











Building Energy Performance		Scotland
Energy Performance Certificate	Calculated asset rating using DesignBuilder v.1.7.0.020 [SBEM]	Building type Libraries/museums/galleries
	<b>Current rating</b>	
	<b>Excellent</b>	
		<b>Carbon Neutral</b>
		<b>A (0 to 15)</b>
		<b>B (16 to 30)</b>
		<b>C (31 to 45)</b>
		<b>D (46 to 60)</b>
	<b>E (61 to 80)</b>	
	<b>F (81 to 100)</b>	
	<b>G (100+)</b>	
<b>Very Poor</b>		
<b>Carbon Dioxide Emissions</b>		
The number refers to the calculated carbon dioxide emissions in terms of kg per m <sup>2</sup> of floor area per year		<b>58</b>
Approximate current energy use per m <sup>2</sup> of floor area:		<b>199 kWh/m<sup>2</sup></b>
Main heating fuel: Natural Gas		Building Services: Heating with Nat. Vent.
Renewable energy source:		Electricity: Grid supplied
<b>Carbon Dioxide is a greenhouse gas which contributes to climate change. Less Carbon Dioxide emissions from buildings helps the environment.</b>		
<b>Benchmarks</b>		
A building of this type built to building regulations standards current at the date of issue of this certificate would have a rating:		<b>50</b>  <b>D+</b>
Where the accompanying recommendations for the cost effective improvement of energy performance are applied, this building would have a rating:		<b>55</b>  <b>D</b>
<b>Recommendations for the cost-effective improvement (lower cost measures) of the energy performance</b>		
1. Consider replacing T8 lamps with retrofit T5 conversion kit.	4. Some walls have uninsulated cavities - introduce cavity wall insulation.	
2. Introduce HF (high frequency) ballasts for fluorescent tubes: Reduced number of fittings required.	5. Carry out a pressure test, identify and treat identified air leakage. Enter result in EPC calculation.	
3. Some spaces have a significant risk of overheating. Consider solar control measures such as the application of reflective coating or shading devices to windows.	6. Some floors are poorly insulated - introduce and/or improve insulation. Add insulation to the exposed surfaces of floors adjacent to underground, unheated spaces or exterior.	

**Address:** Central Library, Aberdeen  
**Conditioned area (m<sup>2</sup>):** 3983  
**Name of protocol organisation:** BRE, [BRE-ND-EPC000086]  
**Date of issue of certificate:** 25 Nov 2008 (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**