CASE STUDY

NEW BUTE SCHOOL OF MEDICINE

The environmental and sustainability challenges provided the perfect tonic for this complex roof

Project Sector:	Public Sector
Application:	Built-up-Roofing
Systems used:	IKO's 15 Year BUFR System
Contractor:	Weatherproofing Advisors Ltd
Started:	March 2009
Completed:	September 2009
Size:	1500m^2

The New Bute Medical School is the school of medicine at the University of St Andrews. It is situated on the North Sea coast of St Andrews, Fife in Scotland and looks down on some breathtaking scenery.

The brand new facility has allowed medical student numbers to increase from 110 to 190 per year group. The refurbishment was therefore an important initiative for St Andrew's University in order to facilitate the highest standards of modern educational practise and produce doctors of the highest quality.

The roof design and installation for this new roof needed to address several key criteria including being an inverted roof, incorporating a lot of complex protrusions, its location in an area exposed to the harshest elements and a project schedule that fell whilst the university was operational and during some very bad weather conditions. The building was also required to meet specific environmental factors and conform to the latest Scottish Building regulations, which included the U-Value for the inverted insulation.

The University also had specific access restrictions onto the roof and one of the most challenging aspects was the logistical planning required to crane large amounts of materials to roof level, which could only accept limited weights in certain areas.

All the timber and any packaging had to be procured from sustainable sources and certification provided to confirm this. All debris from site had to be disposed of in accordance with BREEAM regulations and other elements that could impact the environment had to be controlled; for example drainage from roof areas had to be collected in the harvesting tank.

robust in its protection ensuring that all areas of the roof, including the protrusions were weatherproofed effectively.

Being an IKO approved contractor Weatherproofing Advisors Ltd was able to install the roof to the specific design criteria. They installed IKO's 15 year built up flat roofing system using the pour and roll method. The system was butt jointed to make sure the boards were installed evenly.

Decorative stones and slabs were installed on top of the waterproofing system for additional protection and to outline the man safe system. This brought an additional challenge of transporting a large amount of ballast onto site with minimal disruption to the students, staff and visitors during the day to day workings of the university.

The built-up roofing system was laid despite extremely bad weather conditions.

The project satisfied the University Management Team and the finished roof was awarded a 20 year material and workmanship guarantee.

.

IKO PLC, Appley Lane North, Appley Bridge, Wigan, Lancs WN6 9AB Telephone: 0844 873 1062 Fax: 0844 873 1067
Website: www.ikogroup.co.uk