# Summary for Input Data

| | | | |
|---|---|---|---|
| Property Reference | Unit 19 | Issued on Date | 21/06/2024 |
| Assessment Reference | 3B5P | Prop Type Ref | |
| Property | | | |

| | | | | | |
|---|---|---|---|---|---|
| SAP Rating | 93 A | DER | 0.08 | TER | 10.94 |
| Environmental | 100 A | % DER < TER | | | 99.27 |
| $CO_2$ Emissions (t/year) | 0.01 | DFEE | 33.90 | TFEE | 35.53 |
| Compliance Check | See BREL | % DFEE < TFEE | | | 4.61 |
| % DPER < TPER | 63.67 | DPER | 20.73 | TPER | 57.07 |

| | | | |
|---|---|---|---|
| Assessor Details | Mr. Steven Johnson | Assessor ID | Z708-0001 |
| Client | | | |

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

| | | |
|---|---|---|
| **Orientation** | Northeast | |
| **Property Tenture** | 1 | |
| **Transaction Type** | 6 | |
| **Terrain Type** | Urban | |
| **1.0 Property Type** | House, Semi-Detached | |
| Which Floor | 0 | |
| **2.0 Number of Storeys** | 2 | |
| **3.0 Date Built** | 2023 | |
| **3.0 Property Age Band** | L | |
| **4.0 Sheltered Sides** | 1 | |
| **5.0 Sunlight/Shade** | Average or unknown | |
| **6.0 Thermal Mass Parameter** | Precise calculation | |
| Thermal Mass | N/A | 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 |
|---|---|---|---|
| **Basement:** | 0.00 m | 0.00 m² | 0.00 m |
| **Ground floor:** | 18.40 m | 42.00 m² | 2.40 m |
| **1st Storey:** | 18.40 m | 42.00 m² | 2.60 m |
| **2nd Storey:** | 0.00 m | 0.00 m² | 0.00 m |
| **3rd Storey:** | 0.00 m | 0.00 m² | 0.00 m |
| **4th Storey:** | 0.00 m | 0.00 m² | 0.00 m |
| **5th Storey:** | 0.00 m | 0.00 m² | 0.00 m |
| **6th Storey:** | 0.00 m | 0.00 m² | 0.00 m |
| **7th Storey:** | 0.00 m | 0.00 m² | 0.00 m |

**8.0 Living Area** 13.20 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 | Timber Frame | Timber framed wall (one layer of plasterboard) | 0.19 | 9.00 | 92.00 | 76.80 | 0.00 | None | 15.20 | Calculate Wall 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 | Double plasterboard on both sides, twin timber f rame with/without sheathing board | 0.00 | 20.00 | 42.00 | 0.00 | None |

**9.2 Internal Walls**

| Description | Construction | Kappa (kJ/m²K) | Area (m²) |
|---|---|---|---|
| Internal Wall 1 | Plasterboard on timber frame | 9.00 | 40.00 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|

# Summary for Input Data

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| External Roof 1 | External Plane Roof | Plasterboard, insulated at ceiling level | 0.09 | 9.00 | 42.00 | 42.00 | None | 0.00 | Calculate Wall Area | 0.00 |

**10.2 Internal Ceilings**

| Description | Storey | Construction | Area (m²) |
|---|---|---|---|
| Internal Ceiling 1 | Lowest occupied | Plasterboard ceiling, carpeted chipboard floor | 42.00 |

**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 | Suspended concrete floor, carpeted | 0.11 | None | 0.00 | 75.00 | 42.00 |

**11.2 Internal Floors**

| Description | Storey Index | Construction | Kappa (kJ/m²K) | Area (m²) |
|---|---|---|---|---|
| Internal Floor 1 | | Plasterboard ceiling, carpeted chipboard floor | 9.00 | 42.00 |

**12.0 Opening Types**

| Description | Data Source | Type | Glazing | Glazing Gap | Filling Type | G-value | Frame Type | Frame Factor | U Value (W/m²K) |
|---|---|---|---|---|---|---|---|---|---|
| Door | Manufacturer | Solid Door | | | Air Filled | 0.00 | Wood | 0.70 | 1.00 |
| Window | Manufacturer | Window | Triple glazed | | Air Filled | 0.50 | Wood | 0.70 | 0.80 |

**13.0 Openings**

| Name | Opening Type | Location | Orientation | Area (m²) | Pitch |
|---|---|---|---|---|---|
| Front Door | Door | External Wall 1 | North East | 2.10 | 0 |
| Window | Window | External Wall 1 | North East | 6.10 | 0 |
| Window | Window | External Wall 1 | South West | 7.00 | 0 |

