

AIRIUS[®]

saving you energy

De-stratification is recommended
by The Carbon Trust*

AIRIUS IN RETAIL

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



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50 AP50
READERS' CHOICE

Retail Buildings

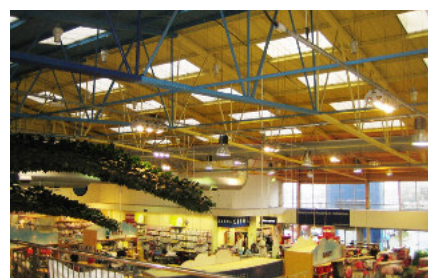
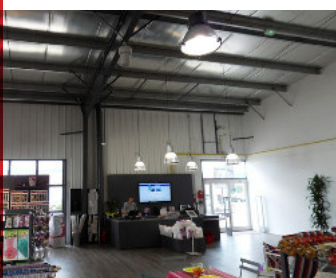
Maintaining comfortable environments for customers and staff in the retail industry are crucial to sales and productivity. Retail outlets which are too cold or too hot result in shorter customer browse times and reduced employee productivity. Airius destratification systems can help eliminate this problem.

Airius supply a range of destratification fans to suit open, exposed and suspended ceiling facilities. For use in aisled applications check out our Narrow Aisle Series, specifically designed to provide an elongated airflow to maximize spread down aisles while minimising interference with open reach in cases.



Features & Benefits

- Vastly improved comfort levels all year round
- Increases customer browse time and spend
- 20-50% savings on heating and cooling costs
- 20-50% reduction in carbon emissions
- Rapid ROI - Usually 12 - 24 months
- Minimal running costs (from £6/pa)
- Recycles heat from equipment, solar gain, lighting etc.
- Optimises ALL types of HVAC systems
- Significantly reduced HVAC maintenance costs
- Condensation reduced or eliminated
- Eliminates cabinet glass fogging
- Dries spills quickly
- Increases lighting lifespan
- Recirculates heat risen to ceiling to where you need it

