

Destratification is recommended by The Carbon Trust*

AIRIUS AND LOCAL AUTHORITIES

Save 20-50% on heating & cooling costs with Airius - **The world leaders in Destratification technology**

Web: www.airius.co.uk













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Local Authority

We are currently working with councils across the UK helping them achieve their energy reduction targets by re-cycling the expensively heated air that has already been supplied in many of their buildings. This not only cuts energy usage but also saves money, reduces emissions and creates a more comfortable environment for staff and visitors.

Airius award winning destratificaion fan system works by gently re-circulating heat which rises to the ceiling back down to the floor in an invisible column of air, keeping the heat where you need it and reducing HVAC costs by 25%-50%.



Features & Benefits

- Vastly improved comfort levels all year round
- Increased pupil attentiveness
- 25-50% savings on heating and cooling costs
- 25-50% reduction in carbon emissions
- Rapid ROI Usually 12 24 months
- Minimal running costs (from £6/pa)
- Recycles heat from solar gain, lighting, people etc.

- Optimises ALL types of HVAC systems
- Significantly reduced HVAC maintenance costs
- Condensation reduced or eliminated
- Reduces heat loss in swimming pools
- Dries poolside spills quickly
- Stops overheating of upper viewing levels
- Recirculates heat risen to ceiling to where you need it







It is understood that stratification is the single largest waste of energy in buildings today and many councils are using Airius to help achieve their energy/emission reduction targets. The Airius system is currently being employed across many different building types owned by local authorities, such as leisure centres and swimming pools, schools, town halls, depots and offices.

As well as being endorsed by the Carbon Trust, who recommend destratification as one of their top cost and carbon saving measures, the Airius Range is available to purchase under the Salix funding scheme which delivers 100% interest free capital to the public sector, giving the flexibility to fund projects through the savings made. Along with free site surveys, installation plans and energy reduction estimates, all in addition to detailed quotations and proposals, Airius offers an in-house management program to assist you through the application process.



Installation Images



Airius - The World Standard For Destratification www.airius.co.uk



Client Testimonials



66 The heating systems come on much less often and complaints have reduced by 90%. **99**

"We installed Airius units into 2 sports halls and the swimming pool area at the Sixmile Leisure Centre, Newtownabbey. **These** have made a vast improvement to the internal atmosphere within the buildings and the public who use the facilities find the air quality greatly improved for sporting activities. The heating systems come on much less often and the complaints from swimmers about the warmth in the swimming pool area has reduced by 90%."

James Dunn - Manager

66 They proved effective at redistributing warm **99** air from the ceiling to occupied areas below

Specialist School in Science and Performing Arts



"We are using Airius Destrat fans for our Music Rooms and they have proved effective at redistributing the warm air from the ceiling to the occupied areas below. We are now installing Airius fans in our Large Hall. It is used for assemblies, dining and performances and the fans will work well in redistributing heat during the winter as well as providing movement of air during the summer. This will be particularly welcome on sunny days when exams are held in the hall."

Gary Kelly - Business Manager





The air quality and temperature has vastly improved

99

"Since the installation of the units **the air quality and temperature has vastly improved and people are now feeling a lot more comfortable in the environment**."

Tom Lyons - Knowsley Council

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life is much better for our students and staff 9



"The National Star College is a residential further education college for students with disabilities. Our main Sports Hall is a 21m x 14m x 9m high unit, which has been difficult to heat, because all the warm air rises to the roof. Because a lot of our students are in wheelchairs, they feel the cold more than an ambulant person. We do not have sub metering in this area, but rest assured, **life is much better for our students and staff**."

David Crompton - Head of Estates



66 We've reduced the temperature in the Hall by 99 2°C and switch the heating off 2 hours earlier 99

"After installing the Airius fans at Saltire Sports Centre the temperature within the hall has stabilised dramatically. We carried out temperature readings before and after installation and after installation, we noted that the variance in temperature over a 24 hour period was between 1 and 1.5 degrees, this is a significant improvement over previous findings. We have now reduced the set point temperature in the Hall by 2 degrees. We've also switch the heating off 2 hours earlier than normal."

Duncan A. McLaren BSc, PgDip, AIEMA - Senior Energy Technician



Selected Client List



www.airius.co.uk

CASE STUDY - EDUCATIONAL

- Primary School St Thomas Aquinas

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 COZ emissions.





saving you energy



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 atentiveness
- 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 122C.

"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."

CASE STUDY - SPORTS FACILITY

SCEGGS Sports - Basketball Courts





Leading private school, SCEGGS Darlinghurst, had a significant over-heating problem in their multipurpose Basketball hall. They had considered blade fans to increase air movement, but these were vulnerable to impact and they wanted a more aesthetic and cost effective solution. So they contacted Airius.