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

| | | |
|---|---|---|
| **17.0 Thermal Bridging** | User Input | |

**17.1 List of Bridges**

| Bridge Type | Source Type | Length | Psi | Adjusted Reference: | Imported |
|---|---|---|---|---|---|
| E2 Other lintels (including other steel lintels) | | 10.30 | 0.00 | 0.00 | No |
| E3 Sill | | 7.50 | 0.00 | 0.00 | No |
| E4 Jamb | | 20.85 | 0.00 | 0.00 | No |
| E5 Ground floor (normal) | | 18.40 | 0.00 | 0.00 | No |
| E6 Intermediate floor within a dwelling | | 18.40 | 0.00 | 0.00 | No |
| E10 Eaves (insulation at ceiling level) | | 10.00 | 0.00 | 0.00 | No |
| E12 Gable (insulation at ceiling level) | | 8.40 | 0.00 | 0.00 | No |
| E16 Corner (normal) | | 10.00 | 0.00 | 0.00 | No |
| E18 Party wall between dwellings | | 10.00 | 0.00 | 0.00 | No |
| P1 Party wall - Ground floor | | 8.40 | 0.00 | 0.00 | No |
| P2 Party wall - Intermediate floor within a dwelling | | 8.40 | 0.00 | 0.00 | No |
| P4 Party wall - Roof (insulation at ceiling level) | | 8.40 | 0.00 | 0.00 | No |

| | | |
|---|---|---|
| Y-value | 0.06 | W/m²K |
| Description | Design Stage | |

| | | |
|---|---|---|
| **18.0 Pressure Testing** | Yes | |
| Designed $AP_{50}$ | 5.00 | m³/(h.m²) @ 50 Pa |
| Property Tested? | Yes | |
| Test Method | Blower Door | |

**19.0 Mechanical Ventilation**

**Mechanical Ventilation**

| | |
|---|---|
| Mechanical Ventilation System Present | Yes |
| Approved Installation | No |
| Mechanical Ventilation data Type | Database |
| Type | Balanced mechanical ventilation with heat recovery |
| MV Reference Number | 500736 |
| Configuration | 2 |
| Manufacturer SFP | 0.65 |
| Duct Type | Rigid |
| MVHR Efficiency | 89.00 |
| Wet Rooms | 2 |
| SFP from Installer Commissioning Certificate | No |

# Summary for Input Data

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|---|---|
| MVHR System Location | Inside heated envelope (installed exclusively) |
| Duct Installation Specification | Level 2 |

**20.0 Fans, Open Fireplaces, Flues**

| | |
|---|---|
| **21.0 Fixed Cooling System** | No |

**22.0 Lighting**

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

| Name | Efficacy | Power | Capacity | Count |
|---|---|---|---|---|
| Lighting 1 | 75.00 | 4 | 300 | 10 |

| | | |
|---|---|---|
| **24.0 Main Heating 1** | Database | |
| Percentage of Heat | 100.00 | % |
| Database Ref. No. | 106465 | |
| Fuel Type | Electricity | |
| SAP Code | 0 | |
| In Winter | 232.54 | |
| In Summer | 170.70 | |
| Model Name | EDLA04EV3 | |
| Manufacturer | Daikin Europe NV | |
| System Type | Heat Pump | |
| Controls SAP Code | 2210 | |
| Delayed Start Stat | No | |
| Burner Control | On/Off | |
| HETAS approved System | No | |
| Oil Pump Inside | No | |
| FI Case | 0.00 | |
| Flue Type | None or Unknown | |
| Fan Assisted Flue | No | |
| Is MHS Pumped | Pump in unheated space | |
| Heating Pump Age | 2013 or later | |
| Heat Emitter | Radiators | |
| Flow Temperature | Enter value | |
| Flow Temperature Value | 55.00 | |
| Boiler Interlock | No | |
| Combi boiler type | No Combi | |
| Combi keep hot type | None | |

| | |
|---|---|
| **25.0 Main Heating 2** | None |
| **26.0 Heat Networks** | 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 |

# Summary for Input Data

| | |
|---|---|
| Bath Count | 1 |
| 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 |
|---|---|---|---|---|---|
| Shower | Combi boiler or unvented hot water system | 11.00 | 9.30 | Yes | Instantaneous System 1 |

**28.3 Waste Water Heat Recovery System**

| | | |
|---|---|---|
| **29.0 Hot Water Cylinder** | Hot Water Cylinder | |
| Cylinder Stat | Yes | |
| Cylinder In Heated Space | Yes | |
| Independent Time Control | Yes | |
| Insulation Type | Measured Loss | |
| Cylinder Volume | 179.00 | L |
| Loss | 1.39 | kWh/day |
| Pipes insulation | Fully insulated primary pipework | |
| In Airing Cupboard | No | |
| **31.0 Thermal Store** | None | |
| **32.0 Photovoltaic Unit** | One Dwelling | |
| Export Capable Meter? | Yes | |
| Connected To Dwelling | Yes | |
| Diverter | No | |
| Battery Capacity [kWh] | 0.00 | |

| PV Cells kWp | Orientation | Elevation | Overshading | FGHRS | MCS Certificate | Overshading Factor | MCS Certificate Reference | Panel Manufacturer |
|---|---|---|---|---|---|---|---|---|
| 4.20 | South West | 30° | None Or Little | No | No | 1.00 | | |

| | | |
|---|---|---|
| **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**