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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** | | | |  | | |

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