

CASE STUDY –St Thomas Aquinas School; Bowral, NSW.

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Air Pears Installed to Reduce Gas Heating Bills at St. Thomas Aquinas School.

St. Thomas Aquinas School in Bowral has installed 8 Air Pear thermal equalisers to serve a newly constructed school hall with a ceiling peak of 6.7m.

As part of the BER schools project, Martin O'Toole Architects chose the Air Pear systems as advised by sustainable consultants from Vim Sustainability. The technology was chosen as a cost-effective solution to ensuring that the building reduced its heating bills and carbon emissions.

"The Air Pear thermal equalisers are a great asset to the school hall" says Andrew Lowden, the project architect.

"The main benefits for the client 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," he says.

Andrew underwent a site visit to test the units on the first day of winter in 2011, whereby 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 Air Pear units come into play" says Mr. Lowden.

"Once the hall is occupied, the gas heaters are turned off, leaving the Air Pear units running to circulate the warm air. When the Air Pears were turned on, a constant temperature between 18-20°C was maintained for a period of time" he says.

James Idle, the Senior Design Engineer of Vento had designed the destratification solution to ensure that the warm air generated by the gas heaters would be distributed evenly throughout the building.

"The aim of the Air Pear design was to reduce the work of existing HVAC systems, allowing the end user to save on their gas bill"

Andrew confirms that his client was on a tight design budget, however the Air Pear units were highly affordable, and gave an attractive payback period and cost savings against the school's existing gas and heating bills.

"I would highly recommend Vento and their Air Pear solution for my future projects."



Images Supplied by Martin O'Toole Architects