| BASIC COMPLIANC<br>Calculation Type: N             | _                                 |              | esigned)  |                  | Design S<br>elmhurst en           |            |
|--|-----------------------------------|--------------|---|------------------|-----------------------------------|------------|
| Property Reference 0221 LMR I                      | B01 01                            |              |   |                  | Issued on Date                    | 22/07/2022 |
| Assessment Be Green                                |                                   |              | P   | rop Type Ref     | lat 01                            |            |
| Reference  |                                   |              |   |                  |                                   |            |
| Property 01  |                                   |              |   |                  |                                   |            |
| SAP Rating   |                                   | 77 C         | DER   | 32.10            | TER                               | 58.89      |
| Environmental                                      |                                   | 88 B         | % DER <ter< td=""><td></td><td>45.49</td><td></td></ter<>   |                  | 45.49                             |            |
| CO₂ Emissions (t/year)                             |                                   | 0.52         | DFEE  | 65.46            | TFEE                              | 66.01      |
| General Requirements Compliance                    |                                   | Pass         | % DFEE <tfee< td=""><td></td><td>0.83</td><td></td></tfee<> |                  | 0.83                              |            |
| Assessor Details Miss Jessica Jan<br>jess@jawsusta | mes, Jessica Jam<br>inability.com | es, Tel: 020 | 79938507,   |                  | Assessor ID                       | R564-0001  |
| Client   |                                   |              |   |                  |                                   |            |
| SUMARY FOR INPUT DATA FOR Nev                      | v Build (As Desig                 | gned)        |   |                  |                                   |            |
| Criterion 1 – Achieving the TER and                | TFEE rate                         |              |   |                  |                                   |            |
| La TER and DER                                     |                                   |              |   |                  |                                   |            |
| Fuel for main heating                              |                                   | Electrici    | ty (c)  |                  |                                   |            |
| Fuel factor  |                                   | 1.55 (ele    | ectricity)  |                  |                                   |            |
| Target Carbon Dioxide Emission I                   | Rate (TER)                        | 58.89        |   |                  | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| Dwelling Carbon Dioxide Emission Rate (DER)        |                                   | 32.10        |   |                  | kgCO <sub>2</sub> /m <sup>2</sup> | Pass       |
|  |                                   | -26.79 (·    | -45.5%)   |                  | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| Lb TFEE and DFEE                                   |                                   |              |   |                  |                                   |            |
| Target Fabric Energy Efficiency (T                 | FEE)                              | 66.01        |   |                  | kWh/m²/yr                         |            |
| Dwelling Fabric Energy Efficiency                  | (DFEE)                            | 65.46        |   |                  | kWh/m²/yr                         |            |
|  |                                   | -0.5 (-0.5   | 8%)   |                  | kWh/m²/yr                         | Pass       |
| Criterion 2 – Limits on design flexib              | ility                             |              |   |                  |                                   |            |
| Limiting Fabric Standards                          |                                   |              |   |                  |                                   |            |
| 2 Fabric U-values                                  |                                   |              |   |                  |                                   |            |
| Element  | Averag                            |              |   | lighest          |                                   |            |
| External wall                                      |                                   | nax. 0.30)   | 0   | .17 (max. 0.70)  |                                   | Pass       |
| Party wall   |                                   | nax. 0.20)   | -   |                  |                                   | Pass       |
| Floor  |                                   | nax. 0.25)   |   | 0.11 (max. 0.70) |                                   | Pass       |
| Openings   | 1.14 (n                           | nax. 2.00)   | 1   | 20 (max. 3.30)   |                                   | Pass       |
| 2a Thermal bridging                                |                                   |              |   |                  |                                   |            |
| Thermal bridging calculated u                      | ising default y-va                | alue of 0.15 |   |                  |                                   |            |
| <u>3 Air permeability</u>                          |                                   |              |   |                  |                                   |            |
| Air permeability at 50 pascals                     | ;                                 |              | sign value)   |                  |                                   |            |
| Maximum  |                                   | 10.0         |   |                  |                                   | Pass       |
| Limiting System Efficiencies                       |                                   |              |   |                  |                                   |            |
| 4 Heating efficiency                               |                                   |              |   |                  |                                   |            |
| Main heating system                                |                                   | Commu        | nity heating scher  | ne               |                                   |            |
| Secondary heating system                           |                                   | None         |   |                  |                                   |            |
| 5 Cylinder insulation                              |                                   |              |   |                  |                                   |            |
|  |                                   | No cylin     |   | -                |                                   |            |





| <u>6 Controls</u>                                     |   |      |  |
|---|---|------|--|
| Space heating controls                                | Flat rate charging, programmer and TRVs |      |  |
| Hot water controls                                    | No cylinder                             |      |  |
| 7 Low energy lights                                   |   |      |  |
| Percentage of fixed lights with low-energy fittings   | 100 %                                   |      |  |
| Minimum   | 75 %                                    | Pass |  |
| 8 Mechanical ventilation                              |   |      |  |
| Not applicable  |   |      |  |
| Criterion 3 – Limiting the effects of heat gains in s | summer                                  |      |  |
| <u>9 Summertime temperature</u>                       |   |      |  |
| Overheating risk (Thames Valley)                      | Medium                                  | Pass |  |
| Based on:   |   |      |  |
| Overshading   | More than average                       |      |  |
| Windows facing South                                  | 4.80 m <sup>2</sup> , No overhang       |      |  |
| Air change rate                                       | 6.00 ach                                |      |  |
| Blinds/curtains                                       | None                                    |      |  |
| Criterion 4 – Building performance consistent wit     | h DER and DFEE rate                     |      |  |
| Party Walls   |   |      |  |
| Туре  | U-value                                 |      |  |
| Filled Cavity with Edge Sealing                       | 0.00 W/m²K                              | Pass |  |
| Air permeability and pressure testing                 |   |      |  |
| 3 Air permeability                                    |   |      |  |
| Air permeability at 50 pascals                        | 4.00 (design value)                     |      |  |
| Maximum   | 10.0                                    | Pass |  |
| <u>10 Key features</u>                                |   |      |  |
| External wall U-value                                 | 0.13 W/m²K                              |      |  |
| Party wall U-value                                    | 0.00 W/m²K                              |      |  |
| Floor U-value   | 0.11 W/m²K                              |      |  |
| Door U-value  | 1.00 W/m²K                              |      |  |



| BASIC COMPLIANC<br>Calculation Type: N                                |                                  | _               | esigned)   |                  | Design S<br>elmhurst en           |            |
|---|----------------------------------|-----------------|--|------------------|-----------------------------------|------------|
| Property Reference 0221 LMR E   | 301 01                           |                 |  |                  | ssued on Date                     | 22/07/2022 |
| Assessment Be Lean  |                                  |                 | P  | rop Type Ref F   | lat 01                            |            |
| Reference 01  |                                  |                 |  |                  |                                   |            |
|   |                                  |                 |  |                  | 7                                 |            |
| SAP Rating  |                                  | 77 C            | DER  | 38.06            | TER                               | 39.27      |
| Environmental   |                                  | 86 B            | % DER <ter< td=""><td>64.02</td><td>3.08</td><td>C2 22</td></ter<> | 64.02            | 3.08                              | C2 22      |
| CO <sub>2</sub> Emissions (t/year)<br>General Requirements Compliance |                                  | 0.62            |  | 61.82            |                                   | 62.22      |
|   |                                  | Pass            | % DFEE <tfee< td=""><td></td><td>0.64</td><td></td></tfee<>        |                  | 0.64                              |            |
| jess@jawsustai  | nes, Jessica Jam<br>nability.com | es, Tel: 020    | 79938507,  |                  | Assessor ID                       | R564-0001  |
| Client  |                                  |                 |  |                  |                                   |            |
| SUMARY FOR INPUT DATA FOR New   | / Build (As Desig                | gned)           |  |                  |                                   |            |
| Criterion 1 – Achieving the TER and                                   | TFEE rate                        |                 |  |                  |                                   |            |
| 1a TER and DER  |                                  |                 |  |                  |                                   |            |
| Fuel for main heating   |                                  | Mains g         | as (c)   |                  |                                   |            |
| Fuel factor   |                                  | 1.00 (m         | ains gas)  |                  |                                   |            |
| Target Carbon Dioxide Emission F                                      | Rate (TER)                       | 39.27           |  |                  | kgCO₂/m²                          |            |
| Dwelling Carbon Dioxide Emission                                      | n Rate (DER)                     | 38.06           |  |                  | kgCO₂/m²                          | Pass       |
|   |                                  | -1.21 (-3       | 3.1%)  |                  | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| <u>1b TFEE and DFEE</u>   |                                  |                 |  |                  |                                   |            |
| Target Fabric Energy Efficiency (T                                    |                                  | 62.22           |  |                  | kWh/m²/yr                         |            |
| Dwelling Fabric Energy Efficiency                                     | (DFEE)                           | 61.82           | <u>C0()</u>  |                  | kWh/m²/yr<br>kWh/m²/yr            | Dece       |
| Criterion 2 – Limits on design flexibi                                | lity                             | -0.4 (-0.       | 078)   |                  | K V 11/111 / y1                   | Pass       |
|   | iity                             |                 |  |                  |                                   |            |
| Limiting Fabric Standards   |                                  |                 |  |                  |                                   |            |
| <u>2 Fabric U-values</u><br>Element                                   | Averag                           |                 |  | lighest          |                                   |            |
| External wall   | Averag                           | ax. 0.30)       |  | ).17 (max. 0.70) |                                   | Pass       |
| Party wall  |                                  | nax. 0.20)      |  | -                |                                   | Pass       |
| Floor   | · ·                              | nax. 0.25)      | C  | ).11 (max. 0.70) |                                   | Pass       |
| Openings  |                                  | ,<br>1ax. 2.00) |  |                  |                                   | Pass       |
| 2a Thermal bridging   |                                  |                 |  |                  |                                   |            |
| Thermal bridging calculated u   | sing default y-va                | alue of 0.15    |  |                  |                                   |            |
| 3 Air permeability  |                                  |                 |  |                  |                                   |            |
| Air permeability at 50 pascals  |                                  | 4.00 (de        | esign value)   |                  |                                   |            |
| Maximum   |                                  | 10.0            |  |                  |                                   | Pass       |
| Limiting System Efficiencies  |                                  |                 |  |                  |                                   |            |
| 4 Heating efficiency  |                                  |                 |  |                  |                                   |            |
| Main heating system   |                                  | Commu           | nity heating scher   | me               |                                   | -          |
| Secondary heating system  |                                  | None            |  |                  |                                   |            |
| 5 Cylinder insulation   |                                  |                 |  |                  |                                   |            |
| <u>5 Cymraet moulation</u>  |                                  |                 |  |                  |                                   |            |





| <u>6 Controls</u>                                      |   |       |      |
|--|---|-------|------|
| Space heating controls                                 | Flat rate charging, programmer and TRVs |       |      |
| Hot water controls                                     | No cylinder                             |       |      |
| 7 Low energy lights                                    |   |       |      |
| Percentage of fixed lights with low-energy fittings    | 100                                     | %     |      |
| Minimum  | 75                                      | %     | Pass |
| 8 Mechanical ventilation                               |   |       |      |
| Not applicable   |   |       |      |
| Criterion 3 – Limiting the effects of heat gains in su | mmer                                    |       |      |
| <u>9 Summertime temperature</u>                        |   |       |      |
| Overheating risk (Thames Valley)                       | Medium                                  |       | Pass |
| Based on:  |   |       | _    |
| Overshading  | Average                                 |       |      |
| Windows facing South                                   | 4.80 m <sup>2</sup> , No overhang       |       |      |
| Air change rate  | 6.00 ach                                |       |      |
| Blinds/curtains  | None                                    |       |      |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                       |       |      |
| Party Walls  |   |       |      |
| Туре   | U-value                                 |       |      |
| Filled Cavity with Edge Sealing                        | 0.00                                    | W/m²K | Pass |
| Air permeability and pressure testing                  |   |       |      |
| 3 Air permeability                                     |   |       |      |
| Air permeability at 50 pascals                         | 4.00 (design value)                     |       |      |
| Maximum  | 10.0                                    |       | Pass |
| <u>10 Key features</u>                                 |   |       |      |
| External wall U-value                                  | 0.13                                    | W/m²K |      |
| Party wall U-value                                     | 0.00                                    | W/m²K |      |
| Floor U-value  | 0.11                                    | W/m²K |      |
| Door U-value   | 1.00                                    | W/m²K |      |
|  |   |       |      |



|   | MPLIANCE I                               | _            |                  | Designed)   |                 | Design S<br>elmhurst ene          |            |
|---|--|--------------|------------------|---|-----------------|-----------------------------------|------------|
| Property Reference                              | 0221 LMR B01 (                           | )2           |                  |   | 1               | ssued on Date                     | 22/07/2022 |
| Assessment                                      | Be Green                                 |              |                  | Pr  | rop Type Ref Fl | at 02                             |            |
| Reference<br>Property                           | 02                                       |              |                  |   |                 |                                   |            |
|   | 02                                       |              |                  |   |                 |                                   |            |
| SAP Rating                                      |  |              | 77 C             | DER   | 32.22           | TER                               | 58.64      |
| Environmental<br>CO <sub>2</sub> Emissions (t/y | (227)                                    |              | 87 B             | % DER <ter<br>DFEE</ter<br>   |                 | 45.05                             | 74.21      |
| General Requirem                                |  |              | 0.57<br>Pass     | % DFEE <tfee< td=""><td>73.37</td><td>1.14</td><td>74.21</td></tfee<> | 73.37           | 1.14                              | 74.21      |
|   |  |              |                  |   |                 |                                   |            |
| Assessor Details<br>Client                      | Miss Jessica James,<br>jess@jawsustainab |              | es, Tel: 020     | 079938507,  |                 | Assessor ID                       | R564-0001  |
|   |  |              |                  |   |                 |                                   |            |
|   | JT DATA FOR New Bu                       |              | ned)             |   |                 |                                   |            |
|   | ving the TER and TFE                     | rate         |                  |   |                 |                                   |            |
| 1a TER and DER                                  |  |              |                  |   |                 |                                   |            |
| Fuel for main he<br>Fuel factor                 | eating                                   |              | Electric         |   |                 |                                   | _          |
|   | Dioxide Emission Rate                    |              | 1.55 (e<br>58.64 | lectricity)   |                 | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| -   | n Dioxide Emission Rate                  |              | 32.22            |   |                 | kgCO <sub>2</sub> /m <sup>2</sup> | Pass       |
| Dweining carbo                                  |  | le (DLN)     |                  | (-45.1%)  |                 | kgCO <sub>2</sub> /m <sup>2</sup> | F 855      |
| 1b TFEE and DFEE                                |  |              | -20.42           | (-43.170)   |                 | KgCO2/111                         |            |
| Target Fabric Er                                | nergy Efficiency (TFEE)                  | 1            | 74.21            |   |                 | kWh/m²/yr                         |            |
| -   | Energy Efficiency (DFI                   |              | 73.37            |   |                 | kWh/m²/yr                         |            |
| 0   | 0, , , ,                                 |              | -0.8 (-1         | 1%)   |                 | kWh/m²/yr                         | Pass       |
| Criterion 2 – Limits                            | s on design flexibility                  |              |                  |   |                 |                                   |            |
| Limiting Fabric                                 | Standards                                |              |                  |   |                 |                                   |            |
| 2 Fabric U-valu                                 | es                                       |              |                  |   |                 |                                   |            |
| Element   |  | Averag       | e                | н   | lighest         |                                   |            |
| External  | wall                                     | -            | nax. 0.30)       | 0   | .17 (max. 0.70) |                                   | Pass       |
| Party wa  | all                                      | 0.00 (m      | nax. 0.20)       | -   |                 |                                   | Pass       |
| Floor   |  | 0.11 (m      | nax. 0.25)       | 0   | .11 (max. 0.70) |                                   | Pass       |
| Roof  |  | 0.12 (m      | nax. 0.20)       | 0   | .12 (max. 0.35) |                                   | Pass       |
| Opening   | S  | 1.14 (m      | nax. 2.00)       | 1   | .20 (max. 3.30) |                                   | Pass       |
| 2a Thermal brid                                 | dging                                    |              |                  |   |                 |                                   |            |
| Thermal brid                                    | dging calculated using                   | default y-va | lue of 0.1       | 5   |                 |                                   |            |
| <u>3 Air permeabi</u>                           | lity                                     |              |                  |   |                 |                                   |            |
| Air permeat                                     | oility at 50 pascals                     |              | 4.00 (d          | esign value)  |                 |                                   |            |
| Maximum   |  |              | 10.0             |   |                 |                                   | Pass       |
| Limiting System                                 | n Efficiencies                           |              |                  |   |                 |                                   |            |
| 4 Heating effici                                | ency                                     |              |                  |   |                 |                                   |            |
| Main heatin                                     | g system                                 |              | Comm             | unity heating scher   | ne              |                                   | -          |
| Secondary h                                     | neating system                           |              | None             |   |                 |                                   |            |
| 5 Cylinder insul                                | lation                                   |              |                  |   |                 |                                   |            |
| Hot water st                                    | torage                                   |              | No cyli          | nder  |                 |                                   |            |
|   |  |              |                  |   |                 |                                   |            |
|   |  |              |                  |   |                 | Regs Region: Engl                 | and        |

Page 1 of 2





| <u>6 Controls</u>                                      |   |       |      |
|--|---|-------|------|
| Space heating controls                                 | Flat rate charging, programmer and TRVs |       | 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                               |   |       |      |
| Not applicable   |   |       |      |
| Criterion 3 – Limiting the effects of heat gains in su | nmer                                    |       |      |
| 9 Summertime temperature                               |   |       |      |
| Overheating risk (Thames Valley)                       | Medium                                  |       | Pass |
| Based on:  |   |       |      |
| Overshading  | More than average                       |       |      |
| Windows facing South                                   | 4.80 m <sup>2</sup> , No overhang       |       |      |
| Air change rate  | 6.00 ach                                |       |      |
| Blinds/curtains  | None                                    |       |      |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                       |       |      |
| Party Walls  |   |       |      |
| Туре   | U-value                                 |       |      |
| Filled Cavity with Edge Sealing                        | 0.00                                    | W/m²K | Pass |
| Air permeability and pressure testing                  |   |       |      |
| <u>3 Air permeability</u>                              |   |       | 1    |
| Air permeability at 50 pascals                         | 4.00 (design value)                     |       |      |
| Maximum  | 10.0                                    |       | Pass |
| <u>10 Key features</u>                                 |   |       |      |
| External wall U-value                                  | 0.13                                    | W/m²K |      |
| Party wall U-value                                     | 0.00                                    | W/m²K |      |
| Roof U-value   | 0.12                                    | W/m²K |      |
| Roof U-value   | 0.12                                    | W/m²K |      |
| Floor U-value  | 0.11                                    | W/m²K |      |
| Door U-value   | 1.00                                    | W/m²K |      |

