

# Building Regulations England Part L (BREL) Compliance Report

Approved Document L1 2021 Edition, England assessed by Array SAP 10 program, Array

Date: Fri 15 May 2026 14:34:48

| Project Information |                   |                 |                     |
|---------------------|-------------------|-----------------|---------------------|
| Assessed By         | Joshua Cunningham | Building Type   | Flat, Semi-detached |
| OCDEA Registration  | EES/024531        | Assessment Date | 2026-05-15          |

| Dwelling Details |                                               |                  |                   |
|------------------|-----------------------------------------------|------------------|-------------------|
| Assessment Type  | As designed                                   | Total Floor Area | 64 m <sup>2</sup> |
| Site Reference   | Flat 09                                       | Plot Reference   | Design V1         |
| Address          | 37 Flat 09 Albion Street, Southwick, BN42 4DN |                  |                   |

| Client Details |                                             |
|----------------|---------------------------------------------|
| Name           | PR HOMES DIRECT LIMITED                     |
| Company        | PR HOMES DIRECT LIMITED                     |
| Address        | 168 Church Road, Hove, East Sussex, BN3 2DL |

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

| 1a Target emission rate and dwelling emission rate                       |                                         |  |    |
|--------------------------------------------------------------------------|-----------------------------------------|--|----|
| Fuel for main heating system                                             | Electricity                             |  |    |
| Target carbon dioxide emission rate                                      | 14.33 kgCO <sub>2</sub> /m <sup>2</sup> |  |    |
| Dwelling carbon dioxide emission rate                                    | 4.31 kgCO <sub>2</sub> /m <sup>2</sup>  |  | OK |
| 1b Target primary energy rate and dwelling primary energy                |                                         |  |    |
| Target primary energy                                                    | 76.94 kWh <sub>PE</sub> /m <sup>2</sup> |  |    |
| Dwelling primary energy                                                  | 45.61 kWh <sub>PE</sub> /m <sup>2</sup> |  | OK |
| 1c Target fabric energy efficiency and dwelling fabric energy efficiency |                                         |  |    |
| Target fabric energy efficiency                                          | 35.6 kWh/m <sup>2</sup>                 |  |    |
| Dwelling fabric energy efficiency                                        | 34.4 kWh/m <sup>2</sup>                 |  | OK |

| 2a Fabric U-values               |                                                        |                                               |                                         |     |
|----------------------------------|--------------------------------------------------------|-----------------------------------------------|-----------------------------------------|-----|
| Element                          | Maximum permitted average U-Value [W/m <sup>2</sup> K] | Dwelling average U-Value [W/m <sup>2</sup> K] | Element with highest individual U-Value |     |
| External walls                   | 0.26                                                   | 0.19                                          | Walls (1) (0.19)                        | OK  |
| Party walls                      | 0.2                                                    | 0                                             | Party Wall (1) (0)                      | N/A |
| Curtain walls                    | 1.6                                                    | 0                                             | N/A                                     | N/A |
| Floors                           | 0.18                                                   | 0.14                                          | Heatloss Floor 1 - Exposed (0.14)       | OK  |
| Roofs                            | 0.16                                                   | N/A                                           | N/A                                     | N/A |
| Windows, doors, and roof windows | 1.6                                                    | 1.2                                           | LSW (1.2)                               | OK  |
| Rooflights                       | 2.2                                                    | N/A                                           | N/A                                     | N/A |

| 2b Envelope elements (better than typically expected values are flagged with a subsequent (!)) |                            |                              |  |
|------------------------------------------------------------------------------------------------|----------------------------|------------------------------|--|
| Name                                                                                           | Net area [m <sup>2</sup> ] | U-Value [W/m <sup>2</sup> K] |  |
| Exposed wall: Walls (1)                                                                        | 49.65                      | 0.19                         |  |
| Party wall: Party Wall (1)                                                                     | 54.66                      | 0 (!)                        |  |
| Upper floor: Heatloss Floor 1 - Exposed, Heatloss Floor 1 - Exposed                            | 43.72                      | 0.14                         |  |

| 2c Openings (better than typically expected values are flagged with a subsequent (!)) |                        |             |              |                              |
|---------------------------------------------------------------------------------------|------------------------|-------------|--------------|------------------------------|
| Name                                                                                  | Area [m <sup>2</sup> ] | Orientation | Frame factor | U-Value [W/m <sup>2</sup> K] |
| LSW, Opening Type 1 - Window                                                          | 8.3                    | South East  | 0.7          | 1.2                          |
| RSW, Opening Type 1 - Window                                                          | 1.76                   | North West  | 0.7          | 1.2                          |

