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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** | | | |  | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***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.*** | | | | | | | | |
|
| **Checked by and signed off by:** | **Brian Cunningham:** | | | | **Director.** | **Date:** | | |