An air leakage record-breaking office building features glazing systems by Kawneer

Kawneer curtain walling helped a commercial building achieve a record-breaking air leakage rate. Some 3,000m² of Kawneer’s AA®110 zone/mullion-drained curtain walling with 65mm sightlines were specified by Michael Laird Architects to help Nine, Edinburgh BioQuarter achieve a BREEAM “Very good” rating.

**Building:** Nine, Edinburgh BioQuarter  
**Location:** Edinburgh  
**Architect:** Michael Laird Architects  
**Main Contractor:** Sir Robert McAlpine  
**Installer:** Charles Henshaw & Sons

[WWW.KAWNEER.CO.UK]
An air leakage record-breaking office building

Curtain walling from leading architectural aluminium systems supplier Kawneer has helped a commercial building achieve a record-breaking air leakage rate.

Some 3,000m² of Kawneer’s AA®110 zone/mullion-drained curtain walling with 65mm sightlines were specified by Michael Laird Architects to help Nine, Edinburgh BioQuarter achieve a BREEAM “Very good” rating. In fact, the overall steel-frame, concrete-deck building, which provides 8,500m² of gross internal floor area, achieved an air leakage rate of 1.42 m³/h·m² @ 50Pa.

Michael Laird associate Adam Frickleton said: “I cannot confirm exactly how this compares to other buildings in the UK but I can confirm that at the time of testing it was the best performance ever recorded by Building Sciences Ltd, who are a testing consultant with over 20 years’ experience, for a building of this type in Scotland.

“The test result was achieved using a careful and considered approach to detailing and construction through all stages of the construction process. Air permeability performance for individual materials and systems was a consideration at the early stages of design. We specified the Kawneer system as we were confident the quality and detailing that was required for this project was achievable based on its use on previous of our projects where it was installed with great success.”

At Nine, Edinburgh BioQuarter, the Kawneer curtain walling was installed over a year (or 27,000 man hours) by specialist sub-contractor Charles Henshaw & Sons for main contractor Sir Robert McAlpine.

Nine is one of the buildings that form the Edinburgh BioQuarter, a new life sciences park being developed by Scottish Enterprise, and will be leased to a number of companies requiring anything between 14m² and 4,000m² of space.

Michael Laird were asked to design an efficient and modern building, with a shell and core suitable for providing flexible accommodation for use as laboratory and office space. The Kawneer curtain walling comprises most of the external envelope, along with a rainscreen cladding system.

Adam Frickleton said: “The recycled content of aluminium was used to assist in the scoring of BREEAM credits. We believe Scottish Enterprise is very pleased with the finished building.”

Alongside the 870-bed Edinburgh Royal Infirmary and the College of Medicine and Veterinary Medicine, Edinburgh BioQuarter offers start-ups and investors access to the Scottish centre for Regenerative Medicine and the BioQuarter incubator building.

The BioQuarter comprises more than 100 acres of serviced and unserviced land for academic, commercial and healthcare use and is being developed in partnership with Alexandria Real Estate Equities Inc (the BioQuarter commercial development partner), alongside the University of Edinburgh and NHS Scotland.

Please contact our Architectural Services Team if you have a project you would like to discuss: Tel: 01928 502604 / Email: kawneerAST@arconic.com

Kawneer UK Limited, Astmoor Road, Astmoor Industrial Estate, Runcorn, Cheshire WA7 1QQ
Tel: + 44 (0)1928 502500 Fax: + 44 (0)1928 502501
WWW.KAWNEER.CO.UK