| 2d Thermal bridging (better than typically expected values are flagged with a subsequent (!))     |                                                   |                                |                  |                     |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------|------------------|---------------------|
| Building part 1: Thermal bridging calculated from linear thermal transmittances for each junction |                                                   |                                |                  |                     |
| Main element                                                                                      | Junction detail                                   | Source                         | Psi value [W/mK] | Drawing / reference |
| External wall                                                                                     | E2: Other lintels (including other steel lintels) | Not government-approved scheme | 0.023 (!)        | RCDs                |
| External wall                                                                                     | E3: Sill                                          | Not government-approved scheme | 0.024 (!)        | RCDs                |
| External wall                                                                                     | E4: Jamb                                          | Not government-approved scheme | 0.019 (!)        | RCDs                |
|                                                                                                   |                                                   |                                |                  |                     |

| Main element  | Junction detail                                                   | Source                         | Psi value [W/mK] | Drawing / reference |
|---------------|-------------------------------------------------------------------|--------------------------------|------------------|---------------------|
| External wall | E16: Corner (normal)                                              | Not government-approved scheme | 0.037 (!)        | RCDs                |
| External wall | E7: Party floor between dwellings (in blocks of flats)            | Not government-approved scheme | 0.036 (!)        | RCDs                |
| Party wall    | P3: Intermediate floor between dwellings (in blocks of flats)     | Not government-approved scheme | 0.036 (!)        | RCDs                |
| External wall | E18: Party wall between dwellings                                 | Not government-approved scheme | 0.041            | RCDs                |
| External wall | E17: Corner (inverted - internal area greater than external area) | Not government-approved scheme | -0.079           | RCDs                |
| External wall | E20: Exposed floor (normal)                                       | SAP table default              | 0.32             |                     |
| External wall | E21: Exposed floor (inverted)                                     | SAP table default              | 0.32             |                     |

### 3 Air permeability (better than typically expected values are flagged with a subsequent (!))

|                                             |                                                      |    |
|---------------------------------------------|------------------------------------------------------|----|
| Maximum permitted air permeability at 50Pa  | 8 m <sup>3</sup> /hm <sup>2</sup>                    |    |
| Dwelling air permeability at 50Pa           | 3 m <sup>3</sup> /hm <sup>2</sup> , Design value (!) | OK |
| Air permeability test certificate reference |                                                      |    |

### 4 Space heating

#### Main heating system 1: Heat pump with radiators or underfloor heating - Electricity

|                  |                                 |
|------------------|---------------------------------|
| Efficiency       | 255.8%                          |
| Emitter type     | Radiators                       |
| Flow temperature | 45°C                            |
| System type      | Heat Pump                       |
| Manufacturer     | Mitsubishi Electric Europe B.V. |
| Model            | Ecodan 5.0 kW                   |
| Commissioning    |                                 |

#### Secondary heating system: N/A

|               |     |
|---------------|-----|
| Fuel          | N/A |
| Efficiency    | N/A |
| Commissioning |     |

### 5 Hot water

#### Cylinder/store - type: Cylinder

|                            |             |
|----------------------------|-------------|
| Capacity                   | 150 litres  |
| Declared heat loss         | 1.6 kWh/day |
| Primary pipework insulated | Yes         |
| Manufacturer               |             |
| Model                      |             |
| Commissioning              |             |

#### Waste water heat recovery system 1 - type: N/A

|              |  |
|--------------|--|
| Efficiency   |  |
| Manufacturer |  |
| Model        |  |

### 6 Controls

#### Main heating 1 - type: Time and temperature zone control by arrangement of plumbing and electrical services

|                 |  |
|-----------------|--|
| Function        |  |
| Ecodesign class |  |
| Manufacturer    |  |
| Model           |  |