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



| Assessment<br>Reference       Be Lean       Prop Type Ref       Flat 02         Property       02       02         SAP Rating       77 C       DER       39.25       TER       39.84         Environmental       85 B       % DER <ter< th="">       1.49       74.21         CO<sub>2</sub> Emissions (t/year)       0.70       DFEE       73.37       TFEE       74.21         General Requirements Compliance       Pass       % DFE       1.14       74.21         Assessor Details       Miss Jessica James, Jessica James, Tel: 02079938507,<br/>jess@jawsustainability.com       Assessor ID       R564-0001         Client       SUMARY FOR INPUT DATA FOR New Build (As Designed)       Mains gas (C)       1.00 (mains gas)       1.00 (mains gas)         Fuel for main heating<br/>Fuel factor       Mains gas (C)       1.00 (mains gas)       1.00 (mains gas)       kgCO<sub>2</sub>/m<sup>2</sup>       Pass         Dwelling Carbon Dioxide Emission Rate (DER)       39.25       kgCO<sub>2</sub>/m<sup>2</sup>       Pass       kgCO<sub>2</sub>/m<sup>2</sup>       Pass</ter<>   |                         | OMPLIANCE               | _              |              | Designed)   |                  | <b>Design S</b><br>elmhurst ene   |            |
|---|-------------------------|-------------------------|----------------|--------------|---|------------------|-----------------------------------|------------|
| Reference           Property         0.2           SAP Rating         77 C         DER         39.25         TER         39.84           Environmental         65 B         % DER         1.49         74.21           General Requirements Compliance         Pass         % DEECTEE         1.14         74.21           General Requirements Compliance         Pass         % DEECTEE         1.14         74.21           Assessor Details         Miss jessica James, Jessica James, Tel: 02079938507, James, Tel: 0207938507, James, Tel: 0207, James, Tel: 0207938507, James, Tel: 0207938507, James, Tel: 0207938507, James, Tel: 0207938507, James, Tel: 0207, James, Tel: 0207938507, James, Tel: 0207938507, James, Tel: 020798, James, Tel: 020797, James, Tel: 0207, James, Tel:   | <b>Property Referen</b> | 0221 LMR B01            | 02             |              |   |                  | ssued on Date                     | 22/07/2022 |
| Property         0.2           SAP Rating         77 C         DER         39.25         TER         39.84           Environmental         85 B         % DERSTER         1.49         20.20           Coptimisations (fyear)         0.70         DEFE         73.37         TFEE         74.21           General Requirements Compliance         Pass         % DEESCTEE         1.14         4           Assessor Details         Miss Jessica James, Jessica James, Tel: 02079938507,<br>Jessigipawsustainability.com         Assessor ID         R564-0001           Client         SuMARY FOR INPUT DATA FOR New Build (As Designed)         Assessor ID         R564-0001           Client         1.00 (mains gas)         Internal DER         Fuel form ain heating         Mains gas (c)           Fuel form ain heating         [1.00 (mains gas)         Image (CO)/m <sup>2</sup> Pass           Target Carbon Dioxide Emission Rate (TER)         39.84         kgCO/m <sup>2</sup> Pass           Ib TEE and DEE         73.37         kWh/m <sup>2</sup> /yr         Pass         4600/m <sup>2</sup> Pass           It Teff abric Energy Efficiency (TFEE)         74.21         KWh/m <sup>2</sup> /yr         Pass         4600/m <sup>2</sup> Pass           Limiting fabric Energy Efficiency (TFEE)         74.21         KWh/m <sup>2</sup> /yr   |                         | Be Lean                 |                |              | P   | rop Type Ref F   | lat 02                            |            |
| AP Rating         77 C         DER         39.25         TER         39.84           Environmental         85 B         % DER         1.49         7.4.21           Coremissions (L/year)         0.70         DFEE         73.37         TEE         74.21           General Requirements Compliance         Pass         % DFE         1.14         74.21           Assessor Details         Miss pesica James, Jessica James, Tel: 02079938507, jess@jawsustainability.com         Assessor ID         R564-0001           Citent         SUMARY FOR INPUT DATA FOR New Build (As Designed)         Citent         Citent         Citent           SUMARY FOR INPUT DATA FOR New Build (As Designed)         Citent         Citent         Citent         Citent Sumary For INPUT DATA FOR New Build (As Designed)           SUMARY FOR INPUT DATA FOR New Build (As Designed)         Citent Sumary For Input Sumary Fuel Sum   |                         |                         |                |              |   |                  |                                   |            |
| Environmental 85 8 % DER <ter %="" (j(year)="" 0.70="" 02079938507,="" 1.14="" 1.49="" 20079938507,="" 20079938507<="" 73.37="" 74.21="" [miss="" assessor="" co2="" compliance="" details="" dfee="" dfee<tfee="" emissions="" general="" james,="" jesse="" jessica="" pass="" requirements="" tel:="" tfee="" th=""><th>Property</th><th>02</th><th></th><th></th><th></th><th></th><th></th><th></th></ter>   | Property                | 02                      |                |              |   |                  |                                   |            |
| CO2 Emissions (L/year)         0.70         DFEE         73.37         TFEE         74.21           General Requirements Compliance         Pass         % DFEE         1.14           Assessor Details         Miss Jessica James, Jessica James, Tel: 02079938507,<br>jess@jawsustainability.com         Assessor ID         R564-0001           Citent   | SAP Rating              |                         |                | 77 C         |   | 39.25            | TER                               | 39.84      |
| General Requirements Compliance       Pass       % DFEE <tfee< td="">       1.14         Assessor Details       Miss Jessica James, Jessica James, Tel: 02079938507, Jess@Jawsustainability.com       Assessor ID       R564-0001         Cint       SUMARY FOR INPUT DATA FOR New Build (As Designed)       Criterion 1 – Achieving the TER and TFEE rate       Emeta         La TER and DER       Fuel form ain heating       Mains gas (C)       Fuel factor       1.00 (mains gas)         Target Carbon Dioxide Emission Rate (TER)       39.84       kgCO<sub>3</sub>/m<sup>2</sup>       Pass         Dwelling Carbon Dioxide Emission Rate (DER)       139.25       kgCO<sub>3</sub>/m<sup>2</sup>       Pass         Lo TEEE and DEE       Target Fabric Energy Efficiency (TFEE)       74.21       kWh/m<sup>2</sup>/yr       Pass         Target Fabric Energy Efficiency (TFEE)       74.21       kWh/m<sup>2</sup>/yr       Pass         Criterion 2 – Limits on design flexibility       0.00 (max. 0.30)       0.17 (max. 0.70)       Pass         Criterion 2 – Limits on design flexibility       0.00 (max. 0.20)       -       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Roof       0.12 (max. 0.20)       1.20 (max. 3.30)       Pass         Patry wall       0.00 (max. 0.20)       -       Pass         Roof       0.12 (max. 0.20)       <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<></tfee<>  |                         |                         |                |              |   |                  |                                   |            |
| Assessor Details       Miss Jessica James, Jessica James, Tel: 02079938507,<br>jess@jawsustainability.com       Assessor ID       R564-0001         Client       SUMARY FOR INPUT DATA FOR New Build (As Designed)       Criterion 1 – Achieving the TER and TFEE rate       E         E TER and DER       Fuel for main heating       Mains gas (c)       Fuel for main heating       KgC0 <sub>2</sub> /m <sup>2</sup> Fuel for main heating       Mains gas (c)       Fuel for main heating       KgC0 <sub>2</sub> /m <sup>2</sup> Pass         Target Carbon Dioxide Emission Rate (TER)       39.84       kgC0 <sub>2</sub> /m <sup>2</sup> Pass         Dwelling Carbon Dioxide Emission Rate (DER)       39.25       kgC0 <sub>2</sub> /m <sup>2</sup> Pass         Lb TEE and DFEE       74.21       KWh/m <sup>2</sup> /yr       Pass         Target Fabric Energy Efficiency (DFEE)       73.37       KWh/m <sup>2</sup> /yr       Pass         Dwelling Fabric Energy Efficiency (DFEE)       73.37       KWh/m <sup>2</sup> /yr       Pass         Efferin 2 – Limits on design flexibility       KWh/m <sup>2</sup> /yr       Pass       Foor       0.11 (max. 0.20)       .1 (max. 0.70)       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass       Pass       Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Ar permeability at 50 pascals       4.00 (design value)       Maximum       Maximum <td></td> <td></td> <td></td> <td></td> <td></td> <td>73.37</td> <td></td> <td>74.21</td>  |                         |                         |                |              |   | 73.37            |                                   | 74.21      |
| Client  Client  Criterion 1 – Achieving the TER and TFEE rate  La TER and DER  Fuel for main heating Fuel for fuel | General Requiren        | nents Compliance        |                | Pass         | % DFEE <tfee< td=""><td></td><td>1.14</td><td></td></tfee<> |                  | 1.14                              |            |
| Criterion 1 – Achieving the TER and TFEE rate         Ita TER and DER         Fuel for main heating         Fuel for main heating       1.00 (mains gas)         Target Carbon Dioxide Emission Rate (TER)       39.84       kgCO <sub>2</sub> /m <sup>2</sup> Dwelling Carbon Dioxide Emission Rate (DER)       39.25       kgCO <sub>2</sub> /m <sup>2</sup> Pass         -0.59 (-1.5%)       kgCO <sub>2</sub> /m <sup>2</sup> Pass       -0.59 (-1.5%)       kgCO <sub>2</sub> /m <sup>2</sup> Ite TEE and DFEE         Target Fabric Energy Efficiency (TFEE)       74.21       kWh/m <sup>2</sup> /yr       Pass         Criterion 2 – Limits on design flexibility         Imiting Fabric Standards         Zerberic U-values         Element       Average       Highest         External wall       0.14 (max. 0.30)       0.17 (max. 0.70)       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 0.35)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Air permeability         Air permeability         Air permeability         Air permeability <td></td> <td></td> <td></td> <td>es, Tel: 020</td> <td>079938507,</td> <td></td> <td>Assessor ID</td> <td>R564-0001</td>  |                         |                         |                | es, Tel: 020 | 079938507,  |                  | Assessor ID                       | R564-0001  |
| Criterion 1 – Achieving the TER and TFEE rate         Ita TER and DER         Fuel for main heating         Fuel for main heating       1.00 (mains gas)         Target Carbon Dioxide Emission Rate (TER)       39.84       kgCO <sub>2</sub> /m <sup>2</sup> Dwelling Carbon Dioxide Emission Rate (DER)       39.25       kgCO <sub>2</sub> /m <sup>2</sup> Pass         -0.59 (-1.5%)       kgCO <sub>2</sub> /m <sup>2</sup> Pass       -0.59 (-1.5%)       kgCO <sub>2</sub> /m <sup>2</sup> Ite TEE and DFEE         Target Fabric Energy Efficiency (TFEE)       74.21       kWh/m <sup>2</sup> /yr       Pass         Criterion 2 – Limits on design flexibility         Imiting Fabric Standards         Zerberic U-values         Element       Average       Highest         External wall       0.14 (max. 0.30)       0.17 (max. 0.70)       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 0.35)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Air permeability         Air permeability         Air permeability         Air permeability <td>SUMARY FOR INP</td> <td>UT DATA FOR New Bu</td> <td>ild (As Desig</td> <td>ned)</td> <td></td> <td></td> <td></td> <td></td>   | SUMARY FOR INP          | UT DATA FOR New Bu      | ild (As Desig  | ned)         |   |                  |                                   |            |
| La TER and DER       Mains gas (c)  |                         |                         |                |              |   |                  |                                   |            |
| Fuel for main heating       Mains gas (c)         Fuel factor       1.00 (mains gas)         Target Carbon Dioxide Emission Rate (TER)       39.84       kgCO2/m²         Dwelling Carbon Dioxide Emission Rate (DER)       39.25       kgCO2/m²         Dwelling Carbon Dioxide Emission Rate (DER)       39.25       kgCO2/m²         Dwelling Carbon Dioxide Emission Rate (DER)       39.25       kgCO2/m²         Dwelling Carbon Dioxide Emission Rate (DER)       74.21       kWh/m²/yr         Dwelling Fabric Energy Efficiency (DFEE)       74.21       kWh/m²/yr         Dwelling Fabric Energy Efficiency (DFEE)       73.37       kWh/m²/yr         Criterion 2 – Limits on design flexibility       Verage       Highest         Effect Values       External wall       0.14 (max. 0.30)       0.17 (max. 0.70)       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 0.35)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Air permeability       10.0       Pass         Air permeability       10.0       Pass         Air permeability       10.0       Pass         Air permeability       10.0  |                         |                         |                |              |   |                  |                                   |            |
| Fuel factor       1.00 (mains gas)         Target Carbon Dioxide Emission Rate (TER)       39.84       kgCO2/m²         Dwelling Carbon Dioxide Emission Rate (DER)       39.25       kgCO2/m²       Pass         -0.59 (-1.5%)       kgCO2/m²       Pass         Lb TFEE and DFEE       74.21       kWh/m²/yr       kWh/m²/yr         Dwelling Fabric Energy Efficiency (DFEE)       74.21       kWh/m²/yr       Pass         Dwelling Fabric Energy Efficiency (DFEE)       73.37       kWh/m²/yr       Pass         Criterion 2 - Limits on design flexibility       73.37       kWh/m²/yr       Pass         Zriterion 2 - Limits on design flexibility       73.37       kWh/m²/yr       Pass         Zriterion 2 - Limits on design flexibility       73.37       kWh/m²/yr       Pass         Zriterion 2 - Limits on design flexibility       73.37       kWh/m²/yr       Pass         Zriterion 2 - Limits on design flexibility       73.37       kWh/m²/yr       Pass         Zriterion 2 - Limits on design flexibility       70.00 (max. 0.30)       0.17 (max. 0.70)       Pass         Bebric L-values       Limiting Fabric Standards       90.00 (max. 0.20)       -       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.30)       Pass       Openings       1.4 (max.  |                         | eating                  |                | Mains        | gas (c)   |                  |                                   |            |
| Target Carbon Dioxide Emission Rate (TER)       39.84       kgCO2/m <sup>2</sup> Dwelling Carbon Dioxide Emission Rate (DER)       39.25       kgCO2/m <sup>2</sup> 1b TFEE and DFEE       0.59 (-1.5%)       kgCO3/m <sup>2</sup> Target Fabric Energy Efficiency (TFEE)       74.21       kWh/m <sup>2</sup> /yr         Dwelling Fabric Energy Efficiency (DFEE)       73.37       kWh/m <sup>2</sup> /yr         0.8 (-1.1%)       kWh/m <sup>2</sup> /yr       Pass         Criterion 2 – Limits on design flexibility         Limiting Fabric Standards         Z fabric U-values         Element       Average         Average       Highest         External wall       0.14 (max. 0.30)       0.17 (max. 0.70)       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Roof       0.12 (max. 0.20)       -       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Za Thermal bridging       Interwall y-value of 0.15       Jass       Pass         Air permeability       Air permeability       Air permeability       Pass         Air permeability at 50 pascals       4.00 (design value)       Pass         Maximum       10.0       Pass  |                         |                         |                |              |   |                  |                                   | $\exists$  |
| Dwelling Carbon Dioxide Emission Rate (DER)         39.25         kgCO₂/m²         Pass           -0.59 (-1.5%)         kgCO₂/m²         kgCO₂/m²         Pass           Target Fabric Energy Efficiency (TFEE)         74.21         kWh/m²/yr         kWh/m²/yr           Dwelling Fabric Energy Efficiency (DFEE)         73.37         kWh/m²/yr         Pass           Criterion 2 – Limits on design flexibility         -0.8 (-1.1%)         Pass           Zriterion 2 – Limits on design flexibility         Verage         Highest           Etement         Average         Highest         Pass           Floor         0.11 (max. 0.30)         0.17 (max. 0.70)         Pass           Floor         0.11 (max. 0.20)         -         Pass           Are party wall         0.00 (max. 0.20)         -         Pass           Roof         0.12 (max. 0.20)         0.12 (max. 0.35)         Pass           Openings         1.14 (max. 2.00)         1.20 (max. 3.30)         Pass           Air permeability         4.00 (design value)         Maximum         Pass           Main num         10.0         Pass         Pass           Limiting System Efficiencies         4.00 (design value)  | Target Carbon           | Dioxide Emission Rate   | (TER)          |              |   |                  | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| Ib TFEE and DFEE       74.21       kWh/m²/yr         Target Fabric Energy Efficiency (DFEE)       73.37       kWh/m²/yr         Dwelling Fabric Energy Efficiency (DFEE)       73.37       kWh/m²/yr         Criterion 2 – Limits on design flexibility       Pass         Element       Average       Highest         External wall       0.14 (max. 0.30)       0.17 (max. 0.70)       Pass         Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Za Thermal bridging       Thermal bridging calculated using default y-value of 0.15       Sair permeability       Pass         Maximum       10.0       Pass       Pass         Imiting System Efficiencies   | -                       |                         |                | 39.25        |   |                  |                                   | Pass       |
| Target Fabric Energy Efficiency (TFEE)       74.21       kWh/m²/yr         Dwelling Fabric Energy Efficiency (DFEE)       73.37       kWh/m²/yr         0.8 (-1.1%)       kWh/m²/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)       0.17 (max. 0.70)       Pass         Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 0.30)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Za Thermal bridging       10.0       Pass         Maximum       10.0       Pass         Maximum       10.0       Pass         Juniting System Efficiencies       -       -         Secondary heating system       Community heating scheme       -         Secondary heating system       None       -       -         Secondary heating system       None       -       -   | C C                     |                         |                | -0.59 (-     | 1.5%)   |                  |                                   | L          |
| Dwelling Fabric Energy Efficiency (DFEE)       73.37       kWh/m²/yr         iolastic interval       iolastic interval       iolastic interval         Criterion 2 – Limits on design flexibility         Limiting Fabric Standards         Z Fabric U-values         Highest         Element       Average       Highest         External wall       0.14 (max. 0.30)       0.17 (max. 0.70)       Pass         Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Roof       0.12 (max. 0.20)       0.12 (max. 0.35)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Za Thermal bridging       Intermal bridging       Pass         Air permeability       Air permeability       Air permeability         Maximum       10.0       Pass         Imiting System Efficiencies       -       -         4Heating efficiency       -       -         Main heating system       Community heating scheme       -         Secondary heating system       None       -         Secondary heating system       None       -   | 1b TFEE and DFEE        |                         |                |              |   |                  |                                   |            |
| -0.8 (-1.1%)       kWh/m²/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)       0.17 (max. 0.70)       Pass         Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Roof       0.12 (max. 0.20)       0.12 (max. 0.35)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Qarhermal bridging         Thermal bridging calculated using defa⊔t y-value of 0.15         Air permeability         Maximum       10.0       Pass         Maximum         Itmiting System Efficiencies         Community heating scheme       -         Secondary heating system       Community heating scheme       -         Secondary heating system       None       -       -         Secondary heating system       None       -       -  | Target Fabric E         | nergy Efficiency (TFEE  | )              | 74.21        |   |                  | kWh/m²/yr                         |            |
| Criterion 2 – Limits on design flexibility          Limiting Fabric Standards         2 Fabric U-values         Element       Average       Highest         External wall       0.14 (max. 0.30)       0.17 (max. 0.70)       Pass         Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Roof       0.12 (max. 0.20)       0.12 (max. 0.35)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Za Thermal bridging         Thermal bridging calculated using default y-value of 0.15         JAir permeability         Air permeability       10.0       Pass         Maximum       10.0       Pass         Limiting System Efficiencies         Alternal system         Secondary heating system       Community heating scheme       -         Secondary heating system       None       -       -  | Dwelling Fabric         | c Energy Efficiency (DF | EE)            | 73.37        | 73.37   |                  |                                   |            |
| Imiting Fabric Standards         2 Fabric U-values       Highest         Element       Average       Highest         External wall       0.14 (max. 0.30)       0.17 (max. 0.70)       Pass         Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Roof       0.12 (max. 0.20)       0.12 (max. 0.35)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Jast permeability         Thermal bridging calculated using default y-value of 0.15         Jair permeability at 50 pascals       4.00 (design value)         Maximum       10.0       Pass         Maximum       10.0         Jess         Jess colspan="2">A Heating efficiencies         Jess colspan="2">A fiftiencies         Jess colspan="2">Air permeability at 50 pascals       4.00 (design value)       Pass         Maximum       10.0       Pass       Pass       Pass         Jess colspan="2">Secondary heating system       Community heating scheme       -<   |                         |                         |                | -0.8 (-1     | 1%)   |                  | kWh/m²/yr                         | Pass       |
| 2 Fabric U-values       Highest         Element       Average       Highest         External wall       0.14 (max. 0.30)       0.17 (max. 0.70)       Pass         Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Roof       0.12 (max. 0.20)       0.12 (max. 0.35)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass         Za Thermal bridging calculated using default y-value of 0.15       Thermal bridging calculated using default y-value of 0.15         Air permeability       Air opermeability at 50 pascals       4.00 (design value)       Pass         Maximum       10.0       Pass       Pass         Element System Efficiencies       Interventing system  | Criterion 2 – Limit     | s on design flexibility |                |              |   |                  |                                   |            |
| ElementAverageHighestExternal wall0.14 (max. 0.30)0.17 (max. 0.70)PassParty wall0.00 (max. 0.20)-PassFloor0.11 (max. 0.25)0.11 (max. 0.70)PassRoof0.12 (max. 0.20)0.12 (max. 0.35)PassOpenings1.14 (max. 2.00)1.20 (max. 3.30)Pass <b>2 a Thermal bridging</b><br>calculated using default y-value of 0.15 <b>3 Air permeability</b><br>Maximum4.00 (design value)PassMaximum10.0Pass <b>Permeability System Efficiencies4 Heating efficiency</b> Main heating systemCommunity heating subtemPassSecondary heating systemNone-Secondary heating system <b>Community heating subtem</b>  | Limiting Fabric         | Standards               |                |              |   |                  |                                   |            |
| External wall0.14 (max. 0.30)0.17 (max. 0.70)PassParty wall0.00 (max. 0.20)-PassFloor0.11 (max. 0.25)0.11 (max. 0.70)PassRoof0.12 (max. 0.20)0.12 (max. 0.35)PassOpenings1.14 (max. 2.00)1.20 (max. 3.30)PassZa Thermal bridging<br>Thermal bridging calculated using default y-value of 0.15Air permeabilityAir permeability10.0PassMaximum10.0PassLimiting System EfficienciesCommunity heating schemeMain heating systemCommunity heating scheme-Secondary heating systemNone-   | <u>2 Fabric U-valu</u>  | ies                     |                |              |   |                  |                                   |            |
| Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.11 (max. 0.25)       0.11 (max. 0.70)       Pass         Roof       0.12 (max. 0.20)       0.12 (max. 0.35)       Pass         Openings       1.14 (max. 2.00)       1.20 (max. 3.30)       Pass <b>2a Thermal bridging</b> -       -       -         Thermal bridging calculated using default y-value of 0.15       -       -       - <b>3 Air permeability</b> -       -       Pass       -         Maximum       10.0       Pass       -       Pass <b>Limiting System Efficiencies</b> -       -       Pass <b>4 Heating efficiency</b> -       -       -         Main heating system       Community heating scheme       -       -         Secondary heating system       None       -       - <b>5 Cylinder insulation</b> -       -       -   | Element                 | t                       | Averag         | e            | F   | lighest          |                                   |            |
| Floor0.11 (max. 0.25)0.11 (max. 0.70)PassRoof0.12 (max. 0.20)0.12 (max. 0.35)PassOpenings1.14 (max. 2.00)1.20 (max. 3.30)Pass <b>2a Thermal bridging</b><br>Thermal bridging calculated using default y-value of 0.15 <b>3 Air permeability</b><br>Air permeability at 50 pascals4.00 (design value)Maximum10.0Pass <b>Limiting System Efficiencies4 Heating efficiency</b> Main heating systemCommunity heating scheme-Secondary heating systemNone_   | External                | l wall                  | 0.14 (m        | nax. 0.30)   | C   | ).17 (max. 0.70) |                                   | Pass       |
| Roof0.12 (max. 0.20)0.12 (max. 0.35)PassOpenings1.14 (max. 2.00)1.20 (max. 3.30)Pass <b>2a Thermal bridging</b><br>Thermal bridging calculated using default y-value of 0.15 <b>3 Air permeability</b> Air permeability at 50 pascals4.00 (design value)Maximum10.0Pass <b>Limiting System Efficiencies4 Heating efficiency</b> Main heating systemCommunity heating schemeSecondary heating systemNone <b>5 Cylinder insulation</b>  | Party wa                | all                     | 0.00 (m        | nax. 0.20)   | -   | -                |                                   | Pass       |
| Openings1.14 (max. 2.00)1.20 (max. 3.30)Pass <b>2a Thermal bridging</b><br>Thermal bridging calculated using default y-value of 0.15PassPass <b>3 Air permeability</b><br>Air permeability at 50 pascals4.00 (design value)PassMaximum10.0PassLimiting System Efficiencies <b>4 Heating efficiency</b><br>Secondary heating systemCommunity heating scheme-Secondary heating systemNone_ <b>5 Cylinder insulation</b>   | Floor                   |                         | 0.11 (n        | nax. 0.25)   | C   | ).11 (max. 0.70) |                                   | Pass       |
| 2a Thermal bridging         Thermal bridging calculated using default y-value of 0.15         3 Air permeability         Air permeability at 50 pascals         Maximum         10.0         Pass         Limiting System Efficiencies         4 Heating efficiency         Main heating system       Community heating scheme         Secondary heating system       None         5 Cylinder insulation  |                         |                         |                |              |   | . ,              |                                   | Pass       |
| Thermal bridging calculated using default y-value of 0.15   3 Air permeability   Air permeability at 50 pascals   Maximum   10.0   Pass   Limiting System Efficiencies   4 Heating efficiency   Main heating system   Secondary heating system   Secondary heating system   Limiting System Efficiencies   5 Cylinder insulation  | Opening                 | gs                      | 1.14 (m        | nax. 2.00)   | 1   | 20 (max. 3.30)   |                                   | Pass       |
| <b>3 Air permeability</b> Air permeability at 50 pascals       4.00 (design value)         Maximum       10.0 <b>Limiting System Efficiencies 4 Heating efficiency</b> Main heating system       Community heating scheme         Secondary heating system       None <b>5 Cylinder insulation</b>  | <u>2a Thermal bri</u>   | dging                   |                |              |   |                  |                                   |            |
| Air permeability at 50 pascals       4.00 (design value)         Maximum       10.0 <b>Limiting System Efficiencies 4 Heating efficiency</b> Main heating system         Secondary heating system         None <b>5 Cylinder insulation</b>   | Thermal bri             | idging calculated using | g default y-va | alue of 0.15 | 5   |                  |                                   |            |
| Maximum       10.0       Pass         Limiting System Efficiencies          4 Heating efficiency          Main heating system       Community heating scheme       -         Secondary heating system       None       -         5 Cylinder insulation       -       -  | <u>3 Air permeabi</u>   | ility                   |                |              |   |                  |                                   |            |
| Limiting System Efficiencies         4 Heating efficiency         Main heating system       Community heating scheme         Secondary heating system       None         5 Cylinder insulation  | Air permea              | bility at 50 pascals    |                | 4.00 (d      | esign value)  |                  |                                   | <u> </u>   |
| 4 Heating efficiency         Main heating system       Community heating scheme         Secondary heating system       None         5 Cylinder insulation   | Maximum                 |                         |                | 10.0         |   |                  |                                   | Pass       |
| Main heating system     Community heating scheme     -       Secondary heating system     None       5 Cylinder insulation  | Limiting Syster         | m Efficiencies          |                |              |   |                  |                                   |            |
| Secondary heating system       None       5 Cylinder insulation   | 4 Heating effici        | iency                   |                |              |   |                  |                                   |            |
| 5 Cylinder insulation   | Main heatir             | ng system               |                | Commu        | unity heating scher   | ne               |                                   |            |
|   | Secondary I             | heating system          |                | None         |   |                  |                                   |            |
| Hot water storage No cylinder   | <u>5 Cylinder insu</u>  | llation                 |                |              |   |                  |                                   |            |
|   | Hot water s             | storage                 |                | No cyli      | nder  |                  |                                   |            |
|   |                         |                         |                |              |   |                  |                                   |            |





| <u>6 Controls</u>                                      |   |       |      |
|--|---|-------|------|
| Space heating controls                                 | Flat rate charging, programmer and TRVs |       | 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                               |   |       |      |
| Not applicable   |   |       |      |
| Criterion 3 – Limiting the effects of heat gains in su | nmer                                    |       |      |
| 9 Summertime temperature                               |   |       |      |
| Overheating risk (Thames Valley)                       | Medium                                  |       | Pass |
| Based on:  |   |       |      |
| Overshading  | More than average                       |       |      |
| Windows facing South                                   | 4.80 m <sup>2</sup> , No overhang       |       |      |
| Air change rate  | 6.00 ach                                |       |      |
| Blinds/curtains  | None                                    |       |      |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                       |       |      |
| Party Walls  |   |       |      |
| Туре   | U-value                                 |       |      |
| Filled Cavity with Edge Sealing                        | 0.00                                    | W/m²K | Pass |
| Air permeability and pressure testing                  |   |       |      |
| <u>3 Air permeability</u>                              |   |       | 1    |
| Air permeability at 50 pascals                         | 4.00 (design value)                     |       |      |
| Maximum  | 10.0                                    |       | Pass |
| <u>10 Key features</u>                                 |   |       |      |
| External wall U-value                                  | 0.13                                    | W/m²K |      |
| Party wall U-value                                     | 0.00                                    | W/m²K |      |
| Roof U-value   | 0.12                                    | W/m²K |      |
| Roof U-value   | 0.12                                    | W/m²K |      |
| Floor U-value  | 0.11                                    | W/m²K |      |
| Door U-value   | 1.00                                    | W/m²K |      |