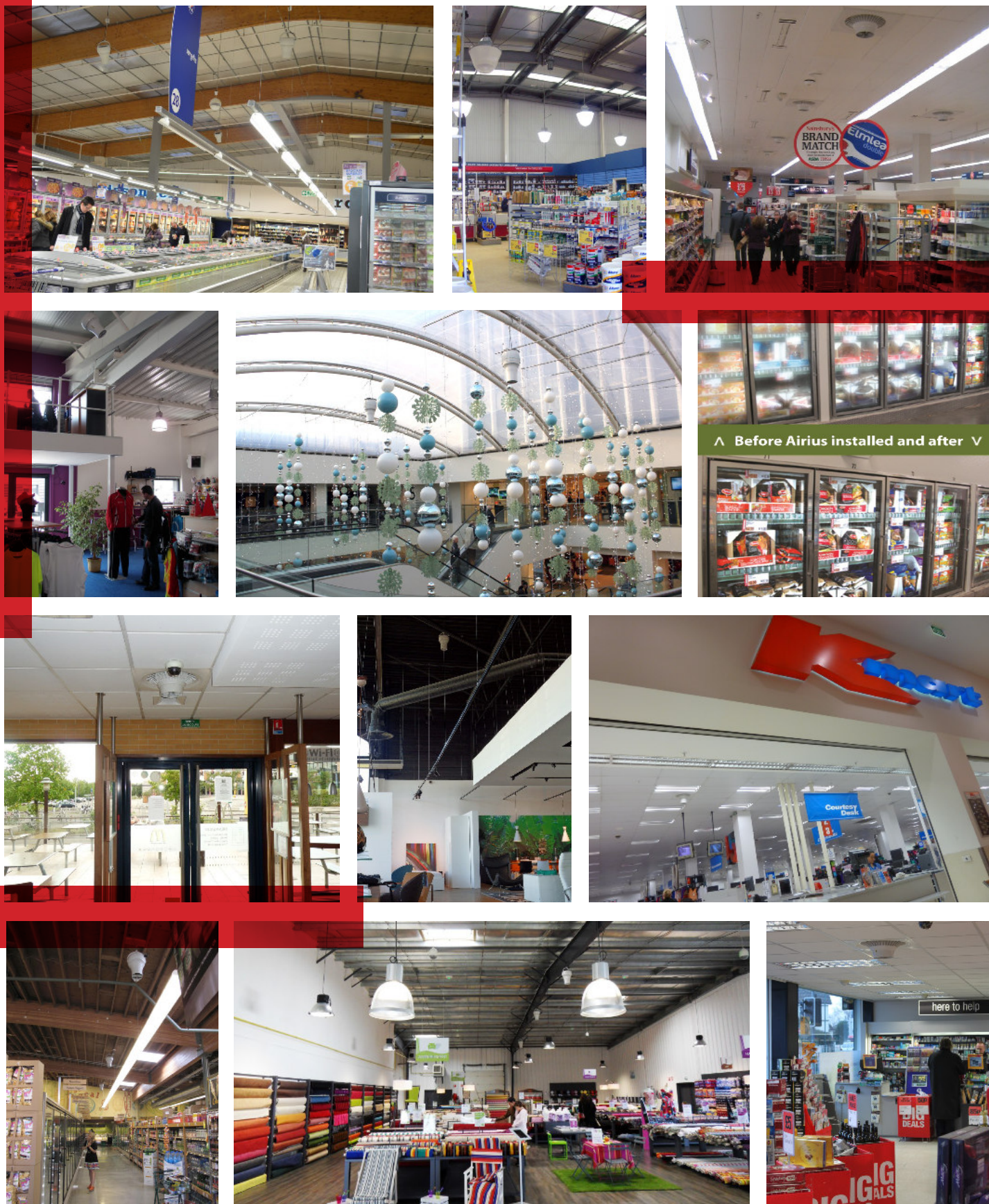


In supermarket and convenience stores large temperature differences are commonly found between cold chiller/freezer aisles and hot bakery/deli sections, whereas in retail outlets heat rises away to the ceiling making ground floor conditions too cold and upper floor temperatures too hot. Running costs for heating and cooling systems are a huge expense; particularly wasteful when HVAC systems are unable to reach set conditions and cannot maintain a consistent environment.

The Airius destratification system offers the perfect solution to this problem. By continuously and silently mixing internal air to balance temperatures you can maintain a consistent level of comfort throughout the store, whilst reducing the workload on your HVAC system, saving up to 50% on heating and cooling costs.

The benefits of destratification are well recognised within the retail sector and Airius have helped thousands of retail stores reduce their energy costs and optimise comfort for occupants, from retail giants such as Morrisons and Marks & Spencer, to local convenience stores such as The Co-Op and Nisa. Destratification is also endorsed by the Carbon Trust, who recommend destratification as one of their top cost and carbon saving measures.

Installation Images



Client Testimonials



“ We recommend Airius to any supermarket wishing to improve customer comfort levels ”

"One of the age old problems has been temperature variations in supermarkets caused by 'spillage' of cold air from dairy cabinets. This can create a temperature variation of up to 7°C in cold aisles compared to other parts of the store. We knew the solution was to use fans to mix the cold and warmer air. The problem was how to do this safely and unobtrusively – we had looked at large HVLS fans – but they presented safety and noise problems.

We then discovered the AIRIUS system of purpose designed fan units – designed specifically for supermarkets. The results were amazing and defied all the sceptics: **a) Customers' noted the improvement in cold aisle temperatures immediately - it had been a regular cause of complaint; b) Temperatures throughout the store became more balanced without making a single change to the air conditioning settings; c) They had no visual impact – even with a relatively low ceiling height; d) They did NOT have any negative impact on refrigeration running costs despite many predictions they would** – we know this because we are measuring live the running costs of the refrigeration system.

We therefore conclude and recommend the Airius system to any supermarket wishing to improve customer comfort levels at a very low running costs."

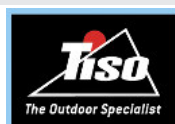
Dennis Hensman – Managing Director

“ The thermostat has been turned down beyond the point I thought was humanly possible! ”



"I confirm my order for a further 4 x model 25's for use in our Tonbridge branch. The staff in Folkstone are very happy with the performance of the units there. **the thermostat has been turned down way beyond the point that I thought was humanly possible!** I will put pen to paper and write a letter as a satisfied customer."

Nick Brewer – Managing Director



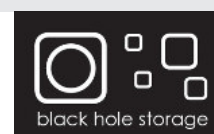
“ We were happy to find the environment now comfortable without the AC running ”

"Our Edinburgh Outdoor Experience store has a single floor store layout opening out into high roofed area with a ground floor café and gallery sales area. We originally controlled the temperature with large AC units but the result was never satisfactory at either level.