#### Water heating - type: Cylinder thermostat and HW separately timed

|              |  |
|--------------|--|
| Manufacturer |  |
| Model        |  |

### 7 Lighting

|                                         |         |    |
|-----------------------------------------|---------|----|
| Minimum permitted light source efficacy | 75 lm/W |    |
| Lowest light source efficacy            | 95 lm/W | OK |
| External lights control                 | N/A     |    |

| 8 Mechanical ventilation                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----|
| <b>System type:</b> Balanced whole-house mechanical ventilation with heat recovery                                                                                                                                                                                                                                                                                                                                                                                                               |                          |    |
| Maximum permitted specific fan power                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1.5 W/(l/s)              |    |
| Specific fan power                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.9 W/(l/s)              | OK |
| Minimum permitted heat recovery efficiency                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 73%                      |    |
| Heat recovery efficiency                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 88%                      | OK |
| Manufacturer/Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Unknown - Planning Stage |    |
| Commissioning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |    |
| 9 Local generation                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |    |
| Technology type: <b>Photovoltaic system (1)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |    |
| Peak power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.598 kWp                |    |
| Orientation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Horizontal               |    |
| Pitch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Horizontal               |    |
| Overshading                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | None or very little      |    |
| Manufacturer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |    |
| MCS certificate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |    |
| 10 Heat networks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |    |
| N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |    |
| 11 Supporting documentary evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |    |
| N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |    |
| 12 Declarations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |    |
| a. Assessor Declaration                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |    |
| This declaration by the assessor is confirmation that the contents of this BREL Compliance Report are a true and accurate reflection based upon the design information submitted for this dwelling for the purpose of carrying out the "As designed" assessment, and that the supporting documentary evidence (SAP Conventions, Appendix 1 (documentary evidence) schedules the minimum documentary evidence required) has been reviewed in the course of preparing this BREL Compliance Report. |                          |    |
| Signed:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Assessor ID:             |    |
| Name:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Date:                    |    |
| b. Client Declaration                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |    |
| N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |    |

# Summary for Input Data



|                      |                                                       |                |            |
|----------------------|-------------------------------------------------------|----------------|------------|
| Plot Reference       | Flat 09                                               | Issued on Date | 15/05/2026 |
| Assessment Reference | Design V1                                             | Plot Type Ref  | 2 Bed      |
| Plot Address         | Flat 09, 37, Albion Street, Southwick, Hove, BN42 4DN | SAP Version    | 10.2       |

|                                    |          |               |       |      |       |
|------------------------------------|----------|---------------|-------|------|-------|
| SAP Rating                         | 84 B     | DER           | 4.31  | TER  | 14.33 |
| Environmental                      | 97 A     | % DER < TER   |       |      | 69.92 |
| CO <sub>2</sub> Emissions (t/year) | 0.25     | DFEE          | 34.42 | TFEE | 35.62 |
| Compliance Check                   | See BREL | % DFEE < TFEE |       |      | 3.39  |
| % DPER < TPER                      | 40.72    | DPER          | 45.61 | TPER | 76.94 |

|                  |                                  |             |           |
|------------------|----------------------------------|-------------|-----------|
| Assessor Details | Mr. Joshua Cunningham            | Assessor ID | Y502-0001 |
| Client           | QU-0145, PR HOMES DIRECT LIMITED |             |           |

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

|                                |                     |        |
|--------------------------------|---------------------|--------|
| Orientation                    | Northeast           |        |
| Property Tenture               | ND                  |        |
| Transaction Type               | 6                   |        |
| Terrain Type                   | Urban               |        |
| 1.0 Property Type              | Flat, Semi-Detached |        |
| Position of Flat               | Mid-floor flat      |        |
| Which Floor                    | 1                   |        |
| 2.0 Number of Storeys          | 1                   |        |
| 3.0 Date Built                 | 2026                |        |
| 4.0 Sheltered Sides            | 2                   |        |
| 5.0 Sunlight/Shade             | Average or unknown  |        |
| 6.0 Thermal Mass Parameter     | Enter TMP value     |        |
| Thermal Mass                   | 350.00              | kJ/m²K |
|                                |                     |        |
| 7.0 Electricity Tariff         | Standard            |        |
| Smart electricity meter fitted | Yes                 |        |
| Smart gas meter fitted         | No                  |        |

|                  |               |                     |                      |                       |
|------------------|---------------|---------------------|----------------------|-----------------------|
| 7.0 Measurements |               | Heat Loss Perimeter | Internal Floor Area  | Average Storey Height |
|                  | Ground floor: | 19.90 m             | 63.68 m <sup>2</sup> | 3.00 m                |

|                 |       |                |
|-----------------|-------|----------------|
| 8.0 Living Area | 22.62 | m <sup>2</sup> |
|-----------------|-------|----------------|