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



|                                 | /IPLIANCE I<br>n Type: Nev               |                  | _          | esigned)  |                    | Design S<br>elmhurst ene          |            |
|---------------------------------|--|------------------|------------|---|--------------------|-----------------------------------|------------|
| Property Reference              | 0221 LMR B01 (                           | 03               |            |   | Iss                | sued on Date                      | 22/07/2022 |
| Assessment                      | Be Green                                 |                  |            |   | Prop Type Ref Flat | t 03                              |            |
| Reference                       |  |                  |            |   |                    |                                   |            |
| Property                        | 03                                       |                  |            |   |                    |                                   |            |
| SAP Rating                      |  |                  | 77 C       | DER   | 31.41              | TER                               | 58.25      |
| Environmental                   |  |                  | 89 B       | % DER <ter< td=""><td></td><td>46.08</td><td></td></ter<>   |                    | 46.08                             |            |
| CO <sub>2</sub> Emissions (t/ye |  |                  | 0.50       | DFEE  |                    | TFEE                              | 62.34      |
| General Requireme               | nts Compliance                           |                  | Pass       | % DFEE <tfee< td=""><td></td><td>2.09</td><td></td></tfee<> |                    | 2.09                              |            |
| Assessor Details                | Miss Jessica James,<br>jess@jawsustainab |                  | , Tel: 020 | 79938507,   |                    | Assessor ID                       | R564-0001  |
| Client                          |  |                  |            |   |                    |                                   |            |
| SUMARY FOR INPUT                | DATA FOR New Bu                          | ild (As Designo  | ed)        |   |                    |                                   |            |
| Criterion 1 – Achievi           | ng the TER and TFE                       | E rate           |            |   |                    |                                   |            |
| 1a TER and DER                  |  |                  |            |   |                    |                                   |            |
| Fuel for main hea               | ting                                     |                  | Electrici  | ity (c)   |                    |                                   |            |
| Fuel factor                     |  |                  | 1.55 (el   | ectricity)  |                    |                                   |            |
| Target Carbon Di                | oxide Emission Rate                      | (TER)            | 58.25      |   |                    | kgCO₂/m²                          |            |
| Dwelling Carbon                 | Dioxide Emission Ra                      | te (DER)         | 31.41      |   |                    | kgCO <sub>2</sub> /m <sup>2</sup> | Pass       |
|                                 |  |                  | -26.84 (   | -46.1%)   |                    | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| Lb TFEE and DFEE                |  | N                | 62.24      |   |                    |                                   |            |
| -                               | rgy Efficiency (TFEE)                    |                  | 62.34      |   |                    | kWh/m²/yr                         |            |
| Dweining Fabric E               | nergy Efficiency (DF                     |                  | 61.03      | 1%)   |                    | kWh/m²/yr<br>kWh/m²/yr            | Pass       |
| Criterion 2 – Limits c          | on design flexibility                    |                  | 1.5 ( 2.   | 1707  |                    |                                   | 1 055      |
| Limiting Fabric St              |  |                  |            |   |                    |                                   |            |
| 2 Fabric U-values               |  |                  |            |   |                    |                                   |            |
| Element                         | 1  | Average          |            |   | Highest            |                                   |            |
| External w                      | all                                      | 0.15 (max        | x 0 30)    |   | 0.17 (max. 0.70)   |                                   | Pass       |
| Party wall                      |  | 0.00 (ma         |            |   | -                  |                                   | Pass       |
| Roof                            |  | 0.12 (ma         |            |   | 0.12 (max. 0.35)   |                                   | Pass       |
| Openings                        |  | 1.14 (ma         |            |   | 1.20 (max. 3.30)   |                                   | Pass       |
| 2a Thermal bridg                | ing                                      |                  |            |   |                    |                                   |            |
| Thermal bridg                   | ing calculated using                     | g default y-valu | ue of 0.15 | ,   |                    |                                   |            |
| 3 Air permeabilit               | Y  | -                |            |   |                    |                                   |            |
| Air permeabil                   | ity at 50 pascals                        |                  | 4.00 (de   | esign value)  |                    |                                   |            |
| Maximum                         |  |                  | 10.0       |   |                    |                                   | Pass       |
| Limiting System                 | Efficiencies                             |                  |            |   |                    |                                   |            |
| 4 Heating efficier              | ncy                                      |                  |            |   |                    |                                   |            |
| Main heating                    | system                                   |                  | Commu      | inity heating sche  | eme                |                                   | -          |
| Secondary he                    | ating system                             |                  | None       |   |                    |                                   |            |
| 5 Cylinder insulat              | tion                                     |                  |            |   |                    |                                   | _          |
|                                 |  |                  | No cylin   |   |                    |                                   |            |





| <u>6 Controls</u>                                      |                                   |         |      |
|--|-----------------------------------|---------|------|
| Space heating controls                                 | Flat rate charging, programmer a  | nd TRVs | 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                               |                                   |         |      |
| Not applicable   |                                   |         |      |
| Criterion 3 – Limiting the effects of heat gains in su | mmer                              |         |      |
| <u>9 Summertime temperature</u>                        |                                   |         |      |
| Overheating risk (Thames Valley)                       | Medium                            |         | Pass |
| Based on:  |                                   |         |      |
| Overshading  | Average                           |         |      |
| Windows facing East                                    | 0.42 m <sup>2</sup> , No overhang |         |      |
| Windows facing South                                   | 4.09 m <sup>2</sup> , No overhang |         |      |
| Windows facing West                                    | 0.21 m <sup>2</sup> , No overhang |         |      |
| Air change rate  | 6.00 ach                          |         |      |
| Blinds/curtains  | None                              |         |      |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                 |         |      |
| Party Walls  |                                   |         |      |
| Туре   | U-value                           |         |      |
| Filled Cavity with Edge Sealing                        | 0.00                              | W/m²K   | Pass |
| Air permeability and pressure testing                  |                                   |         |      |
| <u>3 Air permeability</u>                              |                                   |         |      |
| Air permeability at 50 pascals                         | 4.00 (design value)               |         |      |
| Maximum  | 10.0                              |         | Pass |
| <u>10 Key features</u>                                 |                                   |         |      |
| Party wall U-value                                     | 0.00                              | W/m²K   |      |
| Roof U-value   | 0.12                              | W/m²K   |      |
| Door U-value   | 1.00                              | W/m²K   |      |
|  |                                   |         |      |



| BASIC COMPLIANCE<br>Calculation Type: No              | _               | _                        | )esigned)  |                       | Design and the second s |              |
|---|-----------------|--------------------------|--|-----------------------|--|--------------|
| Property Reference 0221 LMR B0                        | 1 03            |                          |  |                       | sued on Date   | 22/07/2022   |
| Assessment Be Lean                                    |                 |                          | Р  | rop Type Ref Fla      | at 03  |              |
| Reference   |                 |                          |  |                       |  |              |
| Property 03   |                 |                          |  |                       |  |              |
| SAP Rating  |                 | 77 C                     | DER  | 38.21                 | TER  | 39.72        |
| Environmental   |                 | 86 B                     | % DER <ter< td=""><td></td><td>3.81</td><td><b>•</b></td></ter<> |                       | 3.81   | <b>•</b>     |
| CO <sub>2</sub> Emissions (t/year)                    |                 | 0.61                     | DFEE   | 61.03                 | TFEE   | 62.34        |
| General Requirements Compliance                       |                 | Pass                     | % DFEE <tfee< td=""><td></td><td>2.09</td><td></td></tfee<>      |                       | 2.09   |              |
| Assessor Details Miss Jessica Jame<br>jess@jawsustain | ,               | es, Tel: 020             | )79938507,   |                       | Assessor ID  | R564-0001    |
| Client  |                 |                          |  |                       |  |              |
| SUMARY FOR INPUT DATA FOR New I                       | Build (As Desig | ned)                     |  |                       |  |              |
| Criterion 1 – Achieving the TER and TI                | FEE rate        |                          |  |                       |  |              |
| 1a TER and DER  |                 |                          |  |                       |  |              |
| Fuel for main heating                                 |                 | Mains g                  | gas (c)  |                       |  |              |
| Fuel factor   |                 | 1.00 (m                  | ains gas)  |                       |  |              |
| Target Carbon Dioxide Emission Ra                     | te (TER)        | 39.72                    |  |                       | kgCO₂/m²   |              |
| Dwelling Carbon Dioxide Emission                      | Rate (DER)      | 38.21                    |  |                       | kgCO₂/m²   | Pass         |
|   |                 | -1.51 (-:                | 3.8%)  |                       | kgCO <sub>2</sub> /m <sup>2</sup>  |              |
| <u>1b TFEE and DFEE</u>                               |                 |                          |  |                       |  |              |
| Target Fabric Energy Efficiency (TFI                  |                 | 62.34                    |  |                       | kWh/m²/yr  |              |
| Dwelling Fabric Energy Efficiency (I                  | DFEE)           | 61.03                    | 4.0()  |                       | kWh/m²/yr  |              |
|   |                 | -1.3 (-2                 | .1%)   |                       | kWh/m²/yr  | Pass         |
| Criterion 2 – Limits on design flexibilit             | Lý              |                          |  |                       |  |              |
| Limiting Fabric Standards                             |                 |                          |  |                       |  |              |
| 2 Fabric U-values                                     |                 |                          |  |                       |  |              |
| Element   | Averag          |                          |  | lighest               |  | Dese         |
| External wall   |                 | nax. 0.30)<br>nax. 0.20) | Ĺ  | ).17 (max. 0.70)      |  | Pass         |
| Party wall<br>Roof                                    |                 | iax. 0.20)<br>iax. 0.20) | ſ  | -<br>).12 (max. 0.35) |  | Pass<br>Pass |
| Openings  |                 | nax. 2.00)               |  |                       |  | Pass         |
| 2a Thermal bridging                                   | ±.±+ (11        |                          | -  |                       |  | 1 4 5 5      |
| Thermal bridging calculated usi                       | ng default v-va | alue of 0.15             | 5  |                       |  |              |
| <u>3 Air permeability</u>                             | ng acraant y-vo |                          | -  |                       |  |              |
| Air permeability at 50 pascals                        |                 | 4.00 (de                 | esign value)   |                       |  |              |
| Maximum   |                 | 10.0                     |  |                       |  | Pass         |
| Limiting System Efficiencies                          |                 | 2010                     |  |                       |  |              |
| 4 Heating efficiency                                  |                 |                          |  |                       |  |              |
| Main heating system                                   |                 | Comm                     | unity heating schei  | ne                    |  |              |
| Secondary heating system                              |                 | None                     |  |                       |  |              |
| <u>5 Cylinder insulation</u>                          |                 |                          |  |                       |  |              |
| Hot water storage                                     |                 | No cylir                 | nder   |                       |  |              |
| not water storage                                     |                 | INO CYIII                |  |                       |  |              |





| <u>6 Controls</u>                                      |                                   |         |      |
|--|-----------------------------------|---------|------|
| Space heating controls                                 | Flat rate charging, programmer a  | nd TRVs | 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                               |                                   |         |      |
| Not applicable   |                                   |         |      |
| Criterion 3 – Limiting the effects of heat gains in su | mmer                              |         |      |
| <u>9 Summertime temperature</u>                        |                                   |         |      |
| Overheating risk (Thames Valley)                       | Medium                            |         | Pass |
| Based on:  |                                   |         |      |
| Overshading  | Average                           |         |      |
| Windows facing East                                    | 0.42 m <sup>2</sup> , No overhang |         |      |
| Windows facing South                                   | 4.09 m <sup>2</sup> , No overhang |         |      |
| Windows facing West                                    | 0.21 m <sup>2</sup> , No overhang |         |      |
| Air change rate  | 6.00 ach                          |         |      |
| Blinds/curtains  | None                              |         |      |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                 |         |      |
| Party Walls  |                                   |         |      |
| Туре   | U-value                           |         |      |
| Filled Cavity with Edge Sealing                        | 0.00                              | W/m²K   | Pass |
| Air permeability and pressure testing                  |                                   |         |      |
| <u>3 Air permeability</u>                              |                                   |         |      |
| Air permeability at 50 pascals                         | 4.00 (design value)               |         |      |
| Maximum  | 10.0                              |         | Pass |
| <u>10 Key features</u>                                 |                                   |         |      |
| Party wall U-value                                     | 0.00                              | W/m²K   |      |
| Roof U-value   | 0.12                              | W/m²K   |      |
| Door U-value   | 1.00                              | W/m²K   |      |
|  |                                   |         |      |



|                                 | /IPLIANCE R<br>n Type: New                   |                 | As D      | esigned)  |                    | Design S<br>elmhurst er           |            |
|---------------------------------|--|-----------------|-----------|---|--------------------|-----------------------------------|------------|
| <b>Property Reference</b>       | 0221 LMR B01 04                              | 4               |           |   | ไรรเ               | ed on Date                        | 22/07/2022 |
| Assessment                      | Be Green                                     |                 |           |   | Prop Type Ref Flat | )4                                |            |
| Reference                       | 0.4  |                 |           |   |                    |                                   |            |
| Property                        | 04   |                 |           |   |                    |                                   |            |
| SAP Rating                      |  |                 | 77 C      | DER   | 31.61              | TER                               | 58.34      |
| Environmental                   |  |                 | 88 B      | % DER <ter< td=""><td></td><td>45.82</td><td></td></ter<>   |                    | 45.82                             |            |
| CO <sub>2</sub> Emissions (t/ye |  |                 | 0.55      | DFEE  |                    |                                   | 73.16      |
| General Requireme               | nts Compliance                               |                 | Pass      | % DFEE <tfee< td=""><td></td><td>6.55</td><td></td></tfee<> |                    | 6.55                              |            |
| Assessor Details<br>Client      | Miss Jessica James, J<br>jess@jawsustainabil |                 | Tel: 020  | 79938507,   |                    | Assessor ID                       | R564-0001  |
|                                 | DATA FOR New Buil                            | d (As Designe   | d)        |   |                    |                                   |            |
| Criterion 1 – Achievi           | ng the TER and TFEE                          | rate            |           |   |                    |                                   |            |
| 1a TER and DER                  |  |                 |           |   |                    |                                   |            |
| Fuel for main hea               | ting   |                 | Electrici |   |                    |                                   |            |
| Fuel factor                     |  | L               |           | ectricity)  |                    | 7                                 |            |
| -                               | oxide Emission Rate (                        |                 | 58.34     |   |                    | kgCO₂/m²                          |            |
| Dwelling Carbon                 | Dioxide Emission Rate                        | e (DER)         | 31.61     | 45.00()   |                    | kgCO₂/m²                          | Pass       |
| 1b TFEE and DFEE                |  | l               | -26.73 (  | -45.8%)   |                    | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| Target Fabric Ene               | rgy Efficiency (TFEE)                        | [               | 73.16     |   |                    | kWh/m²/yr                         |            |
| Dwelling Fabric E               | nergy Efficiency (DFEI                       | E)              | 68.37     |   |                    | kWh/m²/yr                         |            |
|                                 |  |                 | -4.8 (-6. | 6%)   |                    | kWh/m²/yr                         | Pass       |
| Criterion 2 – Limits o          |  |                 |           |   |                    |                                   |            |
| Limiting Fabric St              | andards                                      |                 |           |   |                    |                                   |            |
| 2 Fabric U-values               |  |                 |           |   |                    |                                   |            |
| Element                         |  | Average         |           |   | Highest            |                                   |            |
| External w                      | all  | 0.16 (max.      |           |   | 0.17 (max. 0.70)   |                                   | Pass       |
| Party wall                      |  | 0.00 (max.      |           |   | -                  |                                   | Pass       |
| Openings                        | ing  | 1.11 (max.      | . 2.00)   |   | 1.20 (max. 3.30)   |                                   | Pass       |
| -                               | ing calculated using o                       | default y-value | e of 0.15 |   |                    |                                   |            |
| <u>3 Air permeabilit</u>        | -  | r               |           |   |                    |                                   |            |
|                                 | ity at 50 pascals                            |                 |           | esign value)  |                    |                                   |            |
| Maximum                         |  |                 | 10.0      |   |                    |                                   | Pass       |
| Limiting System B               |  |                 |           |   |                    |                                   |            |
| <u>4 Heating efficier</u>       |  | r               | -         |   |                    |                                   |            |
| Main heating                    | -  | L.              |           | nity heating sche   | eme                |                                   |            |
| Secondary he                    |  | l               | None      |   |                    |                                   |            |
| 5 Cylinder insulat              |  | r               |           |   |                    |                                   |            |
| Hot water sto                   | rage   |                 | No cylin  | lder  |                    |                                   |            |
| <u>6 Controls</u>               |  |                 |           |   |                    |                                   |            |



Design SAP elmhurst energy

| Space heating controls                                 | Flat rate charging, programmer and TRVs |       | 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                               |   |       |      |
| Not applicable   |   |       |      |
| Criterion 3 – Limiting the effects of heat gains in su | nmer                                    |       |      |
| <u>9 Summertime temperature</u>                        |   |       |      |
| Overheating risk (Thames Valley)                       | Slight                                  |       | Pass |
| Based on:  |   |       |      |
| Overshading  | Average                                 |       |      |
| Windows facing North                                   | 2.40 m <sup>2</sup> , No overhang       |       |      |
| Air change rate  | 6.00 ach                                |       |      |
| Blinds/curtains  | None                                    |       |      |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                       |       |      |
| Party Walls  |   |       |      |
| Туре   | U-value                                 |       |      |
| Filled Cavity with Edge Sealing                        | 0.00                                    | W/m²K | Pass |
| Air permeability and pressure testing                  |   |       |      |
| <u>3 Air permeability</u>                              |   |       |      |
| Air permeability at 50 pascals                         | 4.00 (design value)                     |       |      |
| Maximum  | 10.0                                    |       | Pass |
| <u>10 Key features</u>                                 |   |       |      |
| Party wall U-value                                     | 0.00                                    | W/m²K |      |
| Door U-value   | 1.00                                    | W/m²K |      |
|  |   |       |      |



| BASIC COMPLIANCE<br>Calculation Type: Ne                 | _                | (As D             | esigned)  |                 | Design S<br>elmhurst en           |            |
|--|------------------|-------------------|---|-----------------|-----------------------------------|------------|
| Property Reference 0221 LMR B01                          | 04               |                   |   | Is              | sued on Date                      | 22/07/2022 |
| Assessment Be Lean Reference                             |                  |                   | Pr  | op Type Ref Fla | at 04                             |            |
| Property 04  |                  |                   |   |                 |                                   |            |
| SAP Rating   |                  | 77 C              | DER   | 38.45           | TER                               | 39.67      |
| Environmental  |                  | 85 B              | % DER <ter< td=""><td></td><td>3.07</td><td></td></ter<>    |                 | 3.07                              |            |
| CO₂ Emissions (t/year)                                   |                  | 0.67              | DFEE  | 68.37           | TFEE                              | 73.16      |
| General Requirements Compliance                          |                  | Pass              | % DFEE <tfee< td=""><td></td><td>6.55</td><td></td></tfee<> |                 | 6.55                              |            |
| Assessor Details Miss Jessica James<br>jess@jawsustainal |                  | Tel: 0207         | 79938507,   |                 | Assessor ID                       | R564-0001  |
|  |                  | -1)               |   |                 |                                   |            |
| SUMARY FOR INPUT DATA FOR New Bu                         | : <u> </u>       | id)               |   |                 |                                   |            |
| Criterion 1 – Achieving the TER and TFE                  | E rate           |                   |   |                 |                                   |            |
| La TER and DER   |                  |                   | ( )   |                 |                                   |            |
| Fuel for main heating<br>Fuel factor                     |                  | Mains ga          |   |                 |                                   |            |
| Target Carbon Dioxide Emission Rate                      |                  | 1.00 (ma<br>39.67 | anis gas)   |                 | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| Dwelling Carbon Dioxide Emission Ra                      |                  | 38.45             |   |                 | kgCO <sub>2</sub> /m <sup>2</sup> | Pass       |
|  |                  | -1.22 (-3         | .1%)  |                 | kgCO <sub>2</sub> /m <sup>2</sup> | 1 400      |
| Lb TFEE and DFEE   |                  |                   |   |                 | 0 2,                              |            |
| Target Fabric Energy Efficiency (TFEE                    | E)               | 73.16             |   |                 | kWh/m²/yr                         |            |
| Dwelling Fabric Energy Efficiency (DF                    | EE)              | 68.37             |   |                 | kWh/m²/yr                         |            |
|  |                  | -4.8 (-6.6        | 6%)   |                 | kWh/m²/yr                         | Pass       |
| Criterion 2 – Limits on design flexibility               |                  |                   |   |                 |                                   |            |
| Limiting Fabric Standards                                |                  |                   |   |                 |                                   |            |
| 2 Fabric U-values  |                  |                   |   |                 |                                   |            |
| Element  | Average          |                   | н   | lighest         |                                   |            |
| External wall  | 0.16 (max        |                   | 0   | .17 (max. 0.70) |                                   | Pass       |
| Party wall   | 0.00 (max        |                   | -   |                 |                                   | Pass       |
| Openings   | 1.11 (max        | . 2.00)           | 1   | .20 (max. 3.30) |                                   | Pass       |
| 2a Thermal bridging                                      |                  | 60.45             |   |                 |                                   |            |
| Thermal bridging calculated using                        | g default y-valu | e of 0.15         |   |                 |                                   |            |
| <u>3 Air permeability</u>                                |                  |                   |   |                 |                                   |            |
| Air permeability at 50 pascals                           |                  |                   | sign value)   |                 |                                   |            |
| Maximum  |                  | 10.0              |   |                 |                                   | Pass       |
| Limiting System Efficiencies                             |                  |                   |   |                 |                                   |            |
| <u>4 Heating efficiency</u>                              |                  | Caracita          |   |                 |                                   |            |
| Main heating system                                      |                  |                   | nity heating scher  | ne              |                                   |            |
| Secondary heating system                                 |                  | None              |   |                 |                                   |            |
| 5 Cylinder insulation                                    |                  | No cylin          | el e 12   |                 |                                   |            |
| Hot water storage  |                  | UNIO CV/UD        | (1())   |                 |                                   |            |