The Airius system was installed during the summer whilst the AC system was closed down for servicing and **we were happy to find the environment comfortable without the AC running.** This has now led to the entire AC system being decommissioned with a considerable reduction in electricity consumption."

Iain Calder - Property Director

“ It completely solved our condensation problem. I highly recommend Airius fans ”



"We purchased 6 Airius fans for our self-storage company as we were having problems with condensation when there was a large fluctuation in temperatures. After we installed them **it completely solved our problem and we haven't had any condensation in over 4 years since we have had them.** We keep them on 24 hours a day and they are very cheap to run. Customer service is excellent, especially after one stopped working after 2 1/2 years and they sent a new one out to replace it almost immediately. **I would highly recommend Airius fans."**

Leon Antone - Director

Selected Client List

YOUR M&S

The **co-operative**

M

MORRISONS



Waitrose

Harrods



John Lewis

ASDA



 Lloyds TSB

Nisa
making a difference locally

HSBC 
The world's local bank

NEXT



vodafone



Sainsbury's



TESCO
Every little helps



RBS
The Royal Bank of Scotland



HOMEBASE

Argos

Waterstones



Morrisons Plc - Knottingly Store

Morrisons, the fourth largest supermarket chain in the UK is always looking for ways to reduce their energy costs and carbon footprint, as well as ways to improve customer comfort.

Mitton Mechanical approached Airius to conduct a trial in the Morrisons Knottingly store in 2007. The trial was hugely successful and now 100's of stores have been retrofitted with Airius units.



Key Points:

- **Trial System = 18 Model 15 Suspended Series**
- **6-8°C - Stratification before Airius**
- **1-2°C - Stratification after Airius**
- **£2,365.20 = Approx annual running costs**
- **Increased customer browse time**
- **Rise in overall aisle spend**
- **Eliminates chiller/freezer cabinet fogging**
- **Continuous airflow evaporates spills quickly**

Supermarket operators and HVAC consultants have been trying to resolve the problem of customer discomfort in cold chiller and freezer aisles for many years. This problem is compounded when temperatures throughout the rest of the store can be uncomfortably warm in comparison. Costly and inefficient ducting systems, under cabinet heaters and heat retrieval systems have failed to solve the problem to date.

Mitton Mechanical, a Morrisons contractor, approached Airius to conduct a trial in the Morrisons Knottingly store in Wakefield. Airius units were placed at 4 metre intervals in three chiller aisles, reducing stratification from 6-8°C to 1-2°C, thus making the chiller aisles more comfortable (without affecting the chiller units). This increased customer browse time and aisle spend, as comfortable shoppers browse for longer and spend more. The system also helps dry spills quickly through evaporation and eliminates glass "fogging", keeping cabinet products clearly on display.



CASE STUDY - RETAIL



The trial was hugely successful and over 400 Morrisons stores have now been retrofitted with the Airius units. The Airius system is now on the standard specification list for all new Morrisons stores and will be retrofitted as part of the normal refurbishment program.



Morrisons and Mitton Mechanical are a pleasure to work with. Their eagerness to reduce energy consumption and improve comfort levels for their customers puts them at the very top of the Green supermarket list, which is why they were the first supermarket in the UK to be awarded the prestigious Carbon Trust Standard for making real reductions in their carbon emissions and energy usage.



Foodies Market - Grocery Store

Foodies's Markets, a medium sized, family-owned, urban grocery chain, commissioned Airius to design a destratification solution to improve comfort levels in 2 of their stores, where they were receiving complaints that the stores were too cold.

The results exceeded all expectations. Complaints ceased immediately and both stores heating requirement needed to be reduced far lower than predicted, reflecting significant monetary savings.



Key Points:

- **2 Stores fitted with Airius system**
 - 8 x Model 15 Standard Series
 - 7 x Model 15 Standard Series
- **Cold complaints resolved instantly**
- **Heating load reduced significantly**
- **Increased customer browse time**
- **Cold case cabinet efficiency improved**
- **Eliminates cold case cabinet fogging**
- **Evaporates spills quickly**

Foodie's first installed 8 Model 15 Airius fans in its 745m² store in South Boston. Managers were so pleased with how the destratification fans warmed up the store for both employees and customers that they installed another system of 7 Model 15 fans at their store in Duxbury.

"Before the Airius fans were installed at the Boston store, employees, especially checkout clerks near the store entrance, complained about being cold," said Michael Stameris, Facilities & Operations Manager for Foodie's.

