











| Building Energy Performance | | Scotland |
|---|---|---|
| Energy Performance Certificate | Calculated asset rating using DesignBuilder SBEM v3.0.0 [SBEM] | Building type Offices and Workshop businesses |
| | Current rating | |
| | Excellent | |
| |  | Carbon Neutral |
| |  | A (0 to 15) |
| |  | B (16 to 30) |
| |  | C (31 to 45) |
|  | D (46 to 60) | |
|  | E (61 to 80) | |
|  | F (81 to 100) | |
|  | G (100+) | |
| Very Poor | | |
| Carbon Dioxide Emissions | | |
| The number refers to the calculated carbon dioxide emissions in terms of kg per m ² of floor area per year | | |
| 52 | | |
| Approximate current energy use per m ² of floor area: | | |
| 116 kWh/m² | | |
| Main heating fuel: Natural Gas Building Services: Air conditioning | | |
| Renewable energy source: Heat pumps Electricity: Grid supplied | | |
| Carbon Dioxide is a greenhouse gas which contributes to climate change. Less Carbon Dioxide emissions from buildings helps the environment. | | |
| Benchmarks | | |
| A building of this type built to building regulations standards current at the date of issue of this certificate would have a rating: | | 28 |
| | |  B |
| Where the accompanying recommendations for the cost effective improvement of energy performance are applied, this building would have a rating: | | 0 |
| | |  ?? |
| Recommendations for the cost-effective improvement (lower cost measures) of the energy performance | | |
| 1. Replace tungsten GLS lamps with CFLs: Payback period dependent on hours of use. 4. Add optimum start/stop to the heating system. | | |
| 2. Consider replacing T8 lamps with retrofit T5 conversion kit. 5. Install more efficient water heater. | | |
| 3. Introduce HF (high frequency) ballasts for fluorescent tubes: Reduced number of fittings required. 6. Some windows have high U-values - consider installing secondary glazing. | | |

Address: Johnstone House, 50-54 Rose Street, ABERDEEN AB10 1UD

Conditioned area (m²): 5130

Name of protocol organisation: Stroma Accreditation Ltd, [STRO005748]

Date of issue of certificate: 03 Feb 2013 (Valid for a period not exceeding 10 years)

This certificate is a requirement of EU Directive 2002/91/EC on the energy performance of buildings.

NB THIS CERTIFICATE MUST BE AFFIXED TO THE BUILDING AND NOT REMOVED UNLESS REPLACED WITH AN UPDATED VERSION AND FOR PUBLIC BUILDINGS DISPLAYED IN A PROMINENT PLACE