Not only was the Airius solution cheaper to install, but was more durable, covered a greater floor area and provided ample cooling, without the need for an expensive Air Conditioning system.

Key Points:

- Basketball Court:
 - 1,000m².
 - 10m high ceiling.
- Airius solution = 8 x Model 60's.
- Comfort levels increased dramatically.
- Cooling effects felt immediately.
- Simple, quick & cheap installation.
- Durable & resiliant to impact.
- Also reduces heating costs in winter.





SCEGGS facility manager Keith Stevenson approached Airius to help address severe overheating problems in their 1,000m² multi-purpose Basketball Court facility.

The basketball courts were in a room 10 metres high with a concrete ceiling. Tennis courts were located on the floor above, which contributed to the over-heating.

8 Standard Airius Model 60 units were supplied with two five Amp (SC-05) Speed Controllers, for an installed cost 20% cheaper than blade fans, whilst also providing greater floor coverage.

As a bonus the units were adjustable in any direction. This allowed SCEGGS to direct the air flow to where it was needed, but without causing interference to activities such as badminton, where normally the airflow from alternative fans would impact on the flight of the shuttlecock.

The improvement in comfort inside the space was instant and they indicated that even on the warmest summer days the air movement offered cooling and made the space much more comfortable and usable.

CASE STUDY - SPORTS FACILITY





"The Airius system has been in operation for six months now. We are more than happy with the results.

The space is a lot more usable in the summer months. We have received great feedback from both the school PE department and also external hirers.

We are extremely happy with the performance and comfort we receive since installing these Airius fans and would happily recommend them to other organisations needing to circulate air and increase thermal comfort."

Keith Stevenson - Facilities Manager, SCEGGS Darlinghurst.



Airius - The World Standard For Destratification www.airius.co.uk

CASE STUDY - SWIMMING POOL

Hilton Brown - 2 x Swimming Pools



Hilton Brown SWIMMING Lessons for life

Indoor pool owners and operators have ongoing problems with condensation impacting the amenity and longevity of their pools. Corrosion and mould cause damage, glass fogging obstructs view, constant drips and puddles cause injury and it has an overall negative impact on the amenity in the pool.

Hilton Brown Pools use the Airius system in two of their five recreational and competitive swimming pools to combat all these problems (and more!) and have already made arrangements to install Airius into another two.

Key Points:

- Hilton Brown (Albany):
 Main pool & changing rooms.
- Hilton Brown (Havelock North):
 Main pool.
- 2 x additional pool systems on order.
- All condensation problems rectified.
- Pool heating costs reduced significantly.
- Comfort effects felt immediately.
- Eliminated unpleasant odours.





Howard Gumbley, General Manager at Hilton Brown's Pools contacted Airius to address severe condensation problems in two of their swimming pool facilities in Albany and Havelock North.

At their Havelock North site condensation was impacting on the main pool area, whereas at their Albany pool condensation was causing problems in the main pool and changing rooms.

Both building interiors were constantly damp, benches were wet and water would drip on spectators, especially on cold days. Anything metal or mechanical was particularly affected; locks and automatic doors were jamming and rust was uncontrollable, even on galvanised metal. Being constantly damp, the concrete walls became discoloured and paint deteriorated rapidly. Mould and unpleasant odours were also large problem.

For the Albany pool, which measured approximately 20 metres by 12 metres, the Airius Standard Series model 60 was specified. In the changing room the smaller Standard Series model 15 was recommended.

CASE STUDY - SWIMMING POOL



"Within hours we noticed a difference. Two days later the entire space was a lot drier, with less damp odour. We had spent vast sums of money installing mechanical air handling units and ducting systems in this space, but there were still areas where instructors and customers found it very humid.

The Airius system not only alleviated this issue, but helped dry out an end wall that was often wet with condensation. We have since installed other Airius units in more of our facilities."

Howard Gumbley - General Manager (Albany)

The Havelock North pool, due to its sloped roof, required Standard Series model 25 and 15 units, to account for the variation in height. At its highest point the ceiling was 4.8 metres and the pool measured 24 metres long by 14 metres wide.

After installation both sites virtually eliminated all condensation. Any signs of damp quickly subsided and surfaces dried much faster. Even the concrete, which had become saturated and discoloured, dried out. Comfort levels vastly improved and within only two days the unpleasant odours were almost non-existent.

In addition to resolving the main problems with condensation, Hilton Brown Pools also achieved significant pool heating energy savings at both their Albany and Havelock North pools, benefitting from Airius' world-leading thermal balancing technology.



"Air quality dramatically improved. The glass viewing wall was constantly fogged up prior to installation. Within a day there was virtually no condensation on the glass and the concrete area around the pool dries out much faster than it did before the units were installed.

The units are simple to install and very economical to run, but above all they deliver results."

Howard Gumbley - General Manager (Havelock North)



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