"After the fans were installed on each side of the checkout lane and throughout the store, clerks told managers they now were too warm!" Stameris explained. "I lowered the temperature in the store. But on the next day, they said they were still hot, so I lowered the temperature a second time."

Another factor that led Foodie's to the Airius system was the fan's low use of electricity and easy plug-and-play installation.

"These fans really use a small amount of current," Stameris said.



CASE STUDY - RETAIL



Store managers, using a thermal scanner, could easily see the temperature difference between the hotter ceiling area and the store's cooler floor. "With the recent cold winters some customers also complain about being chilly," Stameris said.

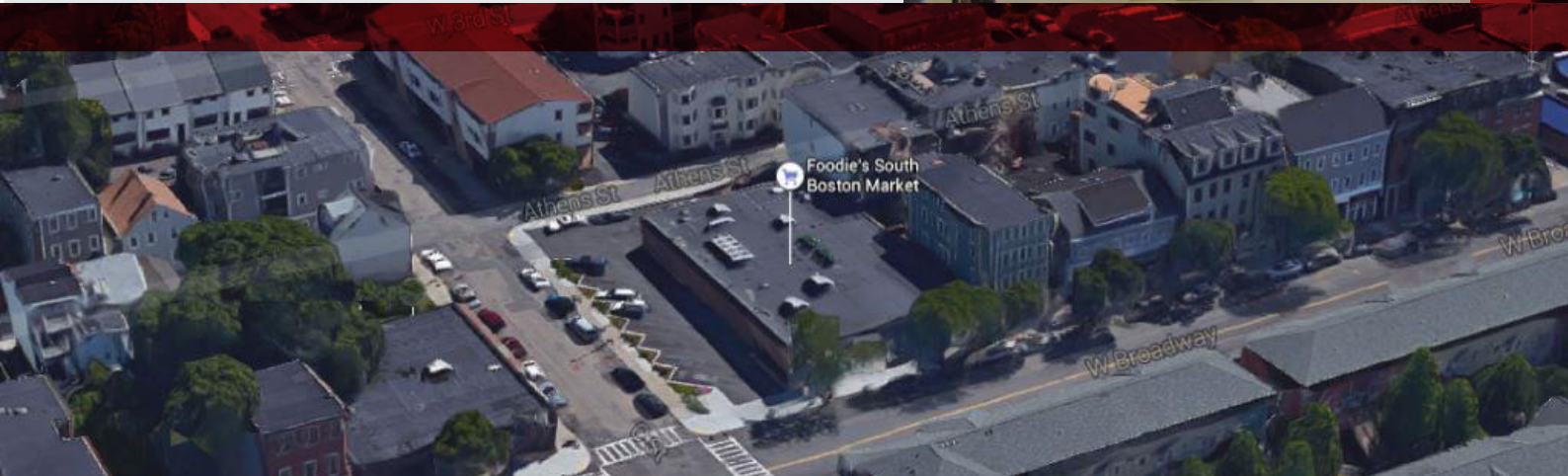
With ceilings of about 4 metres in South Boston and a range from 3.5 to 5 metres at the Duxbury location, the Airius Model 15 has worked well at circulating hotter air to the floor.

Foodie's also installed fans above its open case frozen food aisles, where managers believed that cold air was spilling out.

"We were pleased to find that the column of air is so pinpoint to the floor that we could install the fans less than a metre off the centre of the open cases," Stameris said. "It's very precise."

At Foodie's Duxbury store, one manager's office is located on an elevated mezzanine area. "That office area was often too warm, while employees on the floor below the mezzanine were too cold", Stameris said.

Three fans were installed along the ceiling in the elevated area, to draw the excess heat from the high level office area and recirculate it down to the floor below to solve the problem.



"Groceries, with frozen food aisles, open refrigerated cases and entrances frequently opening and closing for shoppers, make it tough for managers to keep thermostats at their set points and are an anomaly when it comes to keeping temperatures balanced. But the Airius system has helped us do just that, saving a lot of money" Stameris said.

"I'm a believer in the Airius system," he adds, "I've seen first-hand how it has helped."

Newmarket Motors - Cork Showroom



Newmarket Motors

Newmarket Motors installed the Airius system to address unbalanced temperatures in their Cork showroom. Conditions were too hot on the first floor and too cold on ground floor.

Following installation this problem was eliminated, with the added benefit that the workload from the AC system was highly reduced.



