

Scottish Parliament

Complete	Area	Client	Architect
2004	UK Scotland	RMJM Architects	Enric Miralles / RMJM Architects

The Scottish Parliament is a campus of several buildings at the edge of Edinburgh's old town. Covering four acres, the buildings provide accommodation for MSPs, their researchers and parliamentary staff.

Designed by the Spanish architect Enric Miralles and opened by Queen Elizabeth II, the parliament is rated as 'Excellent' by BREEAM and features a number of sustainability features. These include a computerised system that senses the temperature and opens and closes windows automatically and 25m deep bore holes beneath the campus to provide water for cooling and toilet facilities.

The main debating chamber uses a roof structure that allows it to span over 30m without any supporting columns. Predominantly constructed using timber, the chamber uses laminated glass panels and fins to allow natural light to be diffused into the chamber.

In 2005 the Scottish Parliament won the prestigious Stirling Prize.



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Services provided

Sandy Brown provided full acoustic consultancy for the design of the Scottish Parliament, from initial design through to detailed design, construction, and commissioning. This included the debating chamber and associated press facilities, public galleries, committee rooms, libraries, offices, restaurant facilities and bars.

Within this large development, there were a number of acoustic priorities which included:

- The acoustic quality and speech intelligibility within the debating chamber
- broadcast areas that were designed to BBC guidelines for acoustic standards
- acoustic finishes and the design of acoustic treatments to control reverberation time
- wall, floor and door constructions
- detailed design for noise and vibration control of building services systems.

Special acoustic features

The debating chamber is served by a displacement system designed to ensure low background noise levels, and the soffit of the chamber is a bespoke system which is acoustically absorbent, designed to control the reverberation time in the space.

The radio broadcast booths are used to record speech / voiceovers for broadcast, and have stringent acoustic specifications, which are achieved by a combination of low frequency and broadband modular absorbers.

In the committee rooms the acoustic quality is achieved by a combination of absorbent treatment integrated into the interior design, supplemented by efficient treatment above the decorative plasterboard ceilings.

Building services plant is designed to meet NR25 in many areas. But as well as system side noise, the atmospheric side of the building services plant design was also critical because much of the basement plant connects to common lightwells, which are overlooked by spaces which are naturally ventilated via opening windows.



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