











Building Energy Performance		Scotland
Energy Performance Certificate	Calculated asset rating using DesignBuilder v.1.6.9.003 [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>53</b>
Approximate current energy use per m <sup>2</sup> of floor area:		<b>200 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>57</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>47</b>  <b>D+</b>
<b>Recommendations for the cost-effective improvement (lower cost measures) of the energy performance</b>		
1. Consider installing building mounted wind turbine(s).	4. Consider replacing T8 lamps with retrofit T5 conversion kit.	
2. Consider installing solar water heating.	5. Introduce HF (high frequency) ballasts for fluorescent tubes: Reduced number of fittings required.	
3. Consider installing PV.	6. Some spaces have a significant risk of overheating. Consider solar control measures such as the application of reflective coating or shading devices to windows.	

**Address:** Maritime Museum, Shiprow, Aberdeen

**Conditioned area (m<sup>2</sup>):** 2564

**Name of protocol organisation:** CIBSE Certification Limited, [RICS 184761]

**Date of issue of certificate:** 31 Oct 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**