

THE PROVEN ANSWER TO
HOT, HUMID CLASSROOMS

HURRICANETM TURBINE VENTILATORS



Cranebrook Public
School



Terra Sancta
College



Cordeaux Heights
Public School



Roseville Primary
School

Successfully removing the heat
from over 200 Australian schools

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VENTILATION

It's not an option it's fundamental.

THE BENEFITS OF A NATURAL VENTILATION SYSTEM

The purpose of providing natural ventilation systems for classrooms and assembly halls is to provide an acceptable environment in terms of temperature, air movement and air quality for the comfort of students and teachers. Naturally ventilated areas are energy efficient, affordable, comfortable and healthy.

Many authoritative scientific studies have confirmed that student's health and productivity is directly affected by air conditions. Fresh air makes people feel more alive and alert while warm, stale air causes people to feel lethargic and disinterested.

The many health problems that can be associated with "bad air", include sore throats, eyes, headaches, fainting and, in severe cases, asthma. This is due to common pollutants such as dust mites and other organic particles being released by carpets, furnishings and paints. Also, high levels of carbon dioxide contribute to drowsiness, irritability, tiredness, inattention, muscular cramps and reduced work capacity and efficiency.

Hot, humid and stuffy rooms with very little air movement are common in many classrooms and assembly halls. This may also result in moderate heat stress which causes increased sweating, depletion of body fluids and heat intolerance.

Ventilation, fans, and insulation are some of the major types of engineering controls used to reduce heat stress in hot, humid environments. Natural ventilation is used to give constant air changes to a building, diluting hot air with cooler air. This also increases the air flow or convection around the buildings occupants, providing a very effective form of personal cooling.

Despite the scientifically proven benefits of natural ventilation, many buildings do not have adequate fresh air exchange facilities in place. Stale and hot air will not disperse by itself. Opening doors and windows is simply not sufficient to create air flow. Air must be purposely removed and replaced by fresh, ambient air.



St Lukes Grammar School, Sydney NSW.
Featuring H600 Hurricanes.

NEW SOUTH WALES PUBLIC WORKS DEPARTMENT SCHOOL FACILITIES STANDARD – ROOFING (AS OF 1ST SEPTEMBER 1999)

Since the late 1980's, as a result of Policy direction, all new Government schools in New South Wales must incorporate a natural ventilation scheme to remove warm, stale air from classrooms and assembly halls replacing it with fresh air at ambient temperature.

This Policy reflects concern for air quality and comfort within school buildings and acknowledges the importance of using renewable energy (ie the

wind) to achieve a satisfactory learning environment.

Generally, a minimum exhaust capacity of 10 air changes per hour, in an average wind speed of 6 km/hr, and minimum vent diameter of 400mm is required.

The current standard requires isolated precision roller bearings and a minimum 10 year warranty. **The Edmonds Hurricane** ventilator meets this specification.



HURRICANE

Proven for over ten years.

The Hurricane Turbine Ventilator is widely regarded as the most efficient wind driven ventilator on the market in Australia. Manufactured from corrosion resistant aluminium, the Hurricane vent has been a proven performer in Australia and elsewhere for over ten years. It is available in 12 throat sizes from 100 mm to 900 mm diameter.

Its unique vertical vane design provides outstanding performance at low wind speeds and has been proven to outperform a competitive spherical design vent by on average 200%!

The bearing system consists of a **Tandaco** double row, heavy duty ball bearing system, designed to perform well in excess of the 15 year warranty.

The Hurricane Turbine Ventilator exhausts hot, stale air from buildings allowing it to be replaced with fresh air at ambient temperature. The result is a much more pleasant environment for all.

Hurricane has been tested by **Construction Research Laboratory Inc., Miami, Florida** and withstood a continuous gusting wind of 240 km/hr without damage. It has also been tested by the **CSIRO** (Report Number DTA 313) and found to meet the requirements of the *Dynamic Rain Penetration Test* (AS 2428-1).

1. Independently tested by the University of Technology - Sydney, 1998. (Project Number: E98/42/041).



The Hurricane Turbine Ventilator has other benefits also. It prevents condensation by exhausting moist air and, in cases of fire, plays a safety role by exhausting smoke and fumes from the building. Also, being wind driven it uses no electricity and is, therefore, friendly to the environment.

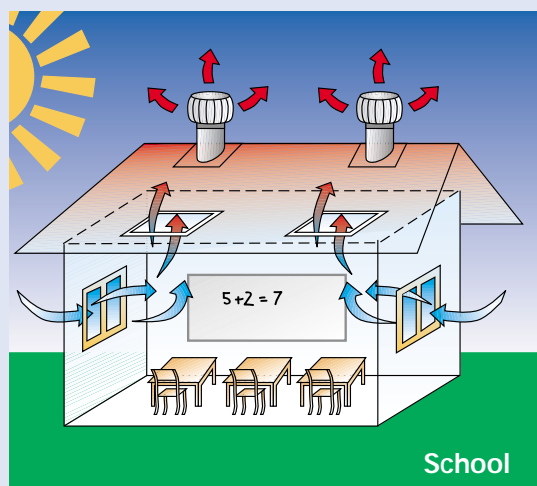
Hurricane is designed and manufactured in Australia and is frequently specified for schools in NSW and QLD. It has been exported to over 14 countries including China, South Africa, Indonesia, Pacific Islands and New Zealand.