| Description               | Type        | Construction                                                                                                    | U-Value (W/m <sup>2</sup> K) | Kappa (kJ/m <sup>2</sup> K) | Gross Area(m <sup>2</sup> ) | Nett Area (m <sup>2</sup> ) | Shelter Res | Shelter | Openings | Area Calculation Type |
|---------------------------|-------------|-----------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|---------|----------|-----------------------|
| External Wall 1 - Masonry | Cavity Wall | Cavity wall; plasterboard on dabs or battens, lightweight aggregate block, filled cavity, any outside structure | 0.19                         |                             | 59.71                       | 49.65                       | 0.00        | None    | 10.06    | Enter Gross Area      |

| Description  | Type                            | Construction                                                     | U-Value (W/m <sup>2</sup> K) | Kappa (kJ/m <sup>2</sup> K) | Area (m <sup>2</sup> ) | Shelter Res | Shelter |
|--------------|---------------------------------|------------------------------------------------------------------|------------------------------|-----------------------------|------------------------|-------------|---------|
| Party Wall 1 | Filled Cavity with Edge Sealing | Single plasterboard on both sides, dense cellular blocks, cavity | 0.00                         |                             | 54.66                  | 0.00        | None    |

| Description     | Construction                                    | Kappa (kJ/m <sup>2</sup> K) | Area (m <sup>2</sup> ) |
|-----------------|-------------------------------------------------|-----------------------------|------------------------|
| Party Ceiling 1 | Precast concrete planks floor, screed, carpeted | 30.00                       | 63.68                  |

| Description                | Type                  | Storey Index    | Construction | U-Value (W/m <sup>2</sup> K) | Shelter Code | Shelter Factor | Kappa (kJ/m <sup>2</sup> K) | Area (m <sup>2</sup> ) |
|----------------------------|-----------------------|-----------------|--------------|------------------------------|--------------|----------------|-----------------------------|------------------------|
| Heatloss Floor 1 - Exposed | Exposed Floor - Solid | Lowest occupied | Other        | 0.14                         | None         | 0.00           | 0.00                        | 43.72                  |

| Description   | Storey Index    | Construction                                    | Kappa (kJ/m <sup>2</sup> K) | Area (m <sup>2</sup> ) |
|---------------|-----------------|-------------------------------------------------|-----------------------------|------------------------|
| Party Floor 1 | Lowest occupied | Precast concrete planks floor, screed, carpeted | 40.00                       | 19.96                  |

# Summary for Input Data

## 12.0 Opening Types

| Description             | Data Source  | Type   | Glazing               | Glazing Gap | Filling Type | G-value | Frame Type | Frame Factor | U Value (W/m²K) |
|-------------------------|--------------|--------|-----------------------|-------------|--------------|---------|------------|--------------|-----------------|
| Opening Type 1 - Window | Manufacturer | Window | Double Low-E Soft 0.1 |             |              | 0.63    |            | 0.70         | 1.20            |

## 13.0 Openings

| Name | Opening Type            | Location                  | Orientation | Area (m²) | Pitch |
|------|-------------------------|---------------------------|-------------|-----------|-------|
| LSW  | Opening Type 1 - Window | External Wall 1 - Masonry | South East  | 8.30      |       |
| RSW  | Opening Type 1 - Window | External Wall 1 - Masonry | North West  | 1.76      |       |

## 14.0 Conservatory

## 15.0 Draught Proofing

 %

## 16.0 Draught Lobby

## 17.0 Thermal Bridging

## 17.1 List of Bridges

| Bridge Type                                                               | Source Type              | Length | Psi   | Adjusted Reference: | Imported |
|---------------------------------------------------------------------------|--------------------------|--------|-------|---------------------|----------|
| E2 Other lintels (including other steel lintels)                          | Non Gov Approved Schemes | 4.95   | 0.02  | 0.02 RCDs           | No       |
| E3 Sill                                                                   | Non Gov Approved Schemes | 4.95   | 0.02  | 0.02 RCDs           | No       |
| E4 Jamb                                                                   | Non Gov Approved Schemes | 11.10  | 0.02  | 0.02 RCDs           | No       |
| E16 Corner (normal)                                                       | Non Gov Approved Schemes | 9.00   | 0.04  | 0.04 RCDs           | No       |
| E7 Party floor between dwellings (in blocks of flats)                     | Non Gov Approved Schemes | 13.30  | 0.04  | 0.04 RCDs           | No       |
| P3 Party wall - Intermediate floor between dwellings (in blocks of flats) | Non Gov Approved Schemes | 34.40  | 0.04  | 0.04 RCDs           | No       |
| E18 Party wall between dwellings                                          | Non Gov Approved Schemes | 3.00   | 0.04  | 0.04 RCDs           | No       |
| E17 Corner (inverted – internal area greater than external area)          | Non Gov Approved Schemes | 3.00   | -0.08 | -0.08 RCDs          | No       |
| E20 Exposed floor (normal)                                                | Table K1 - Default       | 14.73  | 0.32  | 0.32                | No       |
| E21 Exposed floor (inverted)                                              | Table K1 - Default       | 9.27   | 0.32  | 0.32                | No       |

