

St. Thomas Aquinas - Primary School

St Thomas Aquinas Bowral
A Catholic Parish Primary School



St. Thomas Aquinas Primary School needed to address the prohibitive heating costs for running their school hall.

Their gas fired heating system needed to run continuously in order to maintain comfortable internal temperatures for students and teachers, resulting in high energy bills and carbon emissions.

After installation of the Airius system comfortable temperatures were easily achieved and maintained. The workload on their HVAC system was also heavily reduced, making significant savings on running costs and CO₂ emissions.



Key Points:

- Internal temp maintained at 18°C - 20°C
- External Temperature <12°C
- Ceiling Apex = 6.7m
- Before Airius heating ran continuously
- After Airius heating now only runs in 15 minute cycles, a few times a day
- Improved pupil attentiveness
- Conditions balanced throughout whole building
- Quick and easy installation
- Vastly Improved air circulation
- No hot or cold spots

“The Airius destratification fans are a great asset to the school hall.

The main benefits for the school include improved air circulation, a balance of temperature throughout the building, low running costs, silent operation and easy installation – all at a highly affordable price.”

Andrew Lowden - Project Architect

CASE STUDY - EDUCATIONAL



St. Thomas Aquinas School in Bowral installed 8 Airius destratification fans to help reduce the excessive heating costs in their newly constructed school hall.

Project designers Martin O'Toole Architects specified the Airius system as a cost-effective solution to ensure the building reduced its heating bills and carbon emissions. The system also qualified for funding under the 'Building the Education Revolution' (BER) scheme, which was designed to provide new and refurbished infrastructure to eligible schools.



Lead architect on the project Andrew Lowden visited the school after installation when outdoor temperatures in Bowral did not exceed 12°C.

“The hall’s gas heating system warms the hall effectively within 15 minutes. However, to maintain this temperature for long periods of time would be cost prohibitive to the school. This is where the Airius units come into play. Once the hall is occupied, the gas heaters are turned off, leaving the Airius units running to circulate the warm air. When the Airius system was turned on, a constant temperature between 18-20°C was maintained for a surprisingly long period of time” he says.

In addition to maintaining comfortable temperatures in the main hall, the Airius system had been designed to ensure the warm air generated by the gas heaters would be distributed evenly throughout the entire building.

“Although the school was on a tight budget, the Airius units were highly affordable and gave an attractive payback period, resulting in significant cost savings against the school’s existing gas and heating bills” Andrew continued.

“I would highly recommend the Airius solution for my future projects.”