Key Points:

- **Approx. 12°C heating reduction.**
- **A/C settings reset from 'high' to 'low'.**
- **Heating reduced by approx. 24 hours per week.**
- **Conditions resolved by recirculating 1st floor high temperatures down to ground floor level where conditions were too cold, thus also solving ground floor low temperature problem.**

They needed to resolve the uncomfortably high temperatures experienced on their first floor and the uncomfortably low temperatures found on their ground floor, which were creating unsuitable conditions for their staff to work in.

The Airius destratification system was simple and quick to install and not only resolved the temperature imbalance, but also highly reduced the output, workload and operating times required from the A/C system offering significant savings on their energy costs.

Testimonial

"The owner had expressed he was having problems with uneven temperatures between the upstairs offices and downstairs offices and showroom. Staff upstairs were too hot and the staff downstairs were working with their coats on at times. The Showroom has 3 sides of glass, floor to roof. They have 4 combined heating/cooling units with the temperature set at between 30 - 33°C with 4 blowers set to maximum.

We installed 3 Airius Model 25's. The temperature on the A/C units have now been reset at between 18-22°C with the 4 blowers on the low setting and 2 of these are turned off intermittently for approx. 2-4 hours per day.

Staff on both floors commented on the lovely comfortable temperature in comparison to before the system was fitted. These have been monitored during the cold spell of weather that we are experiencing at the moment."

Sean Browne - Dealer Principal

Volkswagen Showroom

- HO: Milton Keynes

Volkswagen



Volkswagen Group (UK) Ltd installed the Airius system into their Head Office Showroom in Milton Keynes, saving them 20,000 kWh on their gas consumption per month and giving them a return on their investment within 90 days.



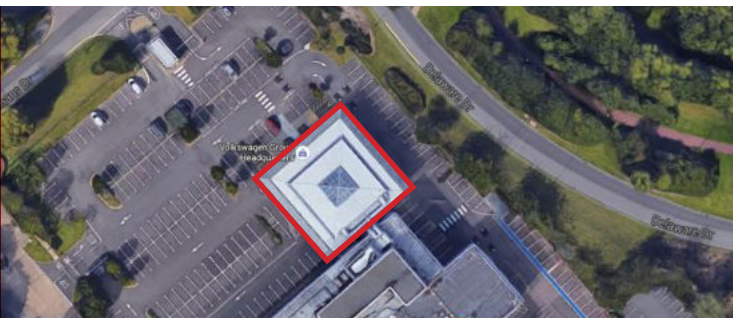
Key Points:

- **ROI = Under 90 days**
- **£460 - Monthly savings (2.3p/kWh)**
- **20,000kWh - Monthly gas reduction**
- **14°C - Stratification before Airius**
- **1-2°C - Stratification after Airius**
- **HVAC run-time reduced by approx. 24 hours**
- **45 tonnes - Approx. annual CO2 reduction**

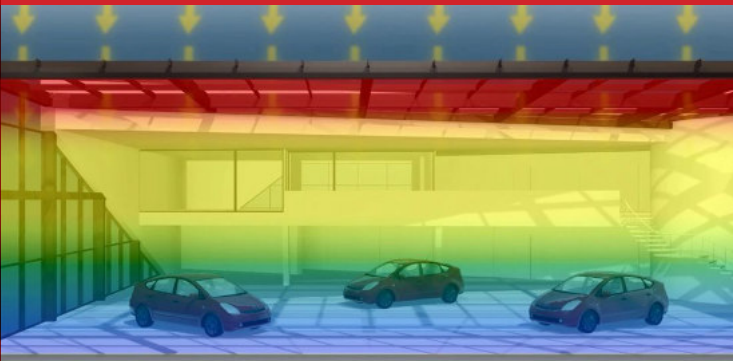
During winter heating conditions the Volkswagen showroom suffered severely from stratification, with temperatures reaching 32°C at high level and 18°C at low level.

Airius model 25 destratification fans were specified and installed. These gave a much more comfortable even temperature throughout the showroom. It was also noted that the heating, which normally ran all day trying to reach it's set temperature, would by midday switch off and not start again until after 4pm.

Gas readings indicated that each month 20,000 kWh less gas was now being used. Based on a figure of 2.3p/kWh the monthly savings were £460. The running costs are minimal, each unit consuming only 35 watts. Within 3 months all the purchase and installation costs had been recovered.



BEFORE AIRIUS



AFTER AIRIUS



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