

Green Roof

Nant Gwrtheyrn Welsh Language Centre, Gwynedd



Background

Set on the north coast of the Llyn Peninsula in North Wales, Nant Gwrtheyrn inhabits the former quarrying village of Porth y Nant, which is evidenced by the numerous derelict farm houses scattered around the site. The quarries closed in 1939 following reduced demand for the granite, and eventually the villagers left. After many of the buildings became derelict and damaged during the 1970s, the Welsh Language Centre was established in 1978 and has been providing its resources to over 25000 people ever since.

Challenge

The project brief was to redevelop the site to offer improved conferencing and catering facilities to provide the level and service expected of such an establishment. In keeping with many projects throughout the country, the architectural and planning authorities specified that a green/living roof be constructed above the roof to the café extension.

In context of its location the site was inaccessible for larger lorries, and the logistics of multiple deliveries became problematic.

Solution

Icopal's TotalTorch and Rootbar capsheet system was specified for the waterproofing due to its robustness. For the green roof element Icopal's EasyGreen modular system was chosen, as the interconnecting modules each contain all of the components required to provide an instant sedum green roof. The advantage of this system over traditional multi-layered schemes is that the sedum is already established and rooted into the growing medium within the module. This makes it more tolerant to issues of wind uplift, which was an important factor for this particular project being situated on an extremely exposed coastal location.

The modular design also meant that logistics of getting the materials to site and on the roof deck were far easier compared with traditional sedum systems, and allowed for quick and easy installation by the roofing contractor.

The renovation of the site has been possible with £5m in European and Welsh Assembly Government grants and has seen the original cottages turned into four-star accommodation and the provision of conference and wedding facilities as well as a new cafe-bar and heritage centre. The facilities were officially opened in March 2011.

Project:

Nant Gwrtheyrn Welsh Language Centre, Gwynedd

Area:

250 m²

Completion Date:

2010

System:

Total Torch & Rootbar System and EasyGreen Extensive Sedum Module

Client:

Nant Gwrtheyrn Trust

Architect:

James Jenkins Thomas, Aberystwyth

Main Contractor:

R L Davies & Son Ltd, Colwyn Bay

Contractor:

JPR Roofing & Flooring Ltd, Stoke