The Scottish Parliament Building’s energy efficiency credentials have been confirmed by its B EPC rating. An Accredited Energy Assessor from IES Consulting undertook the EPC assessment.

Due to the complexity of the building IES Consulting completed advanced 3D modelling and dynamic simulation of the Scottish Parliament using its Scottish Building Standards approved Virtual Environment software in order to determine the EPC rating.

An EPC B rating is the same rating a building of this type designed to today’s stringent standards (Section 6 2007) would be expected to achieve.

David McEwan, UK Director of Glasgow-based IES and the Energy Assessor for the project said: “Given that the building was designed to pre-2000 standards when awareness and understanding of energy efficiency in buildings was considerably lower demonstrates exactly how cutting edge the design was. This B rating is a testament to the high quality sustainable design of the building - where energy efficiency standards have been raised substantially by around 30% since the building was designed in 1997.”

Enric Miralles’ plan for Holyrood made sustainability a central element of the design. The environmental impact of the building was reduced through careful design and selection of materials. Particular attention was given to minimising energy consumption through the increased use of natural ventilation and daylight, a reduction in the need for air conditioning and the use of innovative technology such as a combined heat and power plant.

David Fairhurst, the Scottish Parliament’s Environment manager, said: “We are pleased the energy performance for the entire Parliament building has been assessed as achieving a rate which meets regulations introduced in 2007. This rating clearly demonstrates the conscious efforts which were put into the design and construction of Holyrood to ensure it operated as an energy efficient building.”

IES Consulting worked closely with Thomas and Adamson, whose surveyors gathered all the information.
HOW ARE NON-DOMESTIC EPCS PRODUCED?
Buildings are rated on predicted energy use calculated using official UK Government Simplified Building Energy Model (SBEM) or other approved Dynamic Simulation Model (DSM) software. The IES <Virtual Environment> suite of building performance modelling tools enables both SBEM and DSM calculations from the same 3D input model. The A to G EPC rating grades the building based on calculated CO₂ emissions as determined from its official energy use. For more information on SBEM and DSM – see the CLG website.

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