Y-value  W/m²K

## 19.0 Mechanical Ventilation

### Mechanical Ventilation

|                                              |                                                                                 |
|----------------------------------------------|---------------------------------------------------------------------------------|
| Mechanical Ventilation System Present        | <input type="text" value="Yes"/>                                                |
| Mechanical Ventilation data Type             | <input type="text" value="Data Sheet"/>                                         |
| Type                                         | <input type="text" value="Balanced mechanical ventilation with heat recovery"/> |
| Manufacturer SFP                             | <input type="text" value="0.90"/>                                               |
| Duct Type                                    | <input type="text" value="Rigid"/>                                              |
| MVHR Efficiency                              | <input type="text" value="88.00"/>                                              |
| Wet Rooms                                    | <input type="text" value="1"/>                                                  |
| Brand, Model                                 | <input type="text" value="Unknown - Planning Stage"/>                           |
| SFP from Installer Commissioning Certificate | <input type="text" value="No"/>                                                 |
| MVHR System Location                         | <input type="text" value="Inside heated envelope (installed exclusively)"/>     |
| Duct Installation Specification              | <input type="text" value="Level 1"/>                                            |

## 20.0 Fans, Open Fireplaces, Flues

|                                                  |                                |
|--------------------------------------------------|--------------------------------|
| Number of open chimneys                          | <input type="text" value="0"/> |
| Number of open flues                             | <input type="text" value="0"/> |
| Number of chimneys/flues attached to closed fire | <input type="text" value="0"/> |
| Number of flues attached to solid fuel boiler    | <input type="text" value="0"/> |
| Number of flues attached to other heater         | <input type="text" value="0"/> |
| Number of blocked chimneys                       | <input type="text" value="0"/> |
| Number of intermittent extract fans              | <input type="text" value="0"/> |
| Number of passive vents                          | <input type="text" value="0"/> |
| Number of flueless gas fires                     | <input type="text" value="0"/> |

## 21.0 Fixed Cooling System

## 22.0 Pressure Testing

Designed AP<sub>50</sub>  m³/(h.m²) @ 50 Pa

Test Method

## 22.0 Lighting

# Summary for Input Data

|                   |                         |                          |                      |                           |                    |
|-------------------|-------------------------|--------------------------|----------------------|---------------------------|--------------------|
| No Fixed Lighting | No                      |                          |                      |                           |                    |
|                   | <b>Name</b><br>Lighting | <b>Efficacy</b><br>95.00 | <b>Power</b><br>5.00 | <b>Capacity</b><br>475.00 | <b>Count</b><br>10 |

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**24.0 Main Heating 1**

|                        |                                                  |
|------------------------|--------------------------------------------------|
| Database               |                                                  |
| Percentage of Heat     | 100.00 %                                         |
| Database Ref. No.      | 104569                                           |
| Fuel Type              | Electricity                                      |
| In Winter              | 255.84                                           |
| In Summer              | 177.99                                           |
| Model Name             | Ecodan 5.0 kW                                    |
| Manufacturer           | Mitsubishi Electric Europe B.V.                  |
| System Type            | Heat Pump                                        |
| Controls SAP Code      | 2207                                             |
| Controls description   | Time and temperature zone control by arrangement |
| Is MHS Pumped          | Pump in heated space                             |
| Heating Pump Age       | 2013 or later                                    |
| Heat Emitter           | Radiators                                        |
| Flow Temperature       | Enter value                                      |
| Flow Temperature Value | 45.00                                            |

---

**25.0 Main Heating 2**

|      |
|------|
| None |
|------|

---

**26.0 Heat Networks**

|      |
|------|
| None |
|------|

---

**27.0 Secondary Heating**

|      |
|------|
| None |
|------|

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**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            |
| Cold Water Source                                | From mains     |
| Bath Count                                       | 1              |
| 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 | 9.00              |                  | No        |              |

