

Arbroath Abbey by Advanced Roofing



<http://www.simpsonandbrown.co.uk/architecture/museums-galleries-visitor-centres/arb-roath-abbey-visitor-centre/>

Simpson & Brown won a design competition for the Arbroath Abbey Visitor Reception Building in 1999. The scheme included a new building with visitor facilities, a retail area, audio-visual exhibition space and viewing gallery, together with external landscaping and new interpretation throughout the Abbey site.

In response to the challenging and sensitive site, the new building form is a layered 'soft' horizontal building, contrasting with the high vertical mass of the Abbey. To achieve this, the building steps back in three volumes, slowly rising up, each space within gaining height and light until it finally cantilevers over the rear graveyard wall, giving views of the Abbey behind. This view of the Abbey grounds is key to the design and helps visitors to understand the layout of the Abbey buildings before they set out to explore them. The road leading to the Abbey was closed and the entrance area was pedestrianised.

The aim was to create a building with minimal impact on the environment, thus the construction of the new building makes use of natural materials - stone, timber, glass and a green, planted sedum roof. The timber structure is a mixture of Douglas fir, larch and oak, assembled off-site by a specialist sub-contractor. The trusses have been designed to be simple and elegant, mixing traditional and modern materials.

The timbers for the curved section of the roof have been selected from parts of trees which match the required profile, thus avoiding bending and the use of glued and laminated beams.

The roof is covered with sedum, a layer of vegetation sitting on a mineral wool blanket which supports the roots and stores water enabling the rock plants to survive during dry periods. This was chosen for aesthetic and practical reasons as the most appropriate low-impact, self-maintaining method of covering the large low-pitched roof structures. Its appearance will change with the seasons, reflecting the surrounding landscape.

The form of the building allows natural ventilation. Low level grilles in the front elevation, controlled by dampers, allow air intake as required. This is drawn through the building by high level dampers and opening windows in the curved sections of the north and south elevations.