Design SAP elmhurst energy

| Space heating controls                                 | Flat rate charging, programmer and TRVs |       | 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                               |   |       |      |
| Not applicable   |   |       |      |
| Criterion 3 – Limiting the effects of heat gains in su | nmer                                    |       |      |
| <u>9 Summertime temperature</u>                        |   |       |      |
| Overheating risk (Thames Valley)                       | Slight                                  |       | Pass |
| Based on:  |   |       |      |
| Overshading  | Average                                 |       |      |
| Windows facing North                                   | 2.40 m <sup>2</sup> , No overhang       |       |      |
| Air change rate  | 6.00 ach                                |       |      |
| Blinds/curtains  | None                                    |       |      |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                       |       |      |
| Party Walls  |   |       |      |
| Туре   | U-value                                 |       |      |
| Filled Cavity with Edge Sealing                        | 0.00                                    | W/m²K | Pass |
| Air permeability and pressure testing                  |   |       |      |
| <u>3 Air permeability</u>                              |   |       |      |
| Air permeability at 50 pascals                         | 4.00 (design value)                     |       |      |
| Maximum  | 10.0                                    |       | Pass |
| <u>10 Key features</u>                                 |   |       |      |
| Party wall U-value                                     | 0.00                                    | W/m²K |      |
| Door U-value   | 1.00                                    | W/m²K |      |
|  |   |       |      |



| BASIC COMP<br>Calculation T                                   |  | _                                | Designed)   |                   | Design S<br>elmhurst en  |              |
|---|--|----------------------------------|---|-------------------|--|--------------|
| Property Reference  | 0221 LMR B01 05                                  |                                  |   |                   | ssued on Date  | 22/07/2022   |
|   | Be Green   |                                  | Pr  | op Type Ref F     | lat 05   |              |
| Reference<br>Property   | )5   |                                  |   |                   |  |              |
|   |  |                                  |   |                   | 7  |              |
| SAP Rating  |  | 78 C                             | DER   | 31.07             | TER  | 57.85        |
| Environmental   |  | 89 B                             | % DER <ter<br>DFEE</ter<br>   | 58.20             | 46.29  | 61.64        |
| CO <sub>2</sub> Emissions (t/year)<br>General Requirements Co | ompliance  | Pass                             | % DFEE <tfee< td=""><td>56.20</td><td>5.58</td><td>01.04</td></tfee<> | 56.20             | 5.58   | 01.04        |
|   |  |                                  |   |                   |  |              |
|   | Jessica James, Jessica<br>@jawsustainability.com |                                  | )79938507,  |                   | Assessor ID  | R564-0001    |
| Client  | 2 ja woodo ta ma Sinty room                      |                                  |   |                   | <u></u>  |              |
| SUMARY FOR INPUT DAT  | A FOR New Build (As D                            | esigned)                         |   |                   |  |              |
| Criterion 1 – Achieving th                                    |  | -enginear                        |   |                   |  |              |
| La TER and DER  |  |                                  |   |                   |  |              |
| Fuel for main heating   |  | Electric                         | ity (c)   |                   |  |              |
| Fuel factor   |  |                                  | ectricity)  |                   |  |              |
| Target Carbon Dioxide   | Emission Rate (TER)                              | 57.85                            |   |                   | kgCO <sub>2</sub> /m <sup>2</sup>                                      |              |
| Dwelling Carbon Dioxide Emission Rate (DER)                   |  |                                  | 31.07   |                   |  | Pass         |
| -   |  | -26.78 (                         | (-46.3%)  |                   | kgCO <sub>2</sub> /m <sup>2</sup><br>kgCO <sub>2</sub> /m <sup>2</sup> | <u></u>      |
| b TFEE and DFEE   |  |                                  |   |                   |  |              |
| Target Fabric Energy E  | fficiency (TFEE)                                 | 61.64                            |   |                   | kWh/m²/yr  |              |
| Dwelling Fabric Energy  | efficiency (DFEE)                                | 58.20                            |   |                   | kWh/m²/yr  |              |
|   |  | -3.4 (-5                         | .5%)  |                   | kWh/m²/yr  | Pass         |
| Criterion 2 – Limits on de                                    |  |                                  |   |                   |  |              |
| Limiting Fabric Standa  | rds  |                                  |   |                   |  |              |
| 2 Fabric U-values   |  |                                  |   |                   |  |              |
| Element   |  | erage                            |   | lighest           |  |              |
| External wall   |  | .5 (max. 0.30)                   | 0   | .17 (max. 0.70)   |  | Pass         |
| Party wall<br>Openings  |  | 00 (max. 0.20)<br>.1 (max. 2.00) | -   | .20 (max. 3.30)   |  | Pass<br>Pass |
| 2a Thermal bridging   | 1.1  | .1 (IIIdX. 2.00)                 | Ţ   | .20 (11188. 5.50) |  | F d55        |
|   | alculated using default                          | v-value of 0.15                  |   |                   |  |              |
| <u>3 Air permeability</u>                                     |  | y value of 0.13                  | ,   |                   |  |              |
| Air permeability at   | 50 pascals                                       | 4 00 (de                         | esign value)  |                   |  |              |
| Maximum   | so pascais                                       | 10.0                             |   |                   |  | <br>Pass     |
| Limiting System Efficie                                       | encies   |                                  |   |                   |  |              |
| 4 Heating efficiency  |  |                                  |   |                   |  |              |
| Main heating syste  | m  | Commu                            | unity heating scher   | ne                |  | -            |
| Secondary heating   |  | None                             | .,  |                   |  |              |
| 5 Cylinder insulation   | -  | L                                |   |                   |  |              |
| Hot water storage   |  | No cylir                         | nder  |                   |  |              |
| 0 -   |  |                                  |   |                   |  |              |



Design SAP elmhurst energy

| Space heating controls                                 | Flat rate charging, programmer and TRV | /s    | 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                               |  |       |      |
| Not applicable   |  |       |      |
| Criterion 3 – Limiting the effects of heat gains in su | nmer                                   |       |      |
| <u>9 Summertime temperature</u>                        |  |       |      |
| Overheating risk (Thames Valley)                       | Medium                                 |       | Pass |
| Based on:  |  |       |      |
| Overshading  | Average                                |       |      |
| Windows facing East                                    | 2.40 m <sup>2</sup> , No overhang      |       |      |
| Air change rate  | 6.00 ach                               |       |      |
| Blinds/curtains  | None                                   |       |      |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                      |       |      |
| Party Walls  |  |       |      |
| Туре   | U-value                                |       |      |
| Filled Cavity with Edge Sealing                        | 0.00                                   | W/m²K | Pass |
| Air permeability and pressure testing                  |  |       |      |
| <u>3 Air permeability</u>                              |  |       |      |
| Air permeability at 50 pascals                         | 4.00 (design value)                    |       |      |
| Maximum  | 10.0                                   |       | Pass |
| <u>10 Key features</u>                                 |  |       |      |
| Party wall U-value                                     | 0.00                                   | W/m²K |      |
| Door U-value   | 1.00                                   | W/m²K |      |



| BASIC COMPLIANCE<br>Calculation Type: Ne                              |                   | _            | esigned)  |                  | Design S<br>elmhurst end          |            |
|---|-------------------|--------------|---|------------------|-----------------------------------|------------|
| Property Reference 0221 LMR B0  | 1 05              |              |   | I                | ssued on Date                     | 22/07/2022 |
| Assessment Be Lean  |                   |              | P   | rop Type Ref Fl  | at 05                             |            |
| Reference<br>Property 05  |                   |              |   |                  |                                   |            |
|   |                   |              |   |                  | 0                                 |            |
| SAP Rating  |                   | 78 C         | DER   | 37.76            | TER                               | 39.47      |
| Environmental   |                   | 87 B         | % DER <ter< td=""><td>F8 20</td><td>4.32</td><td>61.64</td></ter<>            | F8 20            | 4.32                              | 61.64      |
| CO <sub>2</sub> Emissions (t/year)<br>General Requirements Compliance |                   | 0.60<br>Pass | DFEE<br>% DFEE <tfee< td=""><td>58.20</td><td>5.58</td><td>61.64</td></tfee<> | 58.20            | 5.58                              | 61.64      |
|   |                   |              | -   |                  |                                   |            |
| Assessor Details Miss Jessica Jame<br>jess@jawsustaina                |                   | s, Tel: 0207 | 79938507,   |                  | Assessor ID                       | R564-0001  |
| Client  | ionity.com        |              |   |                  |                                   |            |
| SUMARY FOR INPUT DATA FOR New B                                       | Build (As Design  | ed)          |   |                  |                                   |            |
| Criterion $1 - $ Achieving the TER and TF                             |                   | euj          |   |                  |                                   |            |
| La TER and DER  |                   |              |   |                  |                                   |            |
|   |                   | Mains ga     |   |                  |                                   |            |
| Fuel for main heating<br>Fuel factor                                  |                   | 1.00 (ma     |   |                  |                                   |            |
| Target Carbon Dioxide Emission Rat                                    | te (TFR)          | 39.47        |   |                  | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| Dwelling Carbon Dioxide Emission F                                    |                   | 37.76        |   |                  | kgCO <sub>2</sub> /m <sup>2</sup> | Pass       |
|   | ()                | -1.71 (-4    | .3%)  |                  | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| Lb TFEE and DFEE  |                   |              | ,   |                  |                                   |            |
| Target Fabric Energy Efficiency (TFE                                  | E)                | 61.64        |   |                  | kWh/m²/yr                         |            |
| Dwelling Fabric Energy Efficiency (D                                  | OFEE)             | 58.20        |   |                  | kWh/m²/yr                         |            |
|   |                   | -3.4 (-5.5   | 5%)   |                  | kWh/m²/yr                         | Pass       |
| Criterion 2 – Limits on design flexibilit                             | У                 |              |   |                  |                                   |            |
| Limiting Fabric Standards   |                   |              |   |                  |                                   |            |
| 2 Fabric U-values   |                   |              |   |                  |                                   |            |
| Element   | Average           |              | I   | Highest          |                                   |            |
| External wall   | 0.15 (ma          |              | (   | 0.17 (max. 0.70) |                                   | Pass       |
| Party wall  | 0.00 (ma          |              |   | -                |                                   | Pass       |
| Openings  | 1.11 (ma          | x. 2.00)     | :   | 1.20 (max. 3.30) |                                   | Pass       |
| 2a Thermal bridging   |                   | 60.45        |   |                  |                                   |            |
| Thermal bridging calculated usin                                      | ng default y-vall | ue of 0.15   |   |                  |                                   |            |
| <u>3 Air permeability</u>   |                   | 4.00 ( )     | • • • •   |                  |                                   |            |
| Air permeability at 50 pascals<br>Maximum                             |                   | 4.00 (de     | sign value)   |                  |                                   | <br>Pass   |
| Limiting System Efficiencies  |                   | 10.0         |   |                  |                                   | Pass       |
| 4 Heating efficiency  |                   |              |   |                  |                                   |            |
|   |                   | Commun       | nity booting cobo   | 122.0            |                                   |            |
| Main heating system<br>Secondary heating system                       |                   | None         | nity heating sche   | IIIE             |                                   |            |
| <u>5 Cylinder insulation</u>  |                   | TIONE        |   |                  |                                   | ] L        |
| Hot water storage   |                   | No cylin     | der   |                  |                                   |            |
| ווטר שמוכו שנטומצל  |                   | INO CYIIII   | uci   |                  |                                   |            |



Design SAP elmhurst energy

| Space heating controls                                 | Flat rate charging, programmer and TRV | /s    | 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                               |  |       |      |
| Not applicable   |  |       |      |
| Criterion 3 – Limiting the effects of heat gains in su | nmer                                   |       |      |
| <u>9 Summertime temperature</u>                        |  |       |      |
| Overheating risk (Thames Valley)                       | Medium                                 |       | Pass |
| Based on:  |  |       |      |
| Overshading  | Average                                |       |      |
| Windows facing East                                    | 2.40 m <sup>2</sup> , No overhang      |       |      |
| Air change rate  | 6.00 ach                               |       |      |
| Blinds/curtains  | None                                   |       |      |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                      |       |      |
| Party Walls  |  |       |      |
| Туре   | U-value                                |       |      |
| Filled Cavity with Edge Sealing                        | 0.00                                   | W/m²K | Pass |
| Air permeability and pressure testing                  |  |       |      |
| <u>3 Air permeability</u>                              |  |       |      |
| Air permeability at 50 pascals                         | 4.00 (design value)                    |       |      |
| Maximum  | 10.0                                   |       | Pass |
| <u>10 Key features</u>                                 |  |       |      |
| Party wall U-value                                     | 0.00                                   | W/m²K |      |
| Door U-value   | 1.00                                   | W/m²K |      |



| BASIC COMPLIANC                                   |                                     |                          | esigned)  |                       | Design S<br>elmhurst en           |              |
|---|-------------------------------------|--------------------------|---|-----------------------|-----------------------------------|--------------|
| Property Reference 0221 LMR                       | B01 06                              |                          |   |                       | Issued on Date                    | 22/07/2022   |
| Assessment Be Green                               |                                     |                          | P   | rop Type Ref          | -lat 06                           |              |
| Reference   |                                     |                          |   |                       |                                   |              |
| Property 06                                       |                                     |                          |   |                       |                                   |              |
| SAP Rating  |                                     | 78 C                     | DER   | 30.91                 | TER                               | 56.32        |
| Environmental                                     |                                     | 89 B                     | % DER <ter< td=""><td></td><td>45.12</td><td>_</td></ter<>  |                       | 45.12                             | _            |
| CO <sub>2</sub> Emissions (t/year)                |                                     | 0.49                     | DFEE  | 54.80                 | TFEE                              | 55.61        |
| General Requirements Compliance                   | e                                   | Pass                     | % DFEE <tfee< td=""><td></td><td>1.46</td><td></td></tfee<> |                       | 1.46                              |              |
| Assessor Details Miss Jessica Ja<br>jess@jawsusta | ames, Jessica Jam<br>ainability.com | nes, Tel: 020            | 79938507,   |                       | Assessor ID                       | R564-0001    |
| Client  |                                     |                          |   |                       |                                   |              |
| SUMARY FOR INPUT DATA FOR Ne                      | w Build (As Desi                    | gned)                    |   |                       |                                   |              |
| Criterion 1 – Achieving the TER and               | TFEE rate                           |                          |   |                       |                                   |              |
| 1a TER and DER                                    |                                     |                          |   |                       |                                   |              |
| Fuel for main heating                             |                                     | Electrici                | ty (c)  |                       |                                   |              |
| Fuel factor                                       |                                     | 1.55 (el                 | ectricity)  |                       |                                   |              |
| Target Carbon Dioxide Emission                    | Rate (TER)                          | 56.32                    |   |                       | kgCO <sub>2</sub> /m <sup>2</sup> |              |
| Dwelling Carbon Dioxide Emissio                   | on Rate (DER)                       | 30.91                    |   |                       | kgCO₂/m²                          | Pass         |
|   |                                     | -25.41 (                 | -45.1%)   |                       | kgCO <sub>2</sub> /m <sup>2</sup> |              |
| 1b TFEE and DFEE                                  |                                     |                          |   |                       |                                   |              |
| Target Fabric Energy Efficiency (                 |                                     | 55.61                    |   |                       | kWh/m²/yr                         |              |
| Dwelling Fabric Energy Efficience                 | y (DFEE)                            | 54.80                    | 40()  |                       | kWh/m²/yr                         | Data         |
| Criterion 2 – Limits on design flexib             |                                     | -0.8 (-1.                | 4%)   |                       | kWh/m²/yr                         | Pass         |
|   | billey                              |                          |   |                       |                                   |              |
| Limiting Fabric Standards                         |                                     |                          |   |                       |                                   |              |
| 2 Fabric U-values                                 |                                     |                          |   |                       |                                   |              |
| Element   | Averag                              | -                        |   | lighest               |                                   | Data         |
| External wall<br>Party wall                       |                                     | nax. 0.30)<br>nax. 0.20) | Ŭ   | ).17 (max. 0.70)      | 1                                 | Pass<br>Pass |
| Roof  |                                     | nax. 0.20)               | -   | -<br>).12 (max. 0.35) |                                   | Pass         |
| Openings  |                                     | nax. 2.00)               |   | 20 (max. 3.30)        |                                   | Pass         |
| 2a Thermal bridging                               | 2100 (1                             |                          | -   |                       |                                   | 1 400        |
| Thermal bridging calculated                       | using default v-v                   | alue of 0.15             |   |                       |                                   |              |
| <u>3 Air permeability</u>                         | using actualty v                    |                          |   |                       |                                   |              |
| Air permeability at 50 pascal                     | s                                   | 4.00 (de                 | esign value)  |                       |                                   |              |
| Maximum   | ~                                   | 10.0                     |   |                       |                                   | <br>Pass     |
| Limiting System Efficiencies                      |                                     | 2010                     |   |                       |                                   |              |
| 4 Heating efficiency                              |                                     |                          |   |                       |                                   |              |
| Main heating system                               |                                     | Commu                    | nity heating scher  | me                    |                                   | -            |
| Secondary heating system                          |                                     | None                     | inty neuting solie  |                       |                                   |              |
|   |                                     |                          |   |                       |                                   |              |
| <u>5 Cylinder insulation</u>                      |                                     |                          |   |                       |                                   |              |





| <u>6 Controls</u>                                       |   |       |      |
|---|---|-------|------|
| Space heating controls                                  | Flat rate charging, programmer and TRVs |       | 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                                |   |       |      |
| Not applicable  |   |       |      |
| Criterion 3 – Limiting the effects of heat gains in sur | nmer                                    |       |      |
| 9 Summertime temperature                                |   |       |      |
| Overheating risk (Thames Valley)                        | Slight                                  |       | Pass |
| Based on:   |   |       |      |
| Overshading   | Average                                 |       |      |
| Windows facing East                                     | 1.35 m <sup>2</sup> , No overhang       |       |      |
| Air change rate   | 6.00 ach                                |       |      |
| Blinds/curtains   | None                                    |       |      |
| Criterion 4 – Building performance consistent with      | DER and DFEE rate                       |       |      |
| Party Walls   |   |       |      |
| Туре  | U-value                                 |       |      |
| Filled Cavity with Edge Sealing                         | 0.00                                    | W/m²K | Pass |
| Air permeability and pressure testing                   |   |       |      |
| <u>3 Air permeability</u>                               |   |       |      |
| Air permeability at 50 pascals                          | 4.00 (design value)                     |       |      |
| Maximum   | 10.0                                    |       | Pass |
| <u>10 Key features</u>                                  |   |       |      |
| Party wall U-value                                      | 0.00                                    | W/m²K |      |
| Roof U-value  | 0.12                                    | W/m²K |      |
| Door U-value  | 1.00                                    | W/m²K |      |



| DER<br>% DER <ter<br>DFEE<br/>% DFEE<tfee<br>0938507,</tfee<br></ter<br>  |                 | Issued on Date         lat 06         TER         3.10         TFEE         1.46         Assessor ID         kgCO2/m²         kgCO2/m²         kgCO2/m²         kgCO2/m² | 22/07/2022<br>38.64<br>55.61<br>R564-0001 |
|---|-----------------|--|---|
| DER<br>% DER <ter<br>DFEE<br/>% DFEE<tfee<br>0938507,</tfee<br></ter<br>  | 37.44           | TER         3.10         TFEE         1.46         Assessor ID         kgCO2/m²         kgCO2/m²   | 55.61<br>R564-0001                        |
| % DER <ter<br>DFEE<br/>% DFEE<tfee<br>0938507,</tfee<br></ter<br>   |                 | 3.10<br>TFEE<br>1.46<br>Assessor ID  | 55.61<br>R564-0001                        |
| % DER <ter<br>DFEE<br/>% DFEE<tfee<br>0938507,</tfee<br></ter<br>   |                 | 3.10<br>TFEE<br>1.46<br>Assessor ID  | 55.61<br>R564-0001                        |
| % DER <ter<br>DFEE<br/>% DFEE<tfee<br>0938507,</tfee<br></ter<br>   |                 | 3.10<br>TFEE<br>1.46<br>Assessor ID  | 55.61<br>R564-0001                        |
| DFEE<br>% DFEE <tfee<br>0938507,<br/>(c)<br/>ns gas)</tfee<br>  | 54.80           | TFEE 1.46 Assessor ID kgCO <sub>2</sub> /m <sup>2</sup> kgCO <sub>2</sub> /m <sup>2</sup>  | R564-0001                                 |
| % DFEE <tfee< td=""><td>54.80</td><td>1.46 Assessor ID kgCO<sub>2</sub>/m<sup>2</sup> kgCO<sub>2</sub>/m<sup>2</sup></td><td>R564-0001</td></tfee<> | 54.80           | 1.46 Assessor ID kgCO <sub>2</sub> /m <sup>2</sup> kgCO <sub>2</sub> /m <sup>2</sup>   | R564-0001                                 |
| 9938507,<br>5 (c)<br>ns gas)  |                 | Assessor ID  |   |
| s (c)<br>ns gas)  |                 | kgCO <sub>2</sub> /m <sup>2</sup><br>kgCO <sub>2</sub> /m <sup>2</sup>   |   |
| ns gas)   |                 | kgCO <sub>2</sub> /m <sup>2</sup>  | Pass                                      |
| ns gas)   |                 | kgCO <sub>2</sub> /m <sup>2</sup>  | Pass                                      |
| ns gas)   |                 | kgCO <sub>2</sub> /m <sup>2</sup>  | Pass                                      |
| ns gas)   |                 | kgCO <sub>2</sub> /m <sup>2</sup>  | Pass                                      |
| ns gas)   |                 | kgCO <sub>2</sub> /m <sup>2</sup>  | Pass                                      |
|   |                 | kgCO <sub>2</sub> /m <sup>2</sup>  | Pass                                      |
| .%)   |                 | kgCO <sub>2</sub> /m <sup>2</sup>  | Pass                                      |
| .%)   |                 |  | Pass                                      |
|   |                 | kgCO <sub>2</sub> /m <sup>2</sup>  |   |
|   |                 |  |   |
|   |                 |  |   |
|   |                 | kWh/m²/yr  |   |
| ()  |                 | kWh/m²/yr  | Dese                                      |
| %)  |                 | kWh/m²/yr  | Pass                                      |
|   |                 |  |   |
|   |                 |  |   |
|   |                 |  |   |
|   | ighest          |  | Dese                                      |
| 0.  | .17 (max. 0.70) |  | Pass                                      |
| -   | 12 (may 0 25)   |  | Pass<br>Pass                              |
|   |                 |  | Pass                                      |
| 1.  | 120 (maxi 0100) |  | 1 455                                     |
|   |                 |  |   |
|   |                 |  |   |
| gn value)   |                 |  |   |
| <u></u>   |                 |  | <br>Pass                                  |
|   |                 |  |   |
|   |                 |  |   |
| ty heating schem  | ne              |  |   |
|   |                 |  |   |
|   |                 |  | ] L                                       |
|   |                 |  |   |
|   | 1<br>gn value)  | 1.20 (max. 3.30)<br>gn value)<br>ty heating scheme   | ty heating scheme                         |





| <u>6 Controls</u>                                       |   |       |      |
|---|---|-------|------|
| Space heating controls                                  | Flat rate charging, programmer and TRVs |       | 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                                |   |       |      |
| Not applicable  |   |       |      |
| Criterion 3 – Limiting the effects of heat gains in sur | nmer                                    |       |      |
| 9 Summertime temperature                                |   |       |      |
| Overheating risk (Thames Valley)                        | Slight                                  |       | Pass |
| Based on:   |   |       |      |
| Overshading   | Average                                 |       |      |
| Windows facing East                                     | 1.35 m <sup>2</sup> , No overhang       |       |      |
| Air change rate   | 6.00 ach                                |       |      |
| Blinds/curtains   | None                                    |       |      |
| Criterion 4 – Building performance consistent with      | DER and DFEE rate                       |       |      |
| Party Walls   |   |       |      |
| Туре  | U-value                                 |       |      |
| Filled Cavity with Edge Sealing                         | 0.00                                    | W/m²K | Pass |
| Air permeability and pressure testing                   |   |       |      |
| <u>3 Air permeability</u>                               |   |       |      |
| Air permeability at 50 pascals                          | 4.00 (design value)                     |       |      |
| Maximum   | 10.0                                    |       | Pass |
| <u>10 Key features</u>                                  |   |       |      |
| Party wall U-value                                      | 0.00                                    | W/m²K |      |
| Roof U-value  | 0.12                                    | W/m²K |      |
| Door U-value  | 1.00                                    | W/m²K |      |



| BASIC COMPLIANCE<br>Calculation Type: No             |                        | Design SAP<br>elmhurst energy |   |                       |                                   |              |
|--|------------------------|-------------------------------|---|-----------------------|-----------------------------------|--------------|
| Property Reference 0221 LMR B0                       | 1 07                   |                               |   | lss                   | sued on Date                      | 22/07/2022   |
| Assessment Be Green                                  |                        |                               | P   | Prop Type Ref Flat    | t 07                              |              |
| Reference  |                        |                               |   |                       |                                   |              |
| Property 07  |                        |                               |   |                       |                                   |              |
| SAP Rating   |                        | 76 C                          | DER   | 34.29                 | TER                               | 61.88        |
| Environmental  |                        | 88 B                          | % DER <ter< td=""><td></td><td>44.58</td><td></td></ter<>   |                       | 44.58                             |              |
| CO <sub>2</sub> Emissions (t/year)                   |                        | 0.54                          | DFEE  | 71.15                 | TFEE                              | 72.26        |
| General Requirements Compliance                      |                        | Pass                          | % DFEE <tfee< td=""><td></td><td>1.54</td><td></td></tfee<> |                       | 1.54                              |              |
| Assessor Details Miss Jessica Jam<br>jess@jawsustain |                        | , Tel: 020                    | )79938507,  |                       | Assessor ID                       | R564-0001    |
| Client   |                        |                               |   |                       |                                   |              |
| SUMARY FOR INPUT DATA FOR New                        | Build (As Designe      | ed)                           |   |                       |                                   |              |
| Criterion 1 – Achieving the TER and T                | FEE rate               |                               |   |                       |                                   |              |
| 1a TER and DER                                       |                        |                               |   |                       |                                   |              |
| Fuel for main heating                                |                        | Electric                      | ity (c)   |                       |                                   |              |
| Fuel factor  |                        | 1.55 (el                      | ectricity)  |                       |                                   |              |
| Target Carbon Dioxide Emission Ra                    | te (TER)               | 61.88                         |   |                       | kgCO <sub>2</sub> /m <sup>2</sup> |              |
| Dwelling Carbon Dioxide Emission                     | Rate (DER)             |                               |   |                       | kgCO <sub>2</sub> /m <sup>2</sup> | Pass         |
|  |                        | -27.59 (                      | (-44.6%)  |                       | kgCO <sub>2</sub> /m <sup>2</sup> |              |
| <u>1b TFEE and DFEE</u>                              |                        |                               |   |                       |                                   |              |
| Target Fabric Energy Efficiency (TFI                 |                        | 72.26                         |   |                       | kWh/m²/yr                         |              |
| Dwelling Fabric Energy Efficiency (I                 | DFEE)                  | 71.15                         | F0()  |                       | kWh/m²/yr                         | Dava         |
| Cuitorian 2 Lincita on design flowibili              |                        | -1.1 (-1.                     | .5%)  |                       | kWh/m²/yr                         | Pass         |
| Criterion 2 – Limits on design flexibilit            | Lý                     |                               |   |                       |                                   |              |
| Limiting Fabric Standards                            |                        |                               |   |                       |                                   |              |
| 2 Fabric U-values                                    |                        |                               |   |                       |                                   |              |
| Element  | Average                | . 0.20)                       |   | Highest               |                                   | Dava         |
| External wall  | 0.16 (max<br>0.00 (max |                               | (   | 0.17 (max. 0.70)      |                                   | Pass         |
| Party wall<br>Roof                                   | 0.00 (ma)<br>0.12 (ma) | ,                             |   | -<br>0.12 (max. 0.35) |                                   | Pass<br>Pass |
| Openings   | 1.08 (ma)              |                               |   | 1.20 (max. 3.30)      |                                   | Pass         |
| 2a Thermal bridging                                  | 2.00 (110)             |                               | -   |                       |                                   |              |
| Thermal bridging calculated usi                      | ng default v-valu      | e of 0 15                     |   |                       |                                   |              |
| <u>3 Air permeability</u>                            | no acraant y-valu      | 0.10                          |   |                       |                                   |              |
| Air permeability at 50 pascals                       |                        | 4 00 (de                      | esign value)  |                       |                                   |              |
| Maximum  |                        | 10.0                          |   |                       |                                   | <br>Pass     |
| Limiting System Efficiencies                         |                        |                               |   |                       |                                   |              |
| 4 Heating efficiency                                 |                        |                               |   |                       |                                   |              |
| Main heating system                                  |                        | Commu                         | inity heating sche  | me                    |                                   |              |
| Secondary heating system                             |                        | None                          |   |                       |                                   |              |
| <u>5 Cylinder insulation</u>                         |                        |                               |   |                       |                                   | ] L          |
| Hot water storage                                    |                        | No cylir                      | nder  |                       |                                   |              |
| not water storage                                    |                        | i to cym                      |   |                       |                                   |              |





| <u>6 Controls</u>                                       |   |       |      |
|---|---|-------|------|
| Space heating controls                                  | Flat rate charging, programmer and TRVs |       | 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                                |   |       |      |
| Not applicable  |   |       |      |
| Criterion 3 – Limiting the effects of heat gains in sur | nmer                                    |       |      |
| 9 Summertime temperature                                |   |       |      |
| Overheating risk (Thames Valley)                        | Slight                                  |       | Pass |
| Based on:   |   |       |      |
| Overshading   | Average                                 |       |      |
| Windows facing East                                     | 1.35 m <sup>2</sup> , No overhang       |       |      |
| Air change rate   | 6.00 ach                                |       |      |
| Blinds/curtains   | None                                    |       |      |
| Criterion 4 – Building performance consistent with      | DER and DFEE rate                       |       |      |
| Party Walls   |   |       |      |
| Туре  | U-value                                 |       |      |
| Filled Cavity with Edge Sealing                         | 0.00                                    | W/m²K | Pass |
| Air permeability and pressure testing                   |   |       |      |
| <u>3 Air permeability</u>                               |   |       |      |
| Air permeability at 50 pascals                          | 4.00 (design value)                     |       |      |
| Maximum   | 10.0                                    |       | Pass |
| <u>10 Key features</u>                                  |   |       |      |
| Party wall U-value                                      | 0.00                                    | W/m²K |      |
| Roof U-value  | 0.12                                    | W/m²K |      |
| Door U-value  | 1.00                                    | W/m²K |      |



| BASIC COMPLIANCE REPORT<br>Calculation Type: New Build (As Designed)     |                                   |                |   |                 | Design SAP<br>elmhurst energy |            |  |  |
|--|-----------------------------------|----------------|---|-----------------|-------------------------------|------------|--|--|
| Property Reference 0221 LMR B  | 01 07                             |                |   |                 | ssued on Date                 | 22/07/2022 |  |  |
| Assessment Be Lean   |                                   |                | Pr  | op Type Ref Fl  | at 07                         |            |  |  |
| Reference  |                                   |                |   |                 |                               |            |  |  |
| Property 07  |                                   |                |   |                 |                               |            |  |  |
| SAP Rating   |                                   | 76 C           | DER   | 41.65           | TER                           | 42.22      |  |  |
| Environmental  |                                   | 85 B           | % DER <ter< td=""><td></td><td>1.36</td><td></td></ter<>    |                 | 1.36                          |            |  |  |
| CO <sub>2</sub> Emissions (t/year)                                       |                                   | 0.66           | DFEE  | 71.15           | TFEE                          | 72.26      |  |  |
| General Requirements Compliance  |                                   | Pass           | % DFEE <tfee< td=""><td></td><td>1.54</td><td></td></tfee<> |                 | 1.54                          |            |  |  |
| jess@jawsustai   | nes, Jessica Jame<br>nability.com | es, Tel: 020   | 79938507,   |                 | Assessor ID                   | R564-0001  |  |  |
| Client   |                                   |                |   |                 |                               |            |  |  |
| SUMARY FOR INPUT DATA FOR New  | Build (As Desig                   | ned)           |   |                 |                               |            |  |  |
| Criterion 1 – Achieving the TER and 1                                    | FEE rate                          |                |   |                 |                               |            |  |  |
| 1a TER and DER   |                                   |                |   |                 |                               |            |  |  |
| Fuel for main heating  |                                   | Mains g        | as (c)  |                 |                               |            |  |  |
| Fuel factor  |                                   | 1.00 (ma       | ains gas)   |                 |                               |            |  |  |
| Target Carbon Dioxide Emission R   |                                   | 42.22          |   |                 | kgCO₂/m²                      |            |  |  |
| Dwelling Carbon Dioxide Emissior   | n Rate (DER)                      |                |   |                 | kgCO₂/m²                      | Pass       |  |  |
|  |                                   | -0.57 (-1      | 4%)   |                 | kgCO₂/m²                      |            |  |  |
| <u>1b TFEE and DFEE</u>  |                                   | 72.26          |   |                 |                               |            |  |  |
| Target Fabric Energy Efficiency (TI<br>Dwelling Fabric Energy Efficiency |                                   | 71.15          |   |                 | kWh/m²/yr<br>kWh/m²/yr        |            |  |  |
| Dweiling rablic Lifergy Liffelency                                       | (DILL)                            | -1.1 (-1.      | 5%)   |                 | kWh/m²/yr                     | Pass       |  |  |
| Criterion 2 – Limits on design flexibil                                  | itv                               | 1.1 ( 1.       |   |                 |                               | 1 435      |  |  |
| Limiting Fabric Standards  |                                   |                |   |                 |                               |            |  |  |
| 2 Fabric U-values  |                                   |                |   |                 |                               |            |  |  |
| Element  | Average                           | 2              | н   | ighest          |                               |            |  |  |
| External wall  | _                                 | -<br>ax. 0.30) |   | .17 (max. 0.70) |                               | Pass       |  |  |
| Party wall   |                                   | ax. 0.20)      | -   | ,               |                               | Pass       |  |  |
| Roof   |                                   | ax. 0.20)      | 0.  | .12 (max. 0.35) |                               | Pass       |  |  |
| Openings   | 1.08 (m                           | ax. 2.00)      | 1.  | .20 (max. 3.30) |                               | Pass       |  |  |
| 2a Thermal bridging  |                                   |                |   |                 |                               |            |  |  |
| Thermal bridging calculated us   | sing default y-va                 | lue of 0.15    |   |                 |                               |            |  |  |
| 3 Air permeability   |                                   |                |   |                 |                               |            |  |  |
| Air permeability at 50 pascals   |                                   | 4.00 (de       | sign value)   |                 |                               |            |  |  |
| Maximum  |                                   | 10.0           |   |                 |                               | Pass       |  |  |
| Limiting System Efficiencies   |                                   |                |   |                 |                               |            |  |  |
| 4 Heating efficiency   |                                   |                |   |                 |                               |            |  |  |
| Main heating system  |                                   | Commu          | nity heating schem  | ne              |                               | -          |  |  |
| Secondary heating system   |                                   | None           |   |                 |                               |            |  |  |
| 5 Cylinder insulation  |                                   |                |   |                 |                               |            |  |  |
| Hot water storage  |                                   | No cylin       | I   |                 |                               |            |  |  |





| <u>6 Controls</u>                                       |   |       |      |
|---|---|-------|------|
| Space heating controls                                  | Flat rate charging, programmer and TRVs |       | 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                                |   |       |      |
| Not applicable  |   |       |      |
| Criterion 3 – Limiting the effects of heat gains in sur | nmer                                    |       |      |
| 9 Summertime temperature                                |   |       |      |
| Overheating risk (Thames Valley)                        | Slight                                  |       | Pass |
| Based on:   |   |       |      |
| Overshading   | Average                                 |       |      |
| Windows facing East                                     | 1.35 m <sup>2</sup> , No overhang       |       |      |
| Air change rate   | 6.00 ach                                |       |      |
| Blinds/curtains   | None                                    |       |      |
| Criterion 4 – Building performance consistent with      | DER and DFEE rate                       |       |      |
| Party Walls   |   |       |      |
| Туре  | U-value                                 |       |      |
| Filled Cavity with Edge Sealing                         | 0.00                                    | W/m²K | Pass |
| Air permeability and pressure testing                   |   |       |      |
| <u>3 Air permeability</u>                               |   |       |      |
| Air permeability at 50 pascals                          | 4.00 (design value)                     |       |      |
| Maximum   | 10.0                                    |       | Pass |
| <u>10 Key features</u>                                  |   |       |      |
| Party wall U-value                                      | 0.00                                    | W/m²K |      |
| Roof U-value  | 0.12                                    | W/m²K |      |
| Door U-value  | 1.00                                    | W/m²K |      |



| BASIC COMPLIANCE REPORT<br>Calculation Type: New Build (As Designed) |   |                 |                |   |                    | Design SAP<br>elmhurst energy     |            |  |
|--|---|-----------------|----------------|---|--------------------|-----------------------------------|------------|--|
| Property Reference   | 0221 LMR B01 (                          | 08              |                |   | Iss                | sued on Date                      | 22/07/2022 |  |
| Assessment   | Be Green                                |                 |                |   | Prop Type Ref Flat | t 08                              |            |  |
| Reference  |   |                 |                |   |                    |                                   |            |  |
| Property   | 08                                      |                 |                |   |                    |                                   |            |  |
| SAP Rating   |   |                 | 79 C           | DER   | 28.54              | TER                               | 53.74      |  |
| Environmental  |   |                 | 90 B           | % DER <ter< td=""><td></td><td>46.89</td><td></td></ter<>   |                    | 46.89                             |            |  |
| CO <sub>2</sub> Emissions (t/yea                                     |   |                 | 0.43           | DFEE  | 38.99              |                                   | 39.80      |  |
| General Requiremen   | ts Compliance                           |                 | Pass           | % DFEE <tfee< td=""><td></td><td>2.02</td><td></td></tfee<> |                    | 2.02                              |            |  |
|  | Viss Jessica James,<br>ess@jawsustainab |                 | Tel: 020       | 79938507,   |                    | Assessor ID                       | R564-0001  |  |
| Client   |   |                 |                |   |                    |                                   |            |  |
| SUMARY FOR INPUT I   | DATA FOR New Bu                         | ild (As Designe | d)             |   |                    |                                   |            |  |
| Criterion 1 – Achievin   | g the TER and TFE                       | E rate          |                |   |                    |                                   |            |  |
| La TER and DER   |   |                 |                |   |                    |                                   |            |  |
| Fuel for main heat   | ing                                     |                 | Electrici      | ty (c)  |                    |                                   |            |  |
| Fuel factor  |   |                 | 1.55 (ele      | ectricity)  |                    |                                   |            |  |
| Target Carbon Dio  | xide Emission Rate                      | (TER)           | 53.74          |   |                    | kgCO <sub>2</sub> /m <sup>2</sup> |            |  |
| Dwelling Carbon D  | ioxide Emission Ra                      | te (DER)        | 28.54          |   |                    | kgCO₂/m²                          | Pass       |  |
|  |   |                 | -25.20 (·      | -46.9%)   |                    | kgCO <sub>2</sub> /m <sup>2</sup> |            |  |
| <u>b TFEE and DFEE</u>   |   |                 | 20.00          |   |                    |                                   |            |  |
| Target Fabric Energy   |   |                 | 39.80<br>38.99 |   |                    | kWh/m²/yr                         |            |  |
| Dwelling Fabric En   | ergy Eniciency (DFi                     | ==)             | -0.8 (-2.      | 0%)   |                    | kWh/m²/yr<br>kWh/m²/yr            | Pass       |  |
| Criterion 2 – Limits or  | design flexibility                      |                 | -0.0 (-2.      | 070)  |                    |                                   | 1 835      |  |
| Limiting Fabric Sta  |   |                 |                |   |                    |                                   |            |  |
| <u>2 Fabric U-values</u>   | indands                                 |                 |                |   |                    |                                   |            |  |
| Element  |   | Average         |                |   | Highest            |                                   |            |  |
| External wa  | Ш                                       | 0.16 (max       | 0 30)          |   | 0.17 (max. 0.70)   |                                   | Pass       |  |
| Party wall   |   | 0.00 (max       | ,              |   | -                  |                                   | Pass       |  |
| Openings   |   | 1.11 (max       | ,              |   | 1.20 (max. 3.30)   |                                   | Pass       |  |
| 2a Thermal bridgi  | ng                                      |                 |                |   |                    |                                   |            |  |
| Thermal bridgi   | ng calculated using                     | default y-value | e of 0.15      |   |                    |                                   |            |  |
| <u>3 Air permeability</u>  |   |                 |                |   |                    |                                   |            |  |
| Air permeabilit  | y at 50 pascals                         |                 | 4.00 (de       | esign value)  |                    |                                   |            |  |
| Maximum  |   |                 | 10.0           |   |                    |                                   | Pass       |  |
| Limiting System Ef   | ficiencies                              |                 |                |   |                    |                                   |            |  |
| 4 Heating efficience   | <u> </u>                                |                 |                |   |                    |                                   |            |  |
| Main heating s   | ystem                                   |                 | Commu          | nity heating sche   | eme                |                                   | -          |  |
| Secondary heat   | ting system                             |                 | None           |   |                    |                                   |            |  |
| <u>5 Cylinder insulati</u>   | on                                      |                 |                |   |                    |                                   |            |  |
| Hot water stora  | age                                     |                 | No cylin       | der   |                    |                                   |            |  |
|  |   |                 |                |   |                    |                                   |            |  |



Design SAP elmhurst energy

| Space heating controls                                  | Flat rate charging, programmer and TRV | S     | 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                                |  |       |      |
| Not applicable  |  |       |      |
| Criterion 3 – Limiting the effects of heat gains in sur | nmer                                   |       |      |
| <u>9 Summertime temperature</u>                         |  |       |      |
| Overheating risk (Thames Valley)                        | Medium                                 |       | Pass |
| Based on:   |  |       |      |
| Overshading   | Average                                |       |      |
| Windows facing South                                    | 2.28 m <sup>2</sup> , No overhang      |       |      |
| Air change rate   | 6.00 ach                               |       |      |
| Blinds/curtains   | None                                   |       |      |
| Criterion 4 – Building performance consistent with      | DER and DFEE rate                      |       |      |
| Party Walls   |  |       |      |
| Туре  | U-value                                |       |      |
| Filled Cavity with Edge Sealing                         | 0.00                                   | W/m²K | Pass |
| Air permeability and pressure testing                   |  |       |      |
| <u>3 Air permeability</u>                               |  |       |      |
| Air permeability at 50 pascals                          | 4.00 (design value)                    |       |      |
| Maximum   | 10.0                                   |       | Pass |
| <u>10 Key features</u>                                  |  |       |      |
| Party wall U-value                                      | 0.00                                   | W/m²K |      |
| Door U-value  | 1.00                                   | W/m²K |      |



| BASIC COMPLIANCE<br>Calculation Type: Ne                              |                      | Design SAP<br>elmhurst energy |   |                             |                                   |              |
|---|----------------------|-------------------------------|---|-----------------------------|-----------------------------------|--------------|
| Property Reference 0221 LMR B0  | 1 08                 |                               |   | 1:                          | ssued on Date                     | 22/07/2022   |
| Assessment Be Lean  |                      |                               | Р   | rop Type Ref                | at 08                             |              |
| Reference<br>Property 08  |                      |                               |   |                             |                                   |              |
|   |                      |                               | -   |                             |                                   |              |
| SAP Rating  |                      | 79 C                          | DER   | 34.59                       | TER                               | 36.93        |
| Environmental   |                      | 88 B                          | % DER <ter< td=""><td>20.00</td><td>6.35</td><td>20.00</td></ter<>                        | 20.00                       | 6.35                              | 20.00        |
| CO <sub>2</sub> Emissions (t/year)<br>General Requirements Compliance |                      | 0.52<br>Pass                  | DFEE<br>% DFEE <tfee< td=""><td>38.99</td><td><b>TFEE</b> 2.02</td><td>39.80</td></tfee<> | 38.99                       | <b>TFEE</b> 2.02                  | 39.80        |
|   |                      |                               |   |                             |                                   |              |
| Assessor Details Miss Jessica Jame<br>jess@jawsustaina                |                      | s, Tel: 020                   | 79938507,   |                             | Assessor ID                       | R564-0001    |
| Client  | ionity.com           |                               |   |                             |                                   |              |
| SUMARY FOR INPUT DATA FOR New B                                       | uild (As Design      | ed)                           |   |                             |                                   |              |
| Criterion $1 - $ Achieving the TER and TF                             |                      |                               |   |                             |                                   |              |
| 1a TER and DER  |                      |                               |   |                             |                                   |              |
| Fuel for main heating   |                      | Mains g                       | as (c)  |                             |                                   |              |
| Fuel factor   |                      | 1.00 (ma                      |   |                             |                                   |              |
| Target Carbon Dioxide Emission Rat                                    | te (TER)             | 36.93                         |   |                             | kgCO₂/m²                          |              |
| Dwelling Carbon Dioxide Emission F                                    |                      | 34.59                         |   |                             | kgCO <sub>2</sub> /m <sup>2</sup> | Pass         |
|   |                      | -2.34 (-6                     | 5.3%)   |                             | kgCO₂/m²                          |              |
| Lb TFEE and DFEE  |                      |                               |   |                             |                                   |              |
| Target Fabric Energy Efficiency (TFEE)                                |                      | 39.80                         |   |                             | kWh/m²/yr                         |              |
| Dwelling Fabric Energy Efficiency (D                                  | PFEE)                | 38.99                         |   |                             | kWh/m²/yr                         |              |
|   |                      | -0.8 (-2.                     | 0%)   |                             | kWh/m²/yr                         | Pass         |
| Criterion 2 – Limits on design flexibilit                             | Y                    |                               |   |                             |                                   |              |
| Limiting Fabric Standards   |                      |                               |   |                             |                                   |              |
| 2 Fabric U-values   |                      |                               |   |                             |                                   |              |
| <b>Element</b><br>External wall                                       | Average              |                               |   | Highest<br>0.17 (max. 0.70) |                                   | Dass         |
| Party wall  | 0.16 (ma<br>0.00 (ma |                               | (   | J.17 (max. 0.70)            |                                   | Pass<br>Pass |
| Openings  | 1.11 (ma             |                               |   | -<br>1.20 (max. 3.30)       |                                   | Pass         |
| 2a Thermal bridging   | 1.11 (110            | . 2.00)                       | -   | 1.20 (max. 5.50)            |                                   | 1 433        |
| Thermal bridging calculated usin                                      | ng default v-valu    | ue of 0.15                    |   |                             |                                   |              |
| 3 Air permeability  | 0                    |                               |   |                             |                                   |              |
| Air permeability at 50 pascals  |                      | 4.00 (de                      | sign value)   |                             |                                   |              |
| Maximum   |                      | 10.0                          | 0 ,   |                             |                                   | Pass         |
| Limiting System Efficiencies  |                      |                               |   |                             |                                   |              |
| 4 Heating efficiency  |                      |                               |   |                             |                                   |              |
| Main heating system   |                      | Commu                         | nity heating sche   | me                          |                                   |              |
| Secondary heating system  |                      | None                          |   |                             |                                   |              |
| 5 Cylinder insulation   |                      | _                             |   |                             |                                   |              |
| Hot water storage   |                      | No cylin                      | der   |                             |                                   |              |
| 6 Controls  |                      |                               |   |                             |                                   |              |



Design SAP elmhurst energy

| Space heating controls                                  | Flat rate charging, programmer and TRV | S     | 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                                |  |       |      |
| Not applicable  |  |       |      |
| Criterion 3 – Limiting the effects of heat gains in sur | nmer                                   |       |      |
| <u>9 Summertime temperature</u>                         |  |       |      |
| Overheating risk (Thames Valley)                        | Medium                                 |       | Pass |
| Based on:   |  |       |      |
| Overshading   | Average                                |       |      |
| Windows facing South                                    | 2.28 m <sup>2</sup> , No overhang      |       |      |
| Air change rate   | 6.00 ach                               |       |      |
| Blinds/curtains   | None                                   |       |      |
| Criterion 4 – Building performance consistent with      | DER and DFEE rate                      |       |      |
| Party Walls   |  |       |      |
| Туре  | U-value                                |       |      |
| Filled Cavity with Edge Sealing                         | 0.00                                   | W/m²K | Pass |
| Air permeability and pressure testing                   |  |       |      |
| <u>3 Air permeability</u>                               |  |       |      |
| Air permeability at 50 pascals                          | 4.00 (design value)                    |       |      |
| Maximum   | 10.0                                   |       | Pass |
| <u>10 Key features</u>                                  |  |       |      |
| Party wall U-value                                      | 0.00                                   | W/m²K |      |
| Door U-value  | 1.00                                   | W/m²K |      |



| BASIC COMPLIANCE REPORT<br>Calculation Type: New Build (As Designed) |                                     |                          |   |                 | Design SAP<br>elmhurst energy     |              |  |
|--|-------------------------------------|--------------------------|---|-----------------|-----------------------------------|--------------|--|
| Property Reference 0221 LMR  | B01 09                              |                          |   |                 | Issued on Date                    | 22/07/2022   |  |
| Assessment Be Green  |                                     |                          | Pr  | op Type Ref     | lat 09                            |              |  |
| Reference  |                                     |                          |   |                 |                                   |              |  |
| Property 09  |                                     |                          |   |                 |                                   |              |  |
| SAP Rating   |                                     | 76 C                     | DER   | 35.88           | TER                               | 65.66        |  |
| Environmental  |                                     | 88 B                     | % DER <ter< td=""><td></td><td>45.36</td><td></td></ter<>   |                 | 45.36                             |              |  |
| CO₂ Emissions (t/year)   |                                     | 0.53                     | DFEE  | 72.44           | TFEE                              | 75.42        |  |
| General Requirements Compliance                                      | e                                   | Pass                     | % DFEE <tfee< td=""><td></td><td>3.94</td><td></td></tfee<> |                 | 3.94                              |              |  |
| Assessor Details Miss Jessica Ja<br>jess@jawsusta                    | imes, Jessica Jam<br>ainability.com | nes, Tel: 0207           | 9938507,  |                 | Assessor ID                       | R564-0001    |  |
| Client   |                                     |                          |   |                 |                                   |              |  |
| SUMARY FOR INPUT DATA FOR Ne   | w Build (As Desi                    | gned)                    |   |                 |                                   |              |  |
| Criterion 1 – Achieving the TER and                                  | TFEE rate                           |                          |   |                 |                                   |              |  |
| La TER and DER   |                                     |                          |   |                 |                                   |              |  |
| Fuel for main heating  |                                     | Electricit               | y (c)   |                 |                                   |              |  |
| Fuel factor  |                                     | 1.55 (ele                | ctricity)   |                 |                                   |              |  |
| Target Carbon Dioxide Emission                                       | Rate (TER)                          | 65.66                    |   |                 | kgCO <sub>2</sub> /m <sup>2</sup> |              |  |
| Dwelling Carbon Dioxide Emissio                                      | on Rate (DER)                       | 35.88                    | 35.88   |                 |                                   | Pass         |  |
|  |                                     | -29.78 (-                | 45.4%)  |                 | kgCO <sub>2</sub> /m <sup>2</sup> |              |  |
| Lb TFEE and DFEE   |                                     |                          |   |                 |                                   |              |  |
| Target Fabric Energy Efficiency (                                    |                                     | 75.42                    |   |                 | kWh/m²/yr                         |              |  |
| Dwelling Fabric Energy Efficiency                                    | y (DFEE)                            | 72.44                    | 20()  |                 | kWh/m²/yr                         |              |  |
|  | •1•.                                | -3.0 (-4.0               | ]%)   |                 | kWh/m²/yr                         | Pass         |  |
| Criterion 2 – Limits on design flexib                                | omty                                |                          |   |                 |                                   |              |  |
| Limiting Fabric Standards  |                                     |                          |   |                 |                                   |              |  |
| 2 Fabric U-values  |                                     |                          |   |                 |                                   |              |  |
| Element  | Averag                              | -                        |   | ighest          |                                   |              |  |
| External wall  |                                     | nax. 0.30)               | 0.  | .17 (max. 0.70) |                                   | Pass         |  |
| Party wall<br>Floor  |                                     | nax. 0.20)<br>nax. 0.25) | -   | .12 (max. 0.70) |                                   | Pass<br>Pass |  |
| Openings   |                                     | nax. 2.00)               |   | .20 (max. 3.30) |                                   | Pass         |  |
| 2a Thermal bridging  | 1.00 (1                             |                          | ±.  |                 |                                   | 1 435        |  |
| Thermal bridging calculated  | using default v-v                   | alue of 0.15             |   |                 |                                   |              |  |
| <u>3 Air permeability</u>  |                                     |                          |   |                 |                                   |              |  |
| Air permeability at 50 pascal  | s                                   | 4 00 (de                 | sign value)   |                 |                                   |              |  |
| Maximum  | -                                   | 10.0                     |   |                 |                                   | <br>Pass     |  |
| Limiting System Efficiencies   |                                     |                          |   |                 |                                   |              |  |
| 4 Heating efficiency   |                                     |                          |   |                 |                                   |              |  |
| Main heating system  |                                     | Commur                   | nity heating schen  | ne              |                                   | -            |  |
| Secondary heating system   |                                     | None                     | inty neuting someth   |                 |                                   |              |  |
| ,  |                                     |                          |   |                 |                                   |              |  |
| 5 Cylinder insulation  |                                     |                          |   |                 |                                   |              |  |





| <u>6 Controls</u>                                       |   |       |      |
|---|---|-------|------|
| Space heating controls                                  | Flat rate charging, programmer and TRVs |       | 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                                |   |       |      |
| Not applicable  |   |       |      |
| Criterion 3 – Limiting the effects of heat gains in sur | nmer                                    |       |      |
| <u>9 Summertime temperature</u>                         |   |       |      |
| Overheating risk (Thames Valley)                        | Slight                                  |       | Pass |
| Based on:   |   |       |      |
| Overshading   | Average                                 |       |      |
| Windows facing West                                     | 1.35 m <sup>2</sup> , No overhang       |       |      |
| Air change rate   | 6.00 ach                                |       |      |
| Blinds/curtains   | None                                    |       |      |
| Criterion 4 – Building performance consistent with      | DER and DFEE rate                       |       |      |
| Party Walls   |   |       |      |
| Туре  | U-value                                 |       |      |
| Filled Cavity with Edge Sealing                         | 0.00                                    | W/m²K | Pass |
| Air permeability and pressure testing                   |   |       |      |
| <u>3 Air permeability</u>                               |   |       | _    |
| Air permeability at 50 pascals                          | 4.00 (design value)                     |       |      |
| Maximum   | 10.0                                    |       | Pass |
| <u>10 Key features</u>                                  |   |       |      |
| Party wall U-value                                      | 0.00                                    | W/m²K |      |
| Exposed floor U-value                                   | 0.12                                    | W/m²K |      |
| Door U-value  | 1.00                                    | W/m²K |      |



| BASIC COMPLIANCE REPORT<br>Calculation Type: New Build (As Designed) |   |                |            |   | )                | Design SAP<br>elmhurst energy     |            |  |
|--|---|----------------|------------|---|------------------|-----------------------------------|------------|--|
| Property Reference   | 0221 LMR B01 0                            | )9             |            |   |                  | Issued on Date                    | 22/07/2022 |  |
| Assessment   | Be Lean                                   |                |            |   | Prop Type Ref    | lat 09                            |            |  |
| Reference  | 09  |                |            |   |                  |                                   |            |  |
| Property   | 09  |                |            |   |                  | _                                 |            |  |
| SAP Rating   |   |                | 76 C       | DER   | 43.60            | TER                               | 44.76      |  |
| Environmental  |   |                | 85 B       | % DER <ter< th=""><th></th><th>2.60</th><th></th></ter<>  |                  | 2.60                              |            |  |
| CO <sub>2</sub> Emissions (t/ye                                      |   |                | 0.64       | DFEE  | 72.44            | TFEE                              | 75.42      |  |
| General Requireme  | ents Compliance                           |                | Pass       | % DFEE <tfe< td=""><td></td><td>3.94</td><td></td></tfe<> |                  | 3.94                              |            |  |
| Assessor Details   | Miss Jessica James,<br>jess@jawsustainabi |                | , Tel: 020 | )79938507,  |                  | Assessor ID                       | R564-0001  |  |
| Client   |   |                |            |   |                  |                                   |            |  |
| SUMARY FOR INPUT   | T DATA FOR New Bui                        | ld (As Designe | ed)        |   |                  |                                   |            |  |
| Criterion 1 – Achiev   | ing the TER and TFEE                      | rate           |            |   |                  |                                   |            |  |
| 1a TER and DER   |   |                |            |   |                  |                                   |            |  |
| Fuel for main hea  | ating                                     |                | Mains g    | gas (c)   |                  |                                   |            |  |
| Fuel factor  |   |                | 1.00 (m    | nains gas)  |                  |                                   |            |  |
| Target Carbon Di   | ioxide Emission Rate                      | (TER)          | 44.76      |   |                  | kgCO <sub>2</sub> /m <sup>2</sup> |            |  |
| Dwelling Carbon  | Dioxide Emission Rat                      | te (DER)       | 43.60      |   |                  | kgCO <sub>2</sub> /m <sup>2</sup> | Pass       |  |
|  |   |                | -1.16 (-   | 2.6%)   |                  | kgCO <sub>2</sub> /m <sup>2</sup> |            |  |
| <u>1b TFEE and DFEE</u>  |   |                |            |   |                  |                                   |            |  |
| -  | ergy Efficiency (TFEE)                    |                | 75.42      |   |                  | kWh/m²/yr                         |            |  |
| Dwelling Fabric E  | Energy Efficiency (DFE                    | EE)            | 72.44      |   |                  | kWh/m²/yr                         | []         |  |
|  |   |                | -3.0 (-4   | .0%)  |                  | kWh/m²/yr                         | Pass       |  |
| Criterion 2 – Limits   |   |                |            |   |                  |                                   |            |  |
| Limiting Fabric S  |   |                |            |   |                  |                                   |            |  |
| 2 Fabric U-values  | <u>s</u>                                  |                |            |   |                  |                                   |            |  |
| Element  |   | Average        |            |   | Highest          |                                   | []         |  |
| External v   |   | 0.15 (max      |            |   | 0.17 (max. 0.70) |                                   | Pass       |  |
| Party wall   |   | 0.00 (ma)      |            |   | -                |                                   | Pass       |  |
| Floor  |   | 0.12 (max      |            |   | 0.12 (max. 0.70) |                                   | Pass       |  |
| Openings   |   | 1.08 (ma)      | (. 2.00)   |   | 1.20 (max. 3.30) |                                   | Pass       |  |
| 2a Thermal bridg   |   |                | 60.45      | _   |                  |                                   |            |  |
|  | ging calculated using                     | default y-valu | e of 0.15  | 0   |                  |                                   |            |  |
| <u>3 Air permeabilit</u>   |   |                |            |   |                  |                                   |            |  |
| -  | lity at 50 pascals                        |                |            | esign value)  |                  |                                   |            |  |
| Maximum  |   |                | 10.0       |   |                  |                                   | Pass       |  |
| Limiting System  |   |                |            |   |                  |                                   |            |  |
| 4 Heating efficie  |   |                |            |   |                  |                                   |            |  |
| Main heating   | -   |                |            | unity heating sch   | ieme             |                                   |            |  |
| Secondary he   |   |                | None       |   |                  |                                   |            |  |
| <u>5 Cylinder insula</u>   |   |                |            |   |                  |                                   |            |  |
| Hot water sto  | orage                                     |                | No cylir   | nder  |                  |                                   |            |  |
|  |   |                |            |   |                  |                                   |            |  |





| <u>6 Controls</u>                                       |   |       |      |
|---|---|-------|------|
| Space heating controls                                  | Flat rate charging, programmer and TRVs |       | 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                                |   |       |      |
| Not applicable  |   |       |      |
| Criterion 3 – Limiting the effects of heat gains in sur | nmer                                    |       |      |
| <u>9 Summertime temperature</u>                         |   |       |      |
| Overheating risk (Thames Valley)                        | Slight                                  |       | Pass |
| Based on:   |   |       |      |
| Overshading   | Average                                 |       |      |
| Windows facing West                                     | 1.35 m <sup>2</sup> , No overhang       |       |      |
| Air change rate   | 6.00 ach                                |       |      |
| Blinds/curtains   | None                                    |       |      |
| Criterion 4 – Building performance consistent with      | DER and DFEE rate                       |       |      |
| Party Walls   |   |       |      |
| Туре  | U-value                                 |       |      |
| Filled Cavity with Edge Sealing                         | 0.00                                    | W/m²K | Pass |
| Air permeability and pressure testing                   |   |       |      |
| <u>3 Air permeability</u>                               |   |       | _    |
| Air permeability at 50 pascals                          | 4.00 (design value)                     |       |      |
| Maximum   | 10.0                                    |       | Pass |
| <u>10 Key features</u>                                  |   |       |      |
| Party wall U-value                                      | 0.00                                    | W/m²K |      |
| Exposed floor U-value                                   | 0.12                                    | W/m²K |      |
| Door U-value  | 1.00                                    | W/m²K |      |



| BASIC COMPLIANCE REPORT<br>Calculation Type: New Build (As Designed) |                      |             |   |                | Design SAP<br>elmhurst energy     |              |  |
|--|----------------------|-------------|---|----------------|-----------------------------------|--------------|--|
| Property Reference 0221 LMR B01                                      | . 10                 |             |   | I              | ssued on Date                     | 22/07/2022   |  |
| Assessment Be Green  |                      |             | Pre   | op Type Ref Fl | at 10                             |              |  |
| Reference  |                      |             |   |                |                                   |              |  |
| Property 10  |                      |             |   |                |                                   |              |  |
| SAP Rating   |                      | 77 C        | DER   | 31.13          | TER                               | 57.30        |  |
| Environmental  |                      | 88 B        | % DER <ter< td=""><td></td><td>45.67</td><td></td></ter<>   |                | 45.67                             |              |  |
| CO <sub>2</sub> Emissions (t/year)                                   |                      | 0.54        | DFEE  | 66.18          | TFEE                              | 69.96        |  |
| General Requirements Compliance                                      |                      | Pass        | % DFEE <tfee< td=""><td></td><td>5.40</td><td></td></tfee<> |                | 5.40                              |              |  |
| Assessor Details Miss Jessica James<br>jess@jawsustaina              |                      | s, Tel: 020 | 79938507,   |                | Assessor ID                       | R564-0001    |  |
| Client<br>SUMARY FOR INPUT DATA FOR New B                            | uild (As Design      | ed)         |   |                |                                   |              |  |
| Criterion 1 – Achieving the TER and TFI                              |                      |             |   |                |                                   |              |  |
| 1a TER and DER   |                      |             |   |                |                                   |              |  |
| Fuel for main heating  |                      | Electrici   | ty (c)  |                |                                   |              |  |
| Fuel factor  |                      | 1.55 (ele   |   |                |                                   |              |  |
| Target Carbon Dioxide Emission Rat                                   | e (TER)              | 57.30       |   |                | kgCO <sub>2</sub> /m <sup>2</sup> |              |  |
| Dwelling Carbon Dioxide Emission R                                   | ate (DER)            | 31.13       |   |                | kgCO <sub>2</sub> /m <sup>2</sup> | Pass         |  |
|  |                      | -26.17 (-   | -45.7%)   |                | kgCO <sub>2</sub> /m <sup>2</sup> |              |  |
| Lb TFEE and DFEE   |                      |             |   |                |                                   |              |  |
| Target Fabric Energy Efficiency (TFE                                 |                      | 69.96       |   |                | kWh/m²/yr                         |              |  |
| Dwelling Fabric Energy Efficiency (D                                 | FEE)                 | 66.18       | 40()  |                | kWh/m²/yr                         |              |  |
|  |                      | -3.8 (-5.4  | 4%)   |                | kWh/m²/yr                         | Pass         |  |
| Criterion 2 – Limits on design flexibility                           |                      |             |   |                |                                   |              |  |
| Limiting Fabric Standards  |                      |             |   |                |                                   |              |  |
| 2 Fabric U-values  |                      |             |   |                |                                   |              |  |
| <b>Element</b><br>External wall                                      | Average              |             |   | ighest         |                                   | Dace         |  |
| Party wall   | 0.16 (ma<br>0.00 (ma |             | 0.  | 17 (max. 0.70) |                                   | Pass<br>Pass |  |
| Openings   | 1.11 (ma             |             | -   | 20 (max. 3.30) |                                   | Pass         |  |
| 2a Thermal bridging  | T.TT (1110           | 2.007       | 1.  | (              |                                   | 1 455        |  |
| Thermal bridging calculated usin                                     | g default v-val      | ue of 0.15  |   |                |                                   |              |  |
| 3 Air permeability   | 8                    |             |   |                |                                   |              |  |
| Air permeability at 50 pascals                                       |                      | 4.00 (de    | sign value)   |                |                                   |              |  |
| Maximum  |                      | 10.0        |   |                |                                   | Pass         |  |
| Limiting System Efficiencies   |                      |             |   |                |                                   |              |  |
| 4 Heating efficiency   |                      |             |   |                |                                   |              |  |
| Main heating system  |                      | Commu       | nity heating schem  | ne             |                                   | -            |  |
| Secondary heating system   |                      | None        | ,                     |                |                                   |              |  |
| 5 Cylinder insulation  |                      |             |   |                |                                   |              |  |
| Hot water storage  |                      | No cylin    | der   |                |                                   |              |  |
| -  |                      | · · ·       |   |                |                                   |              |  |



Design SAP elmhurst energy

| Space heating controls                                  | Flat rate charging, programmer and TR | Vs    | 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                                |                                       |       |      |
| Not applicable  |                                       |       |      |
| Criterion 3 – Limiting the effects of heat gains in sur | nmer                                  |       |      |
| <u>9 Summertime temperature</u>                         |                                       |       |      |
| Overheating risk (Thames Valley)                        | Slight                                |       | Pass |
| Based on:   |                                       |       |      |
| Overshading   | Average                               |       |      |
| Windows facing East                                     | 2.40 m <sup>2</sup> , No overhang     |       |      |
| Air change rate   | 6.00 ach                              |       |      |
| Blinds/curtains   | None                                  |       |      |
| Criterion 4 – Building performance consistent with      | DER and DFEE rate                     |       |      |
| Party Walls   |                                       |       |      |
| Туре  | U-value                               |       |      |
| Filled Cavity with Edge Sealing                         | 0.00                                  | W/m²K | Pass |
| Air permeability and pressure testing                   |                                       |       |      |
| <u>3 Air permeability</u>                               |                                       |       |      |
| Air permeability at 50 pascals                          | 4.00 (design value)                   |       |      |
| Maximum   | 10.0                                  |       | Pass |
| <u>10 Key features</u>                                  |                                       |       |      |
| Party wall U-value                                      | 0.00                                  | W/m²K |      |
| Door U-value  | 1.00                                  | W/m²K |      |



| BASIC COMPLIANCE REPORT<br>Calculation Type: New Build (As Designed)      |                  |                      |   |                | Design SAP<br>elmhurst energy     |            |  |
|---|------------------|----------------------|---|----------------|-----------------------------------|------------|--|
| Property Reference 0221 LMR B0  | 1 10             |                      |   | I              | ssued on Date                     | 22/07/2022 |  |
| Assessment Be Lean  |                  |                      | Pro   | op Type Ref Fl | at 10                             |            |  |
| Reference   |                  |                      |   |                |                                   |            |  |
| Property 10   |                  |                      |   |                |                                   |            |  |
| SAP Rating  |                  | 77 C                 | DER   | 37.85          | TER                               | 39.00      |  |
| Environmental   |                  | 86 B                 | % DER <ter< td=""><td></td><td>2.94</td><td></td></ter<>    |                | 2.94                              |            |  |
| CO <sub>2</sub> Emissions (t/year)  |                  | 0.66                 | DFEE  | 66.18          | THEE                              | 69.96      |  |
| General Requirements Compliance   |                  | Pass                 | % DFEE <tfee< td=""><td></td><td>5.40</td><td></td></tfee<> |                | 5.40                              |            |  |
| Assessor Details Miss Jessica Jame  |                  | s, Tel: 0207         | 9938507,  |                | Assessor ID                       | R564-0001  |  |
|   | Puild (Ac Docign | od)                  |   |                |                                   |            |  |
| SUMARY FOR INPUT DATA FOR New B<br>Criterion 1 – Achieving the TER and TH |                  | eu)                  |   |                |                                   |            |  |
|   | EE rate          |                      |   |                |                                   |            |  |
| La TER and DER  |                  | D. 4                 | - (-)   |                |                                   |            |  |
| Fuel for main heating<br>Fuel factor                                      |                  | Mains ga<br>1.00 (ma |   |                |                                   |            |  |
| Target Carbon Dioxide Emission Ra   | to (TER)         | 39.00                | ins gasj  |                | kgCO <sub>2</sub> /m <sup>2</sup> |            |  |
| Dwelling Carbon Dioxide Emission  | . ,              | 37.85                |   |                | kgCO <sub>2</sub> /m <sup>2</sup> | Pass       |  |
|   | (                | -1.15 (-2.           | 9%)   |                | kgCO <sub>2</sub> /m <sup>2</sup> |            |  |
| Lb TFEE and DFEE  |                  |                      | ,   |                |                                   |            |  |
| Target Fabric Energy Efficiency (TF                                       | EE)              | 69.96                |   |                | kWh/m²/yr                         |            |  |
| Dwelling Fabric Energy Efficiency (                                       | DFEE)            | 66.18                |   |                | kWh/m²/yr                         |            |  |
|   |                  | -3.8 (-5.4           | %)  |                | kWh/m²/yr                         | Pass       |  |
| Criterion 2 – Limits on design flexibilit                                 | :y               |                      |   |                |                                   |            |  |
| Limiting Fabric Standards   |                  |                      |   |                |                                   |            |  |
| 2 Fabric U-values   |                  |                      |   |                |                                   |            |  |
| Element   | Average          |                      | Hi  | ghest          |                                   |            |  |
| External wall   | 0.16 (ma         | ,                    | 0.2   | 17 (max. 0.70) |                                   | Pass       |  |
| Party wall  | 0.00 (ma         | ,                    | -   |                |                                   | Pass       |  |
| Openings  | 1.11 (ma         | ix. 2.00)            | 1.2   | 20 (max. 3.30) |                                   | Pass       |  |
| 2a Thermal bridging   |                  | 60.45                |   |                |                                   |            |  |
| Thermal bridging calculated usi   | ng default y-val | ue of 0.15           |   |                |                                   |            |  |
| <u>3 Air permeability</u>   |                  | 4.00 ( )             |   |                |                                   |            |  |
| Air permeability at 50 pascals  |                  |                      | ign value)  |                |                                   |            |  |
| Maximum   |                  | 10.0                 |   |                |                                   | Pass       |  |
| Limiting System Efficiencies  |                  |                      |   |                |                                   |            |  |
| <u>4 Heating efficiency</u>   |                  | Comment              | ity booting and a   | 0              |                                   |            |  |
| Main heating system   |                  | None                 | ity heating schem   | e              |                                   |            |  |
| Secondary heating system  |                  | NULL                 |   |                |                                   |            |  |
| <u>5 Cylinder insulation</u><br>Hot water storage                         |                  | No cylind            | lor   |                |                                   |            |  |
|   |                  |                      |   |                |                                   |            |  |



Design SAP elmhurst energy

| Space heating controls                                  | Flat rate charging, programmer and TR | Vs    | 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                                |                                       |       |      |
| Not applicable  |                                       |       |      |
| Criterion 3 – Limiting the effects of heat gains in sur | nmer                                  |       |      |
| <u>9 Summertime temperature</u>                         |                                       |       |      |
| Overheating risk (Thames Valley)                        | Slight                                |       | Pass |
| Based on:   |                                       |       |      |
| Overshading   | Average                               |       |      |
| Windows facing East                                     | 2.40 m <sup>2</sup> , No overhang     |       |      |
| Air change rate   | 6.00 ach                              |       |      |
| Blinds/curtains   | None                                  |       |      |
| Criterion 4 – Building performance consistent with      | DER and DFEE rate                     |       |      |
| Party Walls   |                                       |       |      |
| Туре  | U-value                               |       |      |
| Filled Cavity with Edge Sealing                         | 0.00                                  | W/m²K | Pass |
| Air permeability and pressure testing                   |                                       |       |      |
| <u>3 Air permeability</u>                               |                                       |       |      |
| Air permeability at 50 pascals                          | 4.00 (design value)                   |       |      |
| Maximum   | 10.0                                  |       | Pass |
| <u>10 Key features</u>                                  |                                       |       |      |
| Party wall U-value                                      | 0.00                                  | W/m²K |      |
| Door U-value  | 1.00                                  | W/m²K |      |



| BASIC COMPLIANCE REPO<br>Calculation Type: New Bu                          |                                  | signed)   |                                | Design S<br>elmhurst en           |              |
|--|----------------------------------|---|--------------------------------|-----------------------------------|--------------|
| Property Reference 0221 LMR B01 11   |                                  |   | l                              | ssued on Date                     | 22/07/2022   |
| Assessment Be Green  |                                  | Pro   | p Type Ref 月                   | at 11                             |              |
| Reference 11   |                                  |   |                                |                                   |              |
|  |                                  |   |                                | 1                                 |              |
| SAP Rating   |                                  | DER   | 36.82                          | TER                               | 67.30        |
| Environmental<br>CO <sub>2</sub> Emissions (t/year)                        |                                  | % DER <ter< td=""><td>05.22</td><td>45.29</td><td>80.06</td></ter<>           | 05.22                          | 45.29                             | 80.06        |
| General Requirements Compliance  |                                  | DFEE<br>% DFEE <tfee< td=""><td>85.22</td><td>4.32</td><td>89.06</td></tfee<> | 85.22                          | 4.32                              | 89.06        |
|  |                                  |   |                                |                                   |              |
| Assessor Details Miss Jessica James, Jessica<br>jess@jawsustainability.con |                                  | 938507,   |                                | Assessor ID                       | R564-0001    |
| Client   |                                  |   |                                |                                   |              |
| SUMARY FOR INPUT DATA FOR New Build (As E                                  | esigned)                         |   |                                |                                   |              |
| Criterion 1 – Achieving the TER and TFEE rate                              | esigned)                         |   |                                |                                   |              |
| 1a TER and DER   |                                  |   |                                |                                   |              |
| Fuel for main heating  | Electricity                      | (c)   |                                |                                   |              |
| Fuel factor  | 1.55 (elect                      |   |                                |                                   |              |
| Target Carbon Dioxide Emission Rate (TER)                                  | 67.30                            |   |                                | kgCO <sub>2</sub> /m <sup>2</sup> |              |
| Dwelling Carbon Dioxide Emission Rate (DER)                                | 36.82                            |   |                                | kgCO <sub>2</sub> /m <sup>2</sup> | Pass         |
|  | -30.48 (-45                      | 5.3%)   |                                | kgCO₂/m²                          |              |
| <u>1b TFEE and DFEE</u>  |                                  |   |                                |                                   |              |
| Target Fabric Energy Efficiency (TFEE)                                     | 89.06                            |   |                                | kWh/m²/yr                         |              |
| Dwelling Fabric Energy Efficiency (DFEE)                                   | 85.22                            |   |                                | kWh/m²/yr                         |              |
|  | -3.9 (-4.4%                      | Ś)  |                                | kWh/m²/yr                         | Pass         |
| Criterion 2 – Limits on design flexibility                                 |                                  |   |                                |                                   |              |
| Limiting Fabric Standards  |                                  |   |                                |                                   |              |
| 2 Fabric U-values  |                                  |   |                                |                                   |              |
|  | erage                            | -   | hest                           |                                   | Dece         |
|  | .5 (max. 0.30)<br>.2 (max. 0.20) |   | 7 (max. 0.70)<br>2 (max. 0.35) |                                   | Pass         |
|  | .2 (max. 0.20)<br>.0 (max. 2.00) |   | 0 (max. 3.30)                  |                                   | Pass<br>Pass |
| 2a Thermal bridging  | .0 (1107. 2.00)                  | 1.2   | 0 (1107. 5.50)                 |                                   | 1 435        |
| Thermal bridging calculated using default                                  | v-value of 0.15                  |   |                                |                                   |              |
| 3 Air permeability   | ,                                |   |                                |                                   |              |
| Air permeability at 50 pascals   | 4.00 (desig                      | zn value)   |                                |                                   |              |
| Maximum  | 10.0                             |   |                                |                                   | Pass         |
| Limiting System Efficiencies   |                                  |   |                                |                                   |              |
| 4 Heating efficiency   |                                  |   |                                |                                   |              |
| Main heating system  | Communit                         | y heating scheme  | 5                              |                                   | -            |
| Secondary heating system   | None                             |   |                                |                                   |              |
| 5 Cylinder insulation  |                                  |   |                                |                                   |              |
| Hot water storage  | No cylinde                       | r   |                                |                                   |              |
|  |                                  |   |                                |                                   |              |



Design SAP elmhurst energy

| Space heating controls                                 | Flat rate charging, programmer and TRVs | Pass |
|--|---|------|
| Hot water controls                                     | No cylinder                             |      |
|  | No cymraei                              |      |
| 7 Low energy lights                                    |   |      |
| Percentage of fixed lights with low-energy fittings    | 100 %                                   |      |
| Minimum  | 75 %                                    | Pass |
| 8 Mechanical ventilation                               |   |      |
| Not applicable   |   |      |
| Criterion 3 – Limiting the effects of heat gains in su | mmer                                    |      |
| 9 Summertime temperature                               |   |      |
| Overheating risk (Thames Valley)                       | Slight                                  | Pass |
| Based on:  |   |      |
| Overshading  | Average                                 |      |
| Windows facing East                                    | 2.10 m <sup>2</sup> , No overhang       |      |
| Air change rate  | 6.00 ach                                |      |
| Blinds/curtains  | None                                    |      |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                       |      |
| Air permeability and pressure testing                  |   |      |
| <u>3 Air permeability</u>                              |   |      |
| Air permeability at 50 pascals                         | 4.00 (design value)                     | 7    |
| Maximum  | 10.0                                    | Pass |
| <u>10 Key features</u>                                 |   |      |
| Roof U-value   | 0.12 W/m²K                              |      |
| Door U-value   | 1.00 W/m²K                              |      |
|  |   |      |



| BASIC COMPLIANCE R<br>Calculation Type: New                           |                    | Design SAP<br>elmhurst energy |                                       |                                   |            |
|---|--------------------|-------------------------------|---------------------------------------|-----------------------------------|------------|
| Property Reference 0221 LMR B01 1                                     | 1                  |                               | lssu                                  | ied on Date                       | 22/07/2022 |
| Assessment Be Lean  |                    | Pr                            | op Type Ref Flat                      | 11                                |            |
| Reference   |                    |                               |                                       |                                   |            |
| Property 11   |                    |                               |                                       |                                   |            |
| SAP Rating  | 76 0               |                               | 44.87                                 | TER                               | 45.60      |
| Environmental   | 84 1               |                               | 05.22                                 | 1.60                              | 00.00      |
| CO <sub>2</sub> Emissions (t/year)<br>General Requirements Compliance | 0.71               |                               | 85.22                                 | 4.32                              | 89.06      |
|   | Pass               |                               |                                       | 4.32                              |            |
| Assessor Details Miss Jessica James, jess@jawsustainabi               |                    | : 02079938507,                |                                       | Assessor ID                       | R564-0001  |
| Client  |                    |                               |                                       |                                   |            |
| SUMARY FOR INPUT DATA FOR New Buil                                    | d (As Designed)    |                               |                                       |                                   |            |
| Criterion 1 – Achieving the TER and TFEE                              | rate               |                               |                                       |                                   |            |
| 1a TER and DER  |                    |                               |                                       |                                   |            |
| Fuel for main heating   | Ma                 | ins gas (c)                   |                                       |                                   |            |
| Fuel factor   | 1.0                | 0 (mains gas)                 |                                       |                                   |            |
| Target Carbon Dioxide Emission Rate                                   | (TER) 45.          | 60                            |                                       | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| Dwelling Carbon Dioxide Emission Rat                                  | e (DER) 44.        | 87                            |                                       | kgCO₂/m²                          | Pass       |
|   | -0.7               | 73 (-1.6%)                    |                                       | kgCO <sub>2</sub> /m <sup>2</sup> |            |
| <u>1b TFEE and DFEE</u>   |                    |                               |                                       | <b>-</b>                          |            |
| Target Fabric Energy Efficiency (TFEE)                                | 89.                |                               |                                       | kWh/m²/yr                         |            |
| Dwelling Fabric Energy Efficiency (DFE                                |                    |                               |                                       | kWh/m²/yr                         | Dees       |
| Criterion 2 – Limits on design flexibility                            | -3.5               | 9 (-4.4%)                     |                                       | kWh/m²/yr                         | Pass       |
|   |                    |                               |                                       |                                   |            |
| Limiting Fabric Standards   |                    |                               |                                       |                                   |            |
| <u>2 Fabric U-values</u><br>Element                                   | Average            | L                             | ighest                                |                                   |            |
| External wall   | 0.15 (max. 0.3     |                               | .17 (max. 0.70)                       |                                   | Pass       |
| Roof  | 0.12 (max. 0.2     |                               | .12 (max. 0.35)                       |                                   | Pass       |
| Openings  | 1.10 (max. 2.0     | ,                             | 20 (max. 3.30)                        |                                   | Pass       |
| 2a Thermal bridging   | Υ.                 | ,                             | , , , , , , , , , , , , , , , , , , , |                                   |            |
| Thermal bridging calculated using                                     | default y-value of | 0.15                          |                                       |                                   |            |
| 3 Air permeability  | -                  |                               |                                       |                                   |            |
| Air permeability at 50 pascals  | 4.0                | 0 (design value)              |                                       |                                   |            |
| Maximum   | 10.                | 0                             |                                       |                                   | Pass       |
| Limiting System Efficiencies  |                    |                               |                                       |                                   |            |
| 4 Heating efficiency  |                    |                               |                                       |                                   |            |
| Main heating system   | Cor                | mmunity heating schem         | ne                                    |                                   | -          |
| Secondary heating system  | No                 | ne                            |                                       |                                   |            |
| 5 Cylinder insulation   |                    |                               |                                       |                                   |            |
| Hot water storage   | No                 | cylinder                      |                                       |                                   |            |
| <u>6 Controls</u>   |                    |                               |                                       |                                   |            |



Design SAP elmhurst energy

| Space heating controls                                 | Flat rate charging, programmer and TRVs | Pass |
|--|---|------|
| Hot water controls                                     | No cylinder                             |      |
|  | No cymraei                              |      |
| 7 Low energy lights                                    |   |      |
| Percentage of fixed lights with low-energy fittings    | 100 %                                   |      |
| Minimum  | 75 %                                    | Pass |
| 8 Mechanical ventilation                               |   |      |
| Not applicable   |   |      |
| Criterion 3 – Limiting the effects of heat gains in su | mmer                                    |      |
| 9 Summertime temperature                               |   |      |
| Overheating risk (Thames Valley)                       | Slight                                  | Pass |
| Based on:  |   |      |
| Overshading  | Average                                 |      |
| Windows facing East                                    | 2.10 m <sup>2</sup> , No overhang       |      |
| Air change rate  | 6.00 ach                                |      |
| Blinds/curtains  | None                                    |      |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                       |      |
| Air permeability and pressure testing                  |   |      |
| <u>3 Air permeability</u>                              |   |      |
| Air permeability at 50 pascals                         | 4.00 (design value)                     | 7    |
| Maximum  | 10.0                                    | Pass |
| <u>10 Key features</u>                                 |   |      |
| Roof U-value   | 0.12 W/m²K                              |      |
| Door U-value   | 1.00 W/m²K                              |      |
|  |   |      |



| BASIC COMPLIANCE REPORT<br>Calculation Type: New Build (As Designed) |  |                  |            |   | Design SAP<br>elmhurst energy |                                   |            |  |
|--|--|------------------|------------|---|-------------------------------|-----------------------------------|------------|--|
| Property Referen   | 0221 LMR B01                             | 12               |            |   | lss                           | sued on Date                      | 22/07/2022 |  |
| Assessment   | Be Green                                 |                  |            |   | Prop Type Ref Fla             | t 12                              |            |  |
| Reference  |  |                  |            |   |                               |                                   |            |  |
| Property   | 12                                       |                  |            |   |                               |                                   |            |  |
| SAP Rating   |  |                  | 76 C       | DER   | 33.99                         | TER                               | 61.48      |  |
| Environmental  |  |                  | 87 B       | % DER <ter< td=""><td></td><td>44.72</td><td>_</td></ter<>  |                               | 44.72                             | _          |  |
| CO₂ Emissions (t/  |  |                  | 0.60       | DFEE  | 78.85                         | TFEE                              | 82.02      |  |
| General Requiren   | nents Compliance                         |                  | Pass       | % DFEE <tfee< td=""><td></td><td>3.86</td><td></td></tfee<> |                               | 3.86                              |            |  |
| Assessor Details   | Miss Jessica James,<br>jess@jawsustainab |                  | , Tel: 020 | 79938507,   |                               | Assessor ID                       | R564-0001  |  |
| Client   | UT DATA FOR New Bu                       | ild (As Design   | ad)        |   |                               |                                   |            |  |
|  |  |                  | -uj        |   |                               |                                   |            |  |
|  | eving the TER and TFE                    |                  |            |   |                               |                                   |            |  |
| a TER and DER  | acting                                   |                  | Electric 1 | (h)   |                               |                                   |            |  |
| Fuel for main h<br>Fuel factor                                       | eating                                   |                  | Electrici  | ectricity)  |                               |                                   |            |  |
|  | Dioxide Emission Rate                    | (TED)            | 61.48      | ectricity)  |                               | kgCO <sub>2</sub> /m <sup>2</sup> |            |  |
| -  | n Dioxide Emission Rate                  |                  | 33.99      |   |                               | kgCO <sub>2</sub> /m <sup>2</sup> | Pass       |  |
|  |  |                  | -27.49 (   | -44.7%)   |                               | kgCO <sub>2</sub> /m <sup>2</sup> | 1 435      |  |
| b TFEE and DFEE  |  |                  |            | , /,  |                               |                                   |            |  |
| Target Fabric E  | nergy Efficiency (TFEE)                  | )                | 82.02      |   |                               | kWh/m²/yr                         |            |  |
| Dwelling Fabric  | Energy Efficiency (DF                    | EE)              | 78.85      |   |                               | kWh/m²/yr                         |            |  |
|  |  |                  | -3.1 (-3.  | 8%)   |                               | kWh/m²/yr                         | Pass       |  |
| riterion 2 – Limit   | s on design flexibility                  |                  |            |   |                               |                                   |            |  |
| Limiting Fabric  | Standards                                |                  |            |   |                               |                                   |            |  |
| <u>2 Fabric U-valu</u>   | les                                      |                  |            |   |                               |                                   |            |  |
| Element  | t  | Average          |            |   | Highest                       |                                   |            |  |
| External   | wall                                     | 0.16 (max        | x. 0.30)   |   | 0.17 (max. 0.70)              |                                   | Pass       |  |
| Party wa   | all                                      | 0.00 (max        | x. 0.20)   |   | -                             |                                   | Pass       |  |
| Roof   |  | 0.12 (max        | x. 0.20)   |   | 0.12 (max. 0.35)              |                                   | Pass       |  |
| Opening  | gs                                       | 1.08 (max        | x. 2.00)   |   | 1.20 (max. 3.30)              |                                   | Pass       |  |
| 2a Thermal bri   | dging                                    |                  |            |   |                               |                                   |            |  |
| Thermal bri  | dging calculated using                   | g default y-valu | e of 0.15  |   |                               |                                   |            |  |
| <u>3 Air permeabi</u>  | lity                                     |                  |            |   |                               |                                   |            |  |
| Air permeal  | bility at 50 pascals                     |                  | 4.00 (de   | esign value)  |                               |                                   |            |  |
| Maximum  |  |                  | 10.0       |   |                               |                                   | Pass       |  |
| Limiting System  | n Efficiencies                           |                  |            |   |                               |                                   |            |  |
| 4 Heating effici   | iency                                    |                  |            |   |                               |                                   |            |  |
| Main heatir  | ng system                                |                  | Commu      | nity heating sch  | eme                           |                                   | -          |  |
| Secondary I  | neating system                           |                  | None       |   |                               |                                   |            |  |
| <u>5 Cylinder insu</u>   | lation                                   |                  |            |   |                               |                                   |            |  |
| o cynnaer moa  |  |                  |            |   |                               |                                   |            |  |





| Flat rate charging, programmer and TRVs | Pass   |
|---|--|
| No cylinder                             |  |
|   |  |
| / 100 %                                 | 1  |
| 75 %                                    | Pass   |
|   |  |
|   |  |
| summer                                  |  |
|   |  |
| Slight                                  | Pass   |
|   |  |
| Average                                 |  |
|   |  |
| 6.00 ach                                |  |
|   |  |
| ith DER and DFEE rate                   |  |
|   |  |
| U-value                                 |  |
| 0.00 W                                  | V/m²K Pass   |
|   |  |
|   |  |
| 4.00 (design value)                     |  |
| 10.0                                    | Pass   |
|   |  |
| 0.00 W                                  | //m²K  |
| 0.12 W                                  | //m²K  |
| 0.12 W                                  | //m²K  |
| 1.00 W                                  | //m²K  |
|   | No cylinder           100         %           75         %           summer         Slight           Average |

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<br>Calculation Type: New Build (As Designed) |  |                  |           |   | Design SAP<br>elmhurst energy |              |            |  |
|--|--|------------------|-----------|---|-------------------------------|--------------|------------|--|
| Property Reference   | 0221 LMR B01 :                           | 12               |           |   | Is                            | sued on Date | 22/07/2022 |  |
| Assessment   | Be Lean                                  |                  |           |   | Prop Type Ref Fla             | at 12        |            |  |
| Reference  |  |                  |           |   |                               |              |            |  |
| Property   | 12                                       |                  |           |   |                               |              |            |  |
| SAP Rating   |  |                  | 76 C      | DER   | 41.31                         | TER          | 41.81      |  |
| Environmental  |  |                  | 84 B      | % DER <ter< td=""><td></td><td>1.19</td><td></td></ter<>    |                               | 1.19         |            |  |
| CO <sub>2</sub> Emissions (t/y                                       |  |                  | 0.73      | DFEE  | 78.85                         | TFEE         | 82.02      |  |
| General Requireme  | ents Compliance                          |                  | Pass      | % DFEE <tfee< td=""><td></td><td>3.86</td><td></td></tfee<> |                               | 3.86         |            |  |
| Assessor Details   | Miss Jessica James,<br>jess@jawsustainab |                  | Tel: 020  | 79938507,   |                               | Assessor ID  | R564-0001  |  |
| Client   |  |                  |           |   |                               |              |            |  |
|  | T DATA FOR New Bu                        |                  | ed)       |   |                               |              |            |  |
| Criterion 1 – Achiev   | ing the TER and TFE                      | E rate           |           |   |                               |              |            |  |
| a TER and DER  |  |                  |           |   |                               |              |            |  |
| Fuel for main he   | ating                                    |                  | Mains g   |   |                               |              |            |  |
| Fuel factor  |  |                  | 1.00 (ma  | ains gas)   |                               |              |            |  |
| -  | ioxide Emission Rate                     |                  | 41.81     |   |                               | kgCO₂/m²     |            |  |
| Dwelling Carbon  | Dioxide Emission Ra                      | te (DER)         | 41.31     |   |                               | kgCO₂/m²     | Pass       |  |
|  |  |                  | -0.50 (-1 | L.2%)   |                               | kgCO₂/m²     |            |  |
| <u>b TFEE and DFEE</u>   |  |                  |           |   |                               |              |            |  |
| -  | ergy Efficiency (TFEE)                   |                  | 82.02     |   |                               | kWh/m²/yr    |            |  |
| Dwelling Fabric I  | Energy Efficiency (DF                    | EE)              | 78.85     | 00()  |                               | kWh/m²/yr    |            |  |
|  |  |                  | -3.1 (-3. | 8%)   |                               | kWh/m²/yr    | Pass       |  |
|  | on design flexibility                    |                  |           |   |                               |              |            |  |
| Limiting Fabric S  |  |                  |           |   |                               |              |            |  |
| 2 Fabric U-value   | <u>s</u>                                 | _                |           |   |                               |              |            |  |
| Element  |  | Average          |           |   | Highest                       |              |            |  |
| External   |  | 0.16 (max        |           |   | 0.17 (max. 0.70)              |              | Pass       |  |
| Party wal  | l  | 0.00 (max        |           |   | -                             |              | Pass       |  |
| Roof   |  | 0.12 (max        |           |   | 0.12 (max. 0.35)              |              | Pass       |  |
| Openings   |  | 1.08 (ma>        | (. 2.00)  |   | 1.20 (max. 3.30)              |              | Pass       |  |
| 2a Thermal brid  |  |                  |           |   |                               |              |            |  |
|  | ging calculated using                    | g default y-valu | e of 0.15 |   |                               |              |            |  |
| <u>3 Air permeabili</u>  | <u>ty</u>                                |                  |           |   |                               |              |            |  |
| Air permeabi   | lity at 50 pascals                       |                  | 4.00 (de  | esign value)  |                               |              | <u> </u>   |  |
| Maximum  |  |                  | 10.0      |   |                               |              | Pass       |  |
| Limiting System  | Efficiencies                             |                  |           |   |                               |              |            |  |
| 4 Heating efficie  | ncy                                      |                  |           |   |                               |              |            |  |
| Main heating   | g system                                 |                  | Commu     | nity heating sche   | eme                           |              | -          |  |
| Secondary he   | eating system                            |                  | None      |   |                               |              |            |  |
| <u>5 Cylinder insula</u>   | ation                                    |                  |           |   |                               |              |            |  |
|  |  |                  | No cylin  |   |                               |              |            |  |





| Flat rate charging, programmer and TRVs | Pass   |
|---|--|
| No cylinder                             |  |
|   |  |
| / 100 %                                 | 1  |
| 75 %                                    | Pass   |
|   |  |
|   |  |
| summer                                  |  |
|   |  |
| Slight                                  | Pass   |
|   |  |
| Average                                 |  |
|   |  |
| 6.00 ach                                |  |
|   |  |
| ith DER and DFEE rate                   |  |
|   |  |
| U-value                                 |  |
| 0.00 W                                  | V/m²K Pass   |
|   |  |
|   |  |
| 4.00 (design value)                     |  |
| 10.0                                    | Pass   |
|   |  |
| 0.00 W                                  | //m²K  |
| 0.12 W                                  | //m²K  |
| 0.12 W                                  | //m²K  |
| 1.00 W                                  | //m²K  |
|   | No cylinder           100         %           75         %           summer         Slight           Average |

