

# St. Stephens College

## - Basketball Court Cooling



St. Stephens College, a leading private school on the Gold Coast in Queensland, had a significant summer overheating problem in their large basketball hall.

Four large bladed fans had been specified as a cooling option, but St. Stephens College approached Airius to see if they could provide a more aesthetic, simple to install and cost effective solution to cooling via air movement in the hall. The specified Airius solution satisfied the customer on all counts.



### Key Points:

- **Basketball Hall:**
  - Area = 1,400m<sup>2</sup>
  - Ceiling Height = 10m
- **Severe Summer Overheating Problems**
- **Air-Con Expensive To Install & Run**
- **HVLS Fans Unsuitable & Expensive**
- **Airius Solution = 12 x Standard Series Fans**
- **Airius 15% Cheaper Installed Than HVLS**
- **Cooling Effects Felt Immediately**
- **Durable To Impacts From Ball Sports**
- **Adaptable Directional Airflow**
- **Cost Effective To Run & Install**

School and community sports centres are large spaces and in the Australian climate often have issues with overheating in summer.

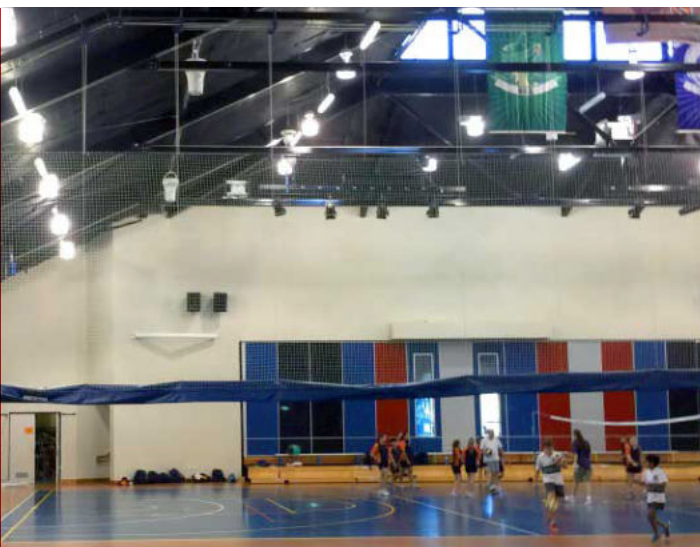
Current solutions are limited to:

- Air Conditioning - high capital expense and running costs
- Large blade fans - expensive installation, aesthetics, structural issues, height restrictions, risk of damage from users, light strobing

The use of air movement for cooling by moving the air across the skin and causing evaporation has been used for centuries in all sorts of tropical and temperate climates. It is a cost-effective solution to the overheating problem.

In 2015, St. Stephen's College's Director of Sport, Rob Seib, approached Airius to provide a proposal to supply an Airius cooling solution as an alternative to large bladed fans.

The two basketball courts were in a relatively new building with high roofs around 10 metres high and around 1400 sq metres in size. Located in a sub-tropical climate, high summer and moderate winter temperatures combined with high humidity are typical for the area.





**“The Airius Air Pears fans have proved to be effective and do not dominate the space but fit easily into the hall; they are almost not noticeable whilst moving the air around the hall, creating air flow on hot, still days making the hall more comfortable to teach and learn in.”**

**- Rod Seib - Director of Sport**

The building design has limited capacity for cross flow ventilation and suffered from severe overheating in spring and summer. The building is used for both sports and classes and the overheating impacted negatively on both sports performance and learning outcomes.

Airius supplied 12 x Model 60 Airius Standard Series units with two five amp speed controllers, for an installed cost of around 15% cheaper and with greater floor coverage than the alternative large bladed fans.

As a bonus the units are very quiet and are adjustable in any direction to enable the customer to direct the air flow to where it may be required.

At 10 metres high these unobtrusive and quiet units provide a large amount of air flow all across the space. Full speed control capability is offered in five steps from 0-100%.

The improvement in comfort inside the space was instant and the customer indicated that even in the warmest days in the Gold Coast summer the air movement offers cooling and has made the space much more comfortable and usable.

