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| **INAB ACCREDITED BUILDING AIRTIGHTNESS TEST & RESULTS** |
| **Report Number:** | **4038** |
| **Building Name & Address** | **New Gate Cultural Centre, Derry 2 - 4 Kennedy Street Derry BT48 6RF** |
| **Client Details:** | **QMAC Construction** |
| **Test Date:** | **31/05/2023** |
| **Test Time:** | **11:09:00** | **DEAP Value:** |
| **Test Engineer:** | **Brian P Cunningham** | **RESULTS**  |
| **Tester position:** | **Inside** |
| **Building Measurements**  |  |
| **Volume, *V*:** | **0.00 m³** | **Air changes at 50 Pa, n50 [/h]:** | **0.00** |
| **Envelope Area, *Ae*:** | **1495.00 m²** | **Air Permeability at 50 Pa, AP50:** | **9.10466m3.h-1.m-2** |
| **Floor Area, *Af*::** | **0.00 m²** | **Flow per Floor Area at 50 Pa, [m³/h/m²]:** | **0.00** |
|  | **Air flow at 50 Pa, [h/m²]:** | **13611.47** |
|  | **Correlation Coefficient, r2:** | **0.99603** |
|  | **Slope, n:** | **0.687240105** |
|  | **Air Flow Coefficient, Cenv:** | **917.67 m3.h-1** |
|  | **Air Leakage Coefficient, CL:** | **925.34 m3.h-1** |
| **The Building achieved an air permeability of 9.10466 m3.h-1.m-2 This is Less than the specified air permeability of 5 m3.h-1.m-2 at 50 Pa building pressure** |
| **Test Data** | **Depressurized or Pressurized Method 2**  |
| **Start (Pa):** | **1.10** | **1.20** | **1.30** | **Start Inside Temperature** | **17.6°C** | **Start Outside Temperature** | **17.5°C** |
| **Building (Pa)** | **-60.00** | **-55.00** | **-50.00** | **-45.00** | **-40.00** | **-35.00** | **-30.00** | **-25.00** |
| **Flow** | **8648.00** | **9215.00** | **10674.00** | **11498.00** | **12534.00** | **13681.00** | **14587.00** | **15611.00** |
| **Error** | **3.1** | **-3.3** | **0.6** | **-1.3** | **-0.9** | **0.5** | **0.3** | **1.1** |
| **End (Pa):** |  |  |  | **End Inside Temperature** | **17.6°C** | **End Outside Temperature** | **17.5°C** |
| **Average Barometric Pressure** | **103.17 kPa** | **Wind Speed** |  |

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| ***Graph of Building Pressure*** |  | ***Equipment details used in test*** |
|  |  | **Equipment Type** | **Serial No……** | **18/02/2022** |
|  | **#6 Fan:** | **3XLFT00458** |  |
|  | **Manometer:** |  |  |
|  | **Barometer:** |  |  |
|  | **Thermometer:** |  |  |
| ***Information of building*** |
| **Type of Test:** | **Whole building** |
| **Internal Doors:** | **Open** |
| **External Doors:** | **Closed** |
| **External Windows:** | **Closed** |
| **Trickle Vents:** | **Closed & Sealed** |
| **Ventilation:** | **System 1 - Background ventilators with intermittent extractors** | **Sealed** |
| **Heating:** | **Gas/Oil/Heap Pump** |
| **Deviations from Standard’s Notes:** |
| ***The building has been tested in accordance with the following standards. EN ISO 9972:2015, ATTMA TSL1/TLS2/TSL3 and BCTS Ltd ISO17025 quality management system. Refer to terms and condition for MU. The external envelope was calculated by BCTS from drawings issued by the client.***  |
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| **Checked by and signed off by:** | **Brian Cunningham:**  | **Director.** | **Date:** |