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**28.3 Waste Water Heat Recovery System**

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**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          | 150.00 L                         |
| Loss                     | 1.60 kWh/day                     |
| Pipes insulation         | Fully insulated primary pipework |

---

**31.0 Thermal Store**

|      |
|------|
| None |
|------|

# Summary for Input Data

## 32.0 Photovoltaic Unit

|                        |                                |
|------------------------|--------------------------------|
| Export Capable Meter?  | Multiple Dwellings – Connected |
| Connected To Dwelling  | No                             |
| Diverter               | Yes                            |
| Battery Capacity [kWh] | No                             |
|                        | 0.00                           |

| PV Cells kWp | Orientation | Elevation  | Overshading    | FGHRS | MCS Certificate | Overshading Factor | MCS Certificate Reference | Panel Manufacturer |
|--------------|-------------|------------|----------------|-------|-----------------|--------------------|---------------------------|--------------------|
| 0.60         | Horizontal  | Horizontal | None Or Little |       | No              | 1.00               |                           |                    |

## 34.0 Small-scale Hydro

|      |
|------|
| None |
|------|

| 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

# Thermal Bridging

|                      |                                                       |                |                    |
|----------------------|-------------------------------------------------------|----------------|--------------------|
| Plot Reference       | Flat 09                                               | Issued on Date | 15/05/2026         |
| Assessment Reference | Design V1                                             | Plot Type Ref  | Semi-Detached Flat |
| Plot Address         | Flat 09, 37, Albion Street, Southwick, Hove, BN42 4DN | SAP Version    | 10.2               |

|                                    |          |               |       |      |       |
|------------------------------------|----------|---------------|-------|------|-------|
| SAP Rating                         | 84 B     | DER           | 4.31  | TER  | 14.33 |
| Environmental                      | 97 A     | % DER < TER   |       |      | 69.92 |
| CO <sub>2</sub> Emissions (t/year) | 0.25     | DFEE          | 34.42 | TFEE | 35.62 |
| Compliance Check                   | See BREL | % DFEE < TFEE |       |      | 3.39  |
| % DPER < TPER                      | 40.72    | DPER          | 45.61 | TPER | 76.94 |

|                  |                                  |             |           |
|------------------|----------------------------------|-------------|-----------|
| Assessor Details | Mr. Joshua Cunningham            | Assessor ID | Y502-0001 |
| Client           | QU-0145, PR HOMES DIRECT LIMITED |             |           |

|               | Junction details                                                          | Source Type              | Psi (W/mK) | Length (m) | Result | Reference |
|---------------|---------------------------------------------------------------------------|--------------------------|------------|------------|--------|-----------|
| External wall | E2 Other lintels (including other steel lintels)                          | Non Gov Approved Schemes | 0.023      | 4.95       | 0.11   | RCDs      |
| External wall | E3 Sill                                                                   | Non Gov Approved Schemes | 0.024      | 4.95       | 0.12   | RCDs      |
| External wall | E4 Jamb                                                                   | Non Gov Approved Schemes | 0.019      | 11.10      | 0.21   | RCDs      |
| External wall | E16 Corner (normal)                                                       | Non Gov Approved Schemes | 0.037      | 9.00       | 0.33   | RCDs      |
| External wall | E7 Party floor between dwellings (in blocks of flats)                     | Non Gov Approved Schemes | 0.036      | 13.30      | 0.48   | RCDs      |
| Party wall    | P3 Party wall - Intermediate floor between dwellings (in blocks of flats) | Non Gov Approved Schemes | 0.036      | 34.40      | 1.24   | RCDs      |
| External wall | E18 Party wall between dwellings                                          | Non Gov Approved Schemes | 0.041      | 3.00       | 0.12   | RCDs      |
| External wall | E17 Corner (inverted – internal area greater than external area)          | Non Gov Approved Schemes | -0.079     | 3.00       | -0.24  | RCDs      |
| External wall | E20 Exposed floor (normal)                                                | Table K1 - Default       | 0.320      | 14.73      | 4.71   |           |
| External wall | E21 Exposed floor (inverted)                                              | Table K1 - Default       | 0.320      | 9.27       | 2.97   |           |

Total: 107.70 W/mK:  
Y-Value: 0.10 W/m²K: