
## Energy Efficiency Rating




**England** EU Directive 2002/91/EC

The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact ($CO_2$) Rating




**England** EU Directive 2002/91/EC

The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide ($CO_2$) emissions. The higher the rating the less impact it has on the environment.

DRAFT