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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **INAB ACCREDITED BUILDING AIRTIGHTNESS TEST & RESULTS** | | | | | | | | | | | | | | | |
| **Report Number:** | | | | | **1744** | | | | | | | | | | |
| **Building Name & Address** | | | | | **Site\_31 The Beeches Castlefen Kildare** | | | | | | | | | | |
| **Client Details:** | | | | | **Cunningham Contracts IRE LTD** | | | | | | | | | | |
| **Test Date:** | | | | | **26/08/2022** | | | | | | | | | | |
| **Test Time:** | | | | | **10:10:00** | | | | | | | **DEAP Value:** | | | |
| **Test Engineer:** | | | | | **Brian P Cunningham** | | | | | | | **RESULTS** | | | |
| **Tester position:** | | | | | **Inside** | | | | | | |
| **Building Measurements** | | | | |  | | | | | | |
| **Volume, *V*:** | | **145.58 m³** | | | **Air changes at 50 Pa, n50 [/h]:** | | | | | | | **3.05** | | | |
| **Envelope Area, *Ae*:** | | **193.72 m²** | | | **Air Permeability at 50 Pa, AP50:** | | | | | | | **2.29399m3.h-1.m-2** | | | |
| **Floor Area, *Af*::** | | **54.59 m²** | | | **Flow per Floor Area at 50 Pa, [m³/h/m²]:** | | | | | | | **8.14** | | | |
|  | | | | | **Air flow at 50 Pa, [h/m²]:** | | | | | | | **444.39** | | | |
|  | | | | | **Correlation Coefficient, r2:** | | | | | | | **0.9998** | | | |
|  | | | | | **Slope, n:** | | | | | | | **0.992346258** | | | |
|  | | | | | **Air Flow Coefficient, Cenv:** | | | | | | | **9.15 m3.h-1** | | | |
|  | | | | | **Air Leakage Coefficient, CL:** | | | | | | | **9.15 m3.h-1** | | | |
| **The Building achieved an air permeability of 2.29399 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** | | | | **16.5°C** | **Start Outside Temperature** | | | | | **17.2°C** |
| **Building (Pa)** | **-59.40** | | **-54.40** | | **-49.40** | | **-44.40** | **-39.40** | | | **-34.40** | **-29.40** | | **-24.40** | |
| **Flow** | **220.00** | | **264.00** | | **308.00** | | **349.00** | **396.00** | | | **442.00** | **491.00** | | **528.00** | |
| **Error** | **0.4** | | **0.1** | | **-0.1** | | **-1.0** | **-0.2** | | | **0.2** | **1.1** | | **-0.4** | |
| **End (Pa):** |  | |  |  | **End Inside Temperature** | | | | **16.5°C** | | **End Outside Temperature** | | | | **17.2°C** |
| **Average Barometric Pressure** | | | | **101.21 kPa** | | | | | **Wind Speed** | | | |  | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Graph of Building Pressure*** | |  | ***Equipment details used in test*** | | | | | |
|  | |  | **Equipment Type** | | | **Serial No……** | **16/08/2022** | |
|  | **#1 Fan:** | | | **3PH600642** |  | |
|  | **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 3 - Continuous Mechanical Extraction** | | | | **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:** | | |