

# Historic Matfen Hall, Northumberland

Grade II listed Matfen Hall in Northumberland, which dates back to 1832, is a stunning 5 star hotel, golf and wedding venue set in over 300 acres of unique parkland in the beautiful Northumbrian countryside.



**End client:**  
Matfen Hall

**Architect:**  
Doonan Architects

**Building Environment & Services Engineers:**  
Skelly & Couch

**Mechanical & Electrical Contractor:**  
J P Westhall

**Technology used:**  
17 Aircool® wall  
ventilators & iC8000  
intelligent controller

Passivent's natural ventilation equipment was used as part of a refurbishment of this historic hall to further enhance its facilities.

Matfen Hall boasts 65 bedrooms, five dining areas, a championship golf course, and a relaxing spa known as The Retreat. It also offers weddings and events, giving guests the chance to have exclusive use of the estate.



## The challenge

As part of this complex restoration project, one of the planned areas of development was the addition of a stunning glass roof over the open courtyards to create an enclosed all-day dining space. This would give guests the feel of being outside whilst providing an indoor dining area which could be used all year round. A dedicated ventilation strategy was therefore needed to maintain a fresh air supply to the hall's newly covered external courtyards.



## The solution

Passivent worked closely on this project with specialist building environment and services engineers, Skelly & Couch and Passivent's client, J P Westhall. Ten Aircool wall ventilators were installed by J P Westhall in the lower courtyard and seven in the upper courtyard. Passivent also supplied a two-zone iC8000 intelligent controller which monitors the internal and external temperature as well as carbon dioxide levels to allow the facilities team to control the natural ventilation system.

Close collaboration was key to the successful delivery of the ventilation system, with Skelly & Couch working with Passivent very early in the design stage to access the relevant technical product information and calculate the required free area. This information then enabled Passivent to size the Aircool wall ventilator's aperture accordingly.

Commenting on the project, Rosie Jones, associate at Skelly & Couch said: *"On such a complex restoration project as this, it was essential that we not only identified the right product but found the right supply chain partner. The Passivent team was extremely efficient and provided us with all the product information we needed in a range of formats so we could advance the technical design of the ventilation strategy effectively."*

Nathan White, General Manager at Matfen Hall added: *"We are delighted with the work that has taken place here at the hall. The covered courtyards have become a real focal point and both the rooflight and the natural ventilation system that are now in place will ensure this stunning outdoor space can be enjoyed to the full for many more years to come."*

Passivent offers natural and hybrid ventilation solutions for a broad range of sectors including education, commercial, leisure, care, healthcare and residential.