Ideal ventilation for any classroom can be provided with the accessories

designed to be used in conjunction with the Hurricane.

These accessories can provide a complete ventilation system to increase the convection flow within the building as well as offering controllable year round ventilation for classrooms and include:

- Remote controlled electric dampers,
- Manually operated dampers, and
- Controllable ceiling registers.





TERRA SANCTA COLLEGE, SYDNEY NSW.
Featuring H700 and H900 Hurricanes.



CORDEAUX HEIGHTS PUBLIC SCHOOL, SYDNEY NSW.
Featuring H400 Hurricanes.

AUSTRALIAN MADE HURRICANE TURBINE VENTILATORS ARE SUCCESSFULLY REMOVING THE HEAT FROM OVER 200 AUSTRALIAN SCHOOLS, INCLUDING THE FOLLOWING:

- Aberdeen Public School
- Alstonville Public School
- Anna Bay Public School
- Arcadia Public School
- Athelstone Public School
- Austral Public School
- Bald Face Hills Public School
- Bangalow Public School
- Bankstown Nth Public School
- Bannora Point Public School
- Barnsley Public School
- Barrenjoey High School
- Beacon Hill Public School
- Belmont Primary School
- Ben Vue Public School
- Berimbah Public School
- Beverley Hills Public School
- Bexley Public School
- Birrubi Public School
- Blakehurst High School
- Bligh Park Public School
- Blue Haven Public School
- Bray Park State High School
- Bremer State High School
- Brisbane State High School
- Camperdown Public School
- Canley Vale High School
- Cannes Hill Public School
- Caringbah High School
- Castle Hill Primary School
- Cessnock Public School
- Charleston Public School
- Chertsey Public School
- Clunes Public School
- Cobar High School
- Collaroy Plateau Public School
- Como West Public School
- Cowra High School
- Cronulla Sth Public School
- Croydon Park Primary School
- Croydon Public School
- Dubbo Primary School
- Dungog Public School
- Duri Public School
- East Gosford Public School
- Eastwood Public School
- Elderslie Public School
- Epping Boys High School
- Fairfield Public School
- Fennell Bay Public School
- Glendenning Public School
- Goraki Public School
- Grafton Public School
- Halliday Point Public School
- Hamden Park Public School
- Hammondville Public School
- Helensvale State High School
- Hinton Public School
- James Ruse Ag. High School
- Katoomba Public School
- Kemps Creek Public School
- Killarney Heights High School
- Kincumber High School
- Kurnell Public School
- Lambton High School
- Letheridge Public School
- Leura Public School
- Lockhart Central School
- MacGregor State High School
- Mackellar Girls High School
- Macksville Public School
- Manly West Primary School
- Marayala Public School
- Marsden High School
- Mawarra Public School
- McLean Public School
- Medowie Public School
- Molong Central School
- Mona Vale Public School
- Mountain Creek State School
- Mudgee High School
- Murwillumbah Wst High School
- Narara Valley High School
- Narellan Gardens Public School
- Narraweena Public School
- Nirimba Senior High School
- Narooma Public School
- Narromine Public School
- Nichols High School
- North Haven Public School
- Nowra High School
- Orange High School
- Ourimbah Primary School
- Parramatta Marist Brothers
- Penrith Sth Public School
- Peshurst High School
- Plattsberg Public School
- Portland Public School
- Pottsville Public School
- Prestons High School
- Quakers Hill Public School
- Quirindi Public School
- Randwick Girls High School
- Redbank Plains State High School
- Revesby Special School
- Rooty Hill Public School
- Ross Hill Public School
- Salamander Bay High School
- Salt Ash Public School
- Singleton High School
- Sth Granville Public School
- Sth Strathfield Primary School
- Springwood High School
- St Helens Primary School
- St Joseph's Primary School
- St Pius Xavier College
- Swansea Public School
- Sydney Girls High School
- Sydney Technical College
- Tanilba Bay Public School
- Temora Public School
- The Oaks Public School
- Thornton Public School
- Thurgoona Public School
- Toronto Public School
- Uki Public School
- Ulladulla Public School
- Villawood Est Public School
- Wallerawang Public School
- Wantira Secondary College
- Warrawee Public School
- Warrimoo Public School
- Wavell Heights State High School
- Westfield Sports High School
- Weston Public School
- Westport High School
- Wilberforce Public School
- Wiley Park Girls High School
- Windsor High School
- Wollongbar Public School
- Woolooware Public School
- Yass Public School
- Yeronga State School
- Yowie Bay Public School

...as well as numerous University and TAFE Campuses and Government Centres.

For further information:

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Australian since 1934

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*Our future is to remain
the undisputed Australian leader in
the provision of quality ventilation and comfort
products, through technical innovation
and excellence in customer service.*

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