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<br>Calculation Type: New Build (As Designed) |   |                |   |                                   | Design SAP<br>elmhurst energy     |            |  |
|--|---|----------------|---|-----------------------------------|-----------------------------------|------------|--|
| Property Reference 022   | 21 LMR B01 13                                     |                |   |                                   | ssued on Date                     | 22/07/2022 |  |
|  | Green   |                | Pr  | op Type Ref F                     | lat 13                            |            |  |
| Reference  |   |                |   |                                   |                                   |            |  |
| Property 13  |   |                |   |                                   |                                   |            |  |
| SAP Rating   |   | 76 C           | DER   | 33.06                             | TER                               | 59.65      |  |
| Environmental  |   | 87 B           | % DER <ter< td=""><td></td><td>44.57</td><td>_</td></ter<>  |                                   | 44.57                             | _          |  |
| CO <sub>2</sub> Emissions (t/year)                                   |   | 0.58           | DFEE  | 75.22                             | TFEE                              | 76.86      |  |
| General Requirements Con   | npliance  | Pass           | % DFEE <tfee< td=""><td></td><td>2.13</td><td></td></tfee<> |                                   | 2.13                              |            |  |
|  | essica James, Jessica Jam<br>awsustainability.com | nes, Tel: 0207 | 9938507,  |                                   | Assessor ID                       | R564-0001  |  |
| Client   |   |                |   |                                   |                                   |            |  |
| SUMARY FOR INPUT DATA I  | FOR New Build (As Desig                           | gned)          |   |                                   |                                   |            |  |
| Criterion 1 – Achieving the T  | TER and TFEE rate                                 |                |   |                                   |                                   |            |  |
| La TER and DER   |   |                |   |                                   |                                   |            |  |
| Fuel for main heating  |   | Electricit     | y (c)   |                                   |                                   |            |  |
| Fuel factor  |   | 1.55 (ele      | ctricity)   |                                   |                                   |            |  |
| Target Carbon Dioxide Er   | mission Rate (TER)                                | 59.65          |   | kgCO <sub>2</sub> /m <sup>2</sup> |                                   |            |  |
| Dwelling Carbon Dioxide  | Emission Rate (DER)                               | 33.06          | 33.06   |                                   |                                   | Pass       |  |
|  |   | -26.59 (-4     | 44.6%)  |                                   | kgCO <sub>2</sub> /m <sup>2</sup> |            |  |
| b TFEE and DFEE  |   |                |   |                                   |                                   |            |  |
| Target Fabric Energy Efficiency (TFEE)                               |   | 76.86          |   |                                   | kWh/m²/yr                         |            |  |
| Dwelling Fabric Energy Efficiency (DFEE)                             |   | 75.22          |   |                                   | kWh/m²/yr                         |            |  |
|  |   | -1.7 (-2.2     | %)  |                                   | kWh/m²/yr                         | Pass       |  |
| Criterion 2 – Limits on desig  |   |                |   |                                   |                                   |            |  |
| Limiting Fabric Standard   | S   |                |   |                                   |                                   |            |  |
| 2 Fabric U-values  |   |                |   |                                   |                                   |            |  |
| Element  | Averag  | -              |   | ighest                            |                                   |            |  |
| External wall  |   | nax. 0.30)     | 0.  | .17 (max. 0.70)                   |                                   | Pass       |  |
| Party wall   |   | nax. 0.20)     | -   |                                   |                                   | Pass       |  |
| Roof   |   | nax. 0.20)     |   | .12 (max. 0.35)                   |                                   | Pass       |  |
| Openings   | 1.10 (r   | nax. 2.00)     | 1.  | .20 (max. 3.30)                   |                                   | Pass       |  |
| 2a Thermal bridging  |   |                |   |                                   |                                   |            |  |
|  | culated using default y-v                         | alue of 0.15   |   |                                   |                                   |            |  |
| <u>3 Air permeability</u>  |   |                |   |                                   |                                   |            |  |
| Air permeability at 50   | ) pascals   | 4.00 (des      | sign value)   |                                   |                                   |            |  |
| Maximum  |   | 10.0           |   |                                   |                                   | Pass       |  |
| Limiting System Efficient  | cies  |                |   |                                   |                                   |            |  |
| 4 Heating efficiency   |   |                |   |                                   |                                   |            |  |
| Main heating system  |   | Commun         | ity heating schem   | ne                                |                                   | -          |  |
| Secondary heating sy   | stem  | None           |   |                                   |                                   |            |  |
| 5 Cylinder insulation  |   |                |   |                                   |                                   |            |  |
|  |   |                |   |                                   |                                   |            |  |





| <u>6 Controls</u>                                      |   |                  |
|--|---|------------------|
| Space heating controls                                 | Flat rate charging, programmer and TRVs | 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                               |   |                  |
| Not applicable   |   |                  |
| Criterion 3 – Limiting the effects of heat gains in su | mmer                                    |                  |
| 9 Summertime temperature                               |   |                  |
| Overheating risk (Thames Valley)                       | Slight                                  | Pass             |
| Based on:  |   |                  |
| Overshading  | Average                                 |                  |
| Windows facing South                                   | 1.35 m <sup>2</sup> , No overhang       |                  |
| Air change rate  | 6.00 ach                                |                  |
| Blinds/curtains  | None                                    |                  |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                       |                  |
| Party Walls  |   |                  |
| Туре   | U-value                                 |                  |
| Filled Cavity with Edge Sealing                        | 0.00 W/n                                | n²K Pass         |
| Air permeability and pressure testing                  |   |                  |
| <u>3 Air permeability</u>                              |   |                  |
| Air permeability at 50 pascals                         | 4.00 (design value)                     |                  |
| Maximum  | 10.0                                    | Pass             |
| <u>10 Key features</u>                                 |   |                  |
| Party wall U-value                                     | 0.00 W/n                                | 1²K              |
| Roof U-value   | 0.12 W/n                                | 1 <sup>2</sup> K |
| Roof U-value   | 0.12 W/n                                | 1 <sup>2</sup> K |
| Door U-value   | 1.00 W/n                                | 1 <sup>2</sup> K |



| 76<br>84<br>0.           | 6 C DER  |  | Is<br>Type Ref Fla  | t 13   | 22/07/2022  |
|--------------------------|--|--|---|--|---|
| 84                       |  |  | Type Ref Fla  | t 13   |   |
| 84                       |  |  |   |  |   |
| 84                       |  |  |   |  |   |
| 84                       |  |  |   |  |   |
|                          |  |  | 40.22   | TER  | 40.54   |
| 0.                       |  | ER <ter< td=""><td></td><td>0.79</td><td>-</td></ter<>   |   | 0.79   | -   |
|                          |  |  | 75.22   | TFEE   | 76.86   |
| Pa                       | ass % D  | FEE <tfee< td=""><td></td><td>2.13</td><td></td></tfee<>   |   | 2.13   |   |
| ssica James, Te<br>v.com | el: 020799385  | 507,   |   | Assessor ID  | R564-0001   |
|                          |  |  |   |  |   |
| (As Designed)            |  |  |   |  |   |
| te                       |  |  |   |  |   |
|                          |  |  |   |  |   |
| N                        | lains gas (c)  |  |   |  |   |
| 1.                       | .00 (mains ga  | s)   |   |  |   |
| ER) 40                   | 0.54   |  | kgCO₂/m²  |  |   |
| DER) 40                  | 40.22  |  |   | kgCO <sub>2</sub> /m <sup>2</sup>  | Pass  |
| -C                       | 0.32 (-0.8%)   |  |   | kgCO <sub>2</sub> /m <sup>2</sup>  |   |
|                          |  |  |   |  |   |
| 70                       | 6.86   |  |   | kWh/m²/yr  |   |
| 7                        | 5.22   |  |   | kWh/m²/yr  |   |
| -1                       | 1.7 (-2.2%)  |  |   | kWh/m²/yr  | Pass  |
|                          |  |  |   |  |   |
|                          |  |  |   |  |   |
|                          |  |  |   |  |   |
| Average                  |  | High   | nest  |  |   |
| 0.15 (max. 0             | ).30)  | 0.17   | ' (max. 0.70)   |  | Pass  |
| 0.00 (max. 0             | ).20)  | -  |   |  | Pass  |
| 0.12 (max. 0             | 0.20)  | 0.12   | 2 (max. 0.35)   |  | Pass  |
| 1.10 (max. 2             | 2.00)  | 1.20   | ) (max. 3.30)   |  | Pass  |
|                          |  |  |   |  |   |
| fault y-value c          | of 0.15  |  |   |  |   |
|                          |  |  |   |  |   |
| 4.                       | .00 (design va   | alue)  |   |  |   |
| 10                       | 0.0  |  |   |  | Pass  |
|                          |  |  |   |  |   |
|                          |  |  |   |  |   |
| C                        | ommunity he  | ating scheme   |   |  | -   |
| N                        | lone   |  |   |  |   |
| _                        | _  | _  | _   |  |   |
| N                        | lo cylinder  |  |   |  |   |
|                          | .com<br>As Designed)<br>te<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1) | .com<br>As Designed)<br>te<br>Mains gas (c)<br>1.00 (mains ga<br>40.54<br>DER) 40.22<br>-0.32 (-0.8%)<br>76.86<br>75.22<br>-1.7 (-2.2%)<br>Average<br>0.15 (max. 0.30)<br>0.00 (max. 0.20)<br>0.12 (max. 0.20)<br>1.10 (max. 2.00)<br>fault y-value of 0.15<br>4.00 (design va<br>10.0 | As Designed)<br>te<br>Mains gas (c)<br>1.00 (mains gas)<br>R) 40.54<br>DER) 40.22<br>-0.32 (-0.8%)<br>76.86<br>75.22<br>-1.7 (-2.2%)<br>Average High<br>0.15 (max. 0.30) 0.17<br>0.00 (max. 0.20) -<br>0.12 (max. 0.20) 0.12<br>1.10 (max. 2.00) 1.20<br>fault y-value of 0.15<br>4.00 (design value)<br>10.0<br>Community heating scheme<br>None | .com         As Designed)         te         Mains gas (c)       1.00 (mains gas)         1.00 (mains gas) | .com         As Designed)         te         Mains gas (c)         1.00 (mains gas)         R)       40.54       kgCO2/m²         40.22       kgCO2/m²         -0.32 (-0.8%)       kgCO2/m²         76.86       kWh/m²/yr         75.22       kWh/m²/yr         75.22       kWh/m²/yr         75.22       kWh/m²/yr         0.15 (max. 0.30)       0.17 (max. 0.70)         0.00 (max. 0.20)       -         0.12 (max. 0.20)       0.12 (max. 0.35)         1.10 (max. 2.00)       1.20 (max. 3.30)         fault y-value of 0.15         4.00 (design value)       10.0         10.0       Community heating scheme         None       Interval |





| <u>6 Controls</u>                                      |   |                  |
|--|---|------------------|
| Space heating controls                                 | Flat rate charging, programmer and TRVs | 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                               |   |                  |
| Not applicable   |   |                  |
| Criterion 3 – Limiting the effects of heat gains in su | mmer                                    |                  |
| 9 Summertime temperature                               |   |                  |
| Overheating risk (Thames Valley)                       | Slight                                  | Pass             |
| Based on:  |   |                  |
| Overshading  | Average                                 |                  |
| Windows facing South                                   | 1.35 m <sup>2</sup> , No overhang       |                  |
| Air change rate  | 6.00 ach                                |                  |
| Blinds/curtains  | None                                    |                  |
| Criterion 4 – Building performance consistent with     | DER and DFEE rate                       |                  |
| Party Walls  |   |                  |
| Туре   | U-value                                 |                  |
| Filled Cavity with Edge Sealing                        | 0.00 W/n                                | n²K Pass         |
| Air permeability and pressure testing                  |   |                  |
| <u>3 Air permeability</u>                              |   |                  |
| Air permeability at 50 pascals                         | 4.00 (design value)                     |                  |
| Maximum  | 10.0                                    | Pass             |
| <u>10 Key features</u>                                 |   |                  |
| Party wall U-value                                     | 0.00 W/n                                | 1²K              |
| Roof U-value   | 0.12 W/n                                | 1 <sup>2</sup> K |
| Roof U-value   | 0.12 W/n                                | 1 <sup>2</sup> K |
| Door U-value   | 1.00 W/n                                | 1 <sup>2</sup> K |



| BASIC COMPLIANCE REPORT<br>Calculation Type: New Build (As Designed)  |                 |              |   |                  | Design SAP<br>elmhurst energy     |             |  |
|---|-----------------|--------------|---|------------------|-----------------------------------|-------------|--|
| Property Reference 0221 LMR B01                                       | 14              |              |   | Is               | sued on Date                      | 22/07/2022  |  |
| Assessment Be Green   |                 |              | Р   | rop Type Ref Fla | t 14                              |             |  |
| Reference<br>Property 14  |                 |              |   |                  |                                   |             |  |
|   |                 |              | -   |                  |                                   |             |  |
| SAP Rating  |                 | 74 C         | DER   | 38.74            | TER                               | 70.29       |  |
| Environmental   |                 | 85 B         | % DER <ter< td=""><td>102.67</td><td>44.88</td><td>107.07</td></ter<>                       | 102.67           | 44.88                             | 107.07      |  |
| CO <sub>2</sub> Emissions (t/year)<br>General Requirements Compliance |                 | 0.67<br>Pass | DFEE<br>% DFEE <tfee< td=""><td>103.67</td><td><b>TFEE</b> 3.18</td><td>107.07</td></tfee<> | 103.67           | <b>TFEE</b> 3.18                  | 107.07      |  |
|   |                 |              | -   |                  |                                   |             |  |
| Assessor Details Miss Jessica James<br>jess@jawsustaina               |                 | s, Tel: 020  | 79938507,   |                  | Assessor ID                       | R564-0001   |  |
| Client  | onry.com        |              |   |                  |                                   |             |  |
| SUMARY FOR INPUT DATA FOR New B                                       | uild (As Design | ned)         |   |                  |                                   |             |  |
| Criterion 1 – Achieving the TER and TFI                               |                 |              |   |                  |                                   |             |  |
| 1a TER and DER  |                 |              |   |                  |                                   |             |  |
| Fuel for main heating   |                 | Electrici    | ty (c)  |                  |                                   |             |  |
| Fuel factor   |                 | 1.55 (ele    |   |                  |                                   |             |  |
| Target Carbon Dioxide Emission Rat                                    | e (TER)         | 70.29        |   |                  | kgCO <sub>2</sub> /m <sup>2</sup> | ]           |  |
| Dwelling Carbon Dioxide Emission R                                    |                 | 38.74        |   |                  | kgCO <sub>2</sub> /m <sup>2</sup> | Pass        |  |
| -   |                 | -31.55 (-    | -44.9%)   |                  | kgCO <sub>2</sub> /m <sup>2</sup> |             |  |
| 1b TFEE and DFEE  |                 |              |   |                  | _                                 |             |  |
| Target Fabric Energy Efficiency (TFEI                                 | E)              | 107.07       |   |                  | kWh/m²/yr                         |             |  |
| Dwelling Fabric Energy Efficiency (DFEE)                              |                 | 103.67       |   |                  | kWh/m²/yr                         |             |  |
|   |                 | -3.4 (-3.2   | 2%)   |                  | kWh/m²/yr                         | Pass        |  |
| Criterion 2 – Limits on design flexibility                            | 1               |              |   |                  |                                   |             |  |
| Limiting Fabric Standards   |                 |              |   |                  |                                   |             |  |
| 2 Fabric U-values   |                 |              |   |                  |                                   |             |  |
| Element   | Average         |              |   | Highest          |                                   |             |  |
| External wall   |                 | ax. 0.30)    |   | 0.17 (max. 0.70) |                                   | Pass        |  |
| Roof  |                 | ax. 0.20)    |   | 0.12 (max. 0.35) |                                   | Pass        |  |
| Openings  | 1.12 (ma        | ax. 2.00)    | -   | 1.20 (max. 3.30) |                                   | Pass        |  |
| 2a Thermal bridging<br>Thermal bridging calculated usin               | a dofault v val | up of 0 15   |   |                  |                                   |             |  |
| 3 Air permeability  | g default y-vai | ue 01 0.15   |   |                  |                                   |             |  |
| Air permeability at 50 pascals  |                 | 4.00 (de     | sign value)   |                  |                                   |             |  |
| Maximum   |                 | 10.0         | sign value)   |                  |                                   | Pass        |  |
| Limiting System Efficiencies  |                 | 10.0         |   |                  |                                   | 1 1 1 2 3 3 |  |
| 4 Heating efficiency  |                 |              |   |                  |                                   |             |  |
| Main heating system   |                 | Commu        | nity heating sche   | me               |                                   |             |  |
| Secondary heating system  |                 | None         | inty including solle  |                  |                                   |             |  |
| 5 Cylinder insulation   |                 |              |   |                  |                                   | ] [         |  |
| -   |                 | No cylin     | -l  |                  |                                   |             |  |
| Hot water storage   |                 |              | der   |                  |                                   | 11 1        |  |



**Design SAP** elmhurst energy

| Space heating controls                                 | Flat rate charging, programmer and TRVs |      |  |  |
|--|---|------|--|--|
| Hot water controls                                     | No cylinder                             |      |  |  |
| 7 Low energy lights                                    |   |      |  |  |
| Percentage of fixed lights with low-energy fittings    | 100 %                                   |      |  |  |
| Minimum  | 75 %                                    | Pass |  |  |
| 8 Mechanical ventilation                               |   |      |  |  |
| Not applicable   |   |      |  |  |
| Criterion 3 – Limiting the effects of heat gains in su | mmer                                    |      |  |  |
| 9 Summertime temperature                               |   |      |  |  |
| Overheating risk (Thames Valley)                       | Slight                                  | Pass |  |  |
| Based on:  |   |      |  |  |
| Overshading  | Average                                 | ]    |  |  |
| Windows facing North                                   | 5.64 m <sup>2</sup> , No overhang       |      |  |  |
| Air change rate  | 6.00 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                         | 4.00 (design value)                     | 7    |  |  |
| Maximum  | 10.0                                    | Pass |  |  |
| <u>10 Key features</u>                                 |   |      |  |  |
| Roof U-value   | 0.12 W/m²K                              |      |  |  |
| Door U-value   | 1.00 W/m²K                              |      |  |  |
|  | · ·                                     |      |  |  |



| BASIC COMPLIANCE REPORT<br>Calculation Type: New Build (As Designed)  |                      |              |   |                                      | Design SAP<br>elmhurst energy     |            |  |
|---|----------------------|--------------|---|--------------------------------------|-----------------------------------|------------|--|
| Property Reference 0221 LMR B01                                       | 14                   |              |   | lss                                  | ued on Date                       | 22/07/2022 |  |
| Assessment Be Lean  |                      |              | P   | Prop Type Ref Flat                   | 14                                |            |  |
| Reference<br>Property 14  |                      |              |   |                                      |                                   |            |  |
|   |                      |              |   |                                      |                                   |            |  |
| SAP Rating  |                      | 74 C         | DER   | 47.34                                | TER                               | 47.34      |  |
| Environmental   |                      | 82 B         | % DER <ter< td=""><td>102.67</td><td>0.00<br/>TFEE</td><td>107.07</td></ter<>   | 102.67                               | 0.00<br>TFEE                      | 107.07     |  |
| CO <sub>2</sub> Emissions (t/year)<br>General Requirements Compliance |                      | 0.82<br>Pass | DFEE<br>% DFEE <tfee< td=""><td>103.67</td><td>3.18</td><td>107.07</td></tfee<> | 103.67                               | 3.18                              | 107.07     |  |
|   |                      |              |   |                                      |                                   |            |  |
| Assessor Details Miss Jessica James<br>jess@jawsustainab              |                      | , Tel: 0207  | 9938507,  | •                                    | Assessor ID                       | R564-0001  |  |
| Client  |                      |              |   |                                      |                                   |            |  |
| SUMARY FOR INPUT DATA FOR New Bu                                      | uild (As Designe     | ed)          |   |                                      |                                   |            |  |
| Criterion 1 – Achieving the TER and TFE                               | · ·                  |              |   |                                      |                                   |            |  |
| 1a TER and DER  |                      |              |   |                                      |                                   |            |  |
| Fuel for main heating   |                      | Mains ga     | is (c)  |                                      |                                   |            |  |
| Fuel factor   |                      | 1.00 (ma     |   |                                      |                                   |            |  |
| Target Carbon Dioxide Emission Rate                                   | e (TER)              | 47.34        |   |                                      | kgCO₂/m²                          |            |  |
| Dwelling Carbon Dioxide Emission Ra                                   | ate (DER)            | 47.34        |   |                                      | kgCO <sub>2</sub> /m <sup>2</sup> | Pass       |  |
|   |                      | 0.00 (0.0    | %)  |                                      | kgCO <sub>2</sub> /m <sup>2</sup> |            |  |
| 1b TFEE and DFEE  |                      |              |   |                                      | _                                 |            |  |
| Target Fabric Energy Efficiency (TFEE                                 |                      | 107.07       |   |                                      | kWh/m²/yr                         |            |  |
| Dwelling Fabric Energy Efficiency (DFEE)                              |                      | 103.67       | 20()  |                                      | kWh/m²/yr                         |            |  |
| Criterion 2 – Limits on design flexibility                            |                      | -3.4 (-3.2   | 2%)   |                                      | kWh/m²/yr                         | Pass       |  |
|   |                      |              |   |                                      |                                   |            |  |
| Limiting Fabric Standards   |                      |              |   |                                      |                                   |            |  |
| <u>2 Fabric U-values</u><br>Element                                   | Average              |              |   | Highest                              |                                   |            |  |
| External wall   | Average<br>0.16 (max | (030)        |   | 0.17 (max. 0.70)                     |                                   | Pass       |  |
| Roof  | 0.10 (ma)            |              |   | 0.17 (max. 0.70)<br>0.12 (max. 0.35) |                                   | Pass       |  |
| Openings  | 1.15 (ma)            | ,            |   | 1.20 (max. 3.30)                     |                                   | Pass       |  |
| 2a Thermal bridging   | (                    |              |   | ()                                   |                                   |            |  |
| Thermal bridging calculated using                                     | g default y-valu     | e of 0.15    |   |                                      |                                   |            |  |
| 3 Air permeability  |                      |              |   |                                      |                                   |            |  |
| Air permeability at 50 pascals  |                      | 4.00 (des    | sign value)   |                                      |                                   |            |  |
| Maximum   |                      | 10.0         |   |                                      |                                   | Pass       |  |
| Limiting System Efficiencies  |                      |              |   |                                      |                                   |            |  |
| 4 Heating efficiency  |                      |              |   |                                      |                                   |            |  |
| Main heating system   |                      | Commur       | nity heating sche   | me                                   |                                   | -          |  |
| Secondary heating system  |                      | None         |   |                                      |                                   |            |  |
| 5 Cylinder insulation   |                      |              |   |                                      |                                   |            |  |
| Hot water storage   |                      | No cylino    | der   |                                      |                                   |            |  |
| <u>6 Controls</u>   |                      |              |   |                                      |                                   |            |  |



**Design SAP** elmhurst energy

| Space heating controls                                 | Flat rate charging, programmer and TRVs |      |  |  |
|--|---|------|--|--|
| Hot water controls                                     | No cylinder                             |      |  |  |
| 7 Low energy lights                                    |   |      |  |  |
| Percentage of fixed lights with low-energy fittings    | 100 %                                   |      |  |  |
| Minimum  | 75 %                                    | Pass |  |  |
| 8 Mechanical ventilation                               |   |      |  |  |
| Not applicable   |   |      |  |  |
| Criterion 3 – Limiting the effects of heat gains in su | mmer                                    |      |  |  |
| 9 Summertime temperature                               |   |      |  |  |
| Overheating risk (Thames Valley)                       | Slight                                  | Pass |  |  |
| Based on:  |   |      |  |  |
| Overshading  | Average                                 | ]    |  |  |
| Windows facing North                                   | 5.64 m <sup>2</sup> , No overhang       |      |  |  |
| Air change rate  | 6.00 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                         | 4.00 (design value)                     | 7    |  |  |
| Maximum  | 10.0                                    | Pass |  |  |
| <u>10 Key features</u>                                 |   |      |  |  |
| Roof U-value   | 0.12 W/m²K                              |      |  |  |
| Door U-value   | 1.00 W/m²K                              |      |  |  |
|  | · ·                                     |      |  |  |

