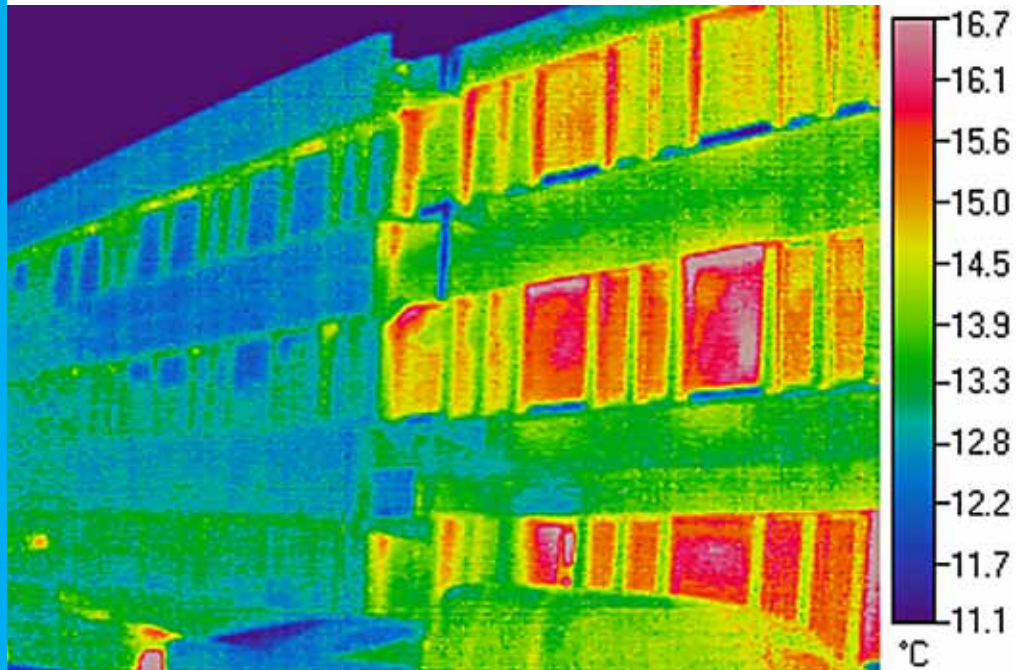


# Project Profile



## PROJECT NAME

COTTRELL BUILDING,  
STIRLING UNIVERSITY

## DEVELOPER

D&B FACADES

## NORDAN GIVES STIRLING UNIVERSITY AN ENERGY-SAVING FACELIFT

Stirling University undoubtedly has one of the most attractive university campuses in Europe, taking in a loch, golf course and 18th century castle. So when its principal building, a mid-1960s concrete structure, was due for refurbishment, aesthetics were as high a priority as improving the thermal performance, and NorDan aluminium clad timber windows offered the perfect solution.

After a rigorous tendering process, Wiltshire-based overcladding specialist D&B Facades won the contract for the £3.9 million refurbishment of the Cottrell Building, which involved installing its external insulated aluminium rainscreen cladding system and replacing the existing single glazing. As the university's facilities department was particularly interested in improving the building's thermal performance, a thermographic survey was commissioned to monitor improvements as the work progressed.

NorDan windows were specified for the project for a combination of reasons, explains Pete Hillyard, managing director at D&B Facades, including performance, value for money, longevity and environmental impact.

He comments: "We have to be confident that what we install will not require constant revisits for repairs, maintenance or adjustment. We've worked with NorDan a number of times before, in schools and universities as well as on high rise residential projects, and in our experience NorDan windows are extremely robust and deliver what they promise – high performance, long life and low maintenance.

"We are also very keen to ensure the products we select have the lowest carbon footprint and are from a sustainable source. We know that with NorDan, recycling is prioritised in manufacture, with waste materials recycled in the factory, plus at the end of the product's useful life, as it's timber, it's easily recyclable."

NorDan worked closely with D&B's design team to produce over 2000 high performance aluminium clad tilt and turn windows and fixed lights. D+B's cladding

ABERDEEN  
83-87 Causewayend  
Aberdeen  
AB25 3TQ  
Tel: 01224 633174  
Fax: 01224 642584

GLENROTHES  
Unit 12,  
Eastfield Bus. Pk.  
Newark Road South  
Glenrothes  
KY7 4NS  
Tel: 01592 775800  
Fax: 01592 775900

WISHAW  
96 Kirk Road  
Wishaw  
North Lanarkshire  
ML2 7NS  
Tel: 01698 376922  
Fax: 01698 376852

GLOUCESTER  
Green Farm Bus. Pk.  
Falcon Close  
Quedgeley  
Gloucester  
GL2 4LY  
Tel: 01452 883131  
Fax: 01452 883739

NEEDHAM MARKET  
Maitland Road  
Lion Barn Bus. Pk.  
Needham Market  
Suffolk  
IP6 8NZ  
Tel: 01449 722922  
Fax: 01449 722911

Email: [info@nordan.co.uk](mailto:info@nordan.co.uk)  
Web: [www.nordan.co.uk](http://www.nordan.co.uk)



system integrates the windows at the design stage for a weathertight result that does not rely on copious amounts of limited life elements such as sealant, silicon and gaskets to ensure high performance.

During the course of the refurbishment, the full new envelope including the windows was built outside face of the existing building before the old windows were removed from the inside, which took place outside normal hours of occupation. This approach meant the existing internal environment was at all times weathertight, allowing uninterrupted use of the building and creating minimal disturbance for the university.

The tilt and turn window used in the Cottrell Building is NorDan's flagship design, in continuous production for over 40 years. In the tilt position, the window opens inwards around 100mm to give draught-free ventilation, while in the turn position it opens inwards completely, allowing easy cleaning of the external glass from inside the building. The building now benefits from NorDan's whole-window U-value of 1.4 W/m<sup>2</sup>K, which in fact created the project's greatest improvement in heat loss terms.

Frequency of maintenance was a key issue for the university in the refurbishment. The aluminium cladding on NorDan's timber windows completely protect the timber in the windows from the external environment, making the frames virtually maintenance-free and giving a lifespan of up to 60 years. The cladding is available in a wide range of colours from the standard RAL colour range, so there are plenty of options for specifiers wanting to give an individual touch to a project.

While aluminium as a material can negatively affect a project's 'green' rating due to the relatively high energy use involved in production, NorDan manufactures its windows and cladding at its factory in Norway, which is powered by hydroelectricity to minimise the embodied energy of its products. This approach combines the practical benefits of aluminium with a reduced environmental impact compared with other manufacturers, making durable aluminium cladding a sound environmental choice.

The refurbishment of the Cottrell Building was delivered 12 weeks ahead of programme and within budget. The thermographic survey of the finished project revealed that the thermal performance had been improved substantially by the new cladding and windows, meaning the building not only has a smart new look, but it will save energy too.

For more information on NorDan's high performance environmentally-friendly windows, click on [www.nordan.co.uk](http://www.nordan.co.uk) or call 01452 883131. For further information on D&B Facades' overcladding systems, visit [www.dbfacades.com](http://www.dbfacades.com).