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| **INAB ACCREDITED BUILDING AIRTIGHTNESS TEST & RESULTS** |
| **Report Number:** | **428** |
| **Building Name & Address** | **New Building Grennan College, Thomastown Kilkenny Kilkenny** |
| **Client Details:** | **Bell Contracts** |
| **Test Date:** | **16/12/2021** |
| **Test Time:** | **11:05:00** | **DEAP Value:** |
| **Test Engineer:** | **Brian P Cunningham** | **RESULTS**  |
| **Tester position:** | **Inside** |
| **Building Measurements**  |  |
| **Volume, *V*:** | **2248 m³** | **Air changes at 50 Pa, n50 [/h]:** | **2.09** |
| **Envelope Area, *Ae*:** | **1730 m²** | **Air Permeability at 50 Pa, AP50:** | **2.72155m3.h-1.m-2** |
| **Floor Area, *Af*::** | **613 m²** | **Flow per Floor Area at 50 Pa, [m³/h/m²]:** | **7.68** |
|  | **Air flow at 50 Pa, [h/m²]:** | **4708.28** |
|  | **Correlation Coefficient, r2:** | **0.99956** |
|  | **Slope, n:** | **0.604049079** |
|  | **Air Flow Coefficient, Cenv:** | **437.04 m3.h-1** |
|  | **Air Leakage Coefficient, CL:** | **443.20 m3.h-1** |
| **The Building achieved an air permeability of 2.72155 m3.h-1.m-2 This is Less than the specified air permeability of 3 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** | **11.8°C** | **Start Outside Temperature** | **13.1°C** |
| **Building (Pa)** | **-45.00** | **-51.00** | **-57.00** | **-63.00** | **-69.00** | **-75.00** | **-81.00** | **-87.00** |
| **Flow** | **3149.39** | **3527.00** | **3855.61** | **4176.01** | **4465.54** | **4750.34** | **5031.23** | **5141.22** |
| **Error** | **-0.8** | **0.6** | **0.2** | **0.4** | **0.2** | **0.0** | **0.2** | **-0.7** |
| **End (Pa):** |  |  |  | **End Inside Temperature** | **11.8°C** | **End Outside Temperature** | **13.1°C** |
| **Average Barometric Pressure** | **102.5 kPa** | **Wind Speed** |  |

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| ***Graph of Building Pressure*** |  | ***Equipment details used in test*** |
|  |  | **Equipment Type** | **Serial No……** | **30/08/2022** |
|  | **#4 Fan:** | **5FN000147** |  |
|  | **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:** |