

STERIL-AIRE®

UVC World Leaders in Indoor Air Quality
& AC Energy Savings



How Steril-Aire Benefits

Improved IAQ (Indoor Air Quality)

- Air from AC System up to 99% free of microorganisms
- Green Marketing
- Reduction in distribution of airborne infections (flu etc)
- Enhanced customer environment
- Reduction in VOCs and odours

FOOD BENEFITS

- Extension of produce shelf-life
- Extension of refrigeration display life
- Reduction in food contamination (Salmonella & E.coli)
- Reduction in Food Recalls

FACILITIES

Automatic coil cleaning

- Reduced AC maintenance
- Reduced Refrigeration maintenance
- Reduction of maintenance labour & chemical costs
- AC energy saving (10-20%)
- Reduction in carbon footprint
- Improved sustainability
- Coil Condensate Recovery/Recycling
- Extension of equipment life



DE Fixture and UVC Emitter®



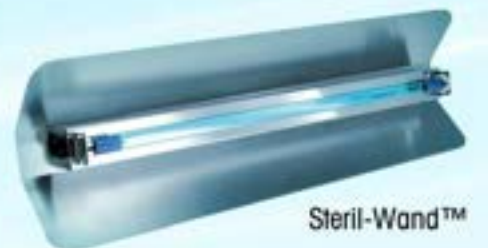
SEN Fixture and UVC Emitter®



SE Fixture and UVC Emitter®

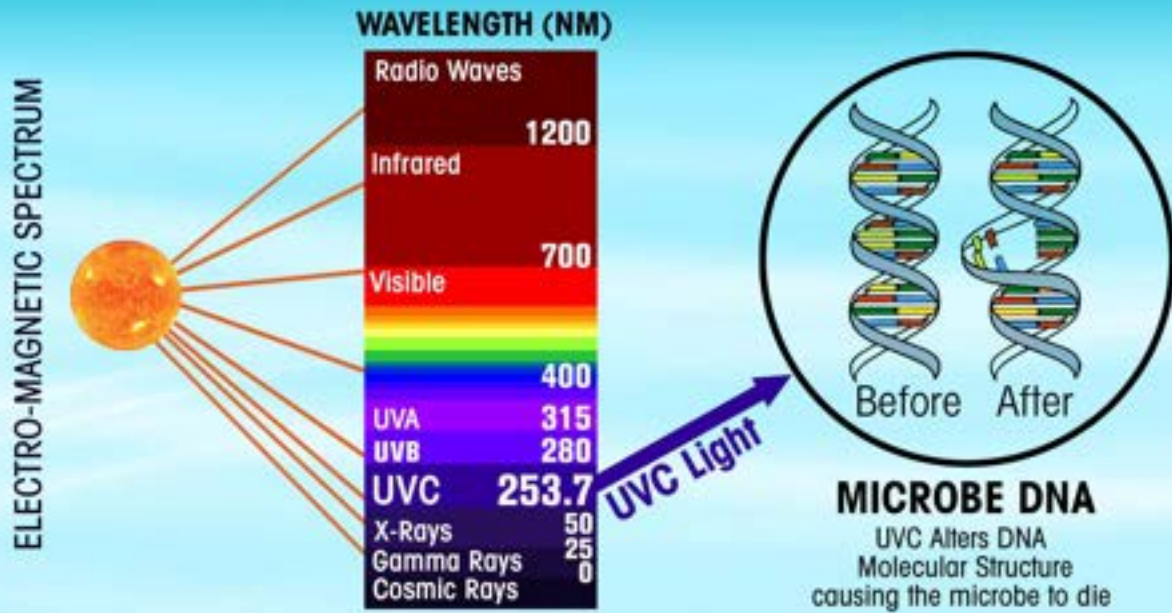


SE VO Kit for Air Handlers™



Steril-Wand™

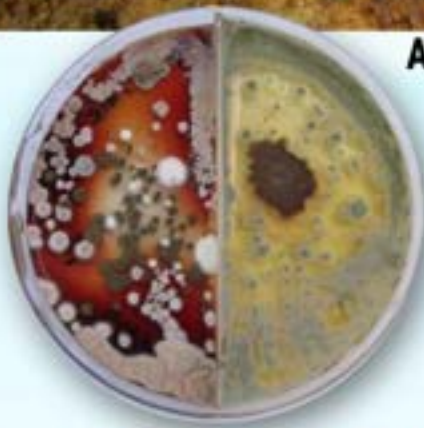
The Science of Steril-Aire UVC



Air-Conditioning Cooling Coil



AIR BIO-TEST



Before Steril-Aire



After Steril-Aire

How Steril-Aire Works

Health risks come from two main sources;

1: The biofilm (mould) that grows inside the AC system, fed by the condensate created when warm air passes through the cold cooling coils. Sending out mould, bacteria and their products (VOCs) into the air.

2: The bacteria that enters the buildings via the ducts, doors and windows, and the viruses and bacteria (coughs and sneezes) that enter with people. All of which are distributed throughout the building by the AC system. This leads to cold and flu outbreaks, sickness, absenteeism and a drop in productivity

UVC Exposure inactivates microbial organisms such as bacteria and viruses by altering the structure and molecular bonds of the DNA.

Destroying the organisms ability to reproduce, it becomes harmless since it can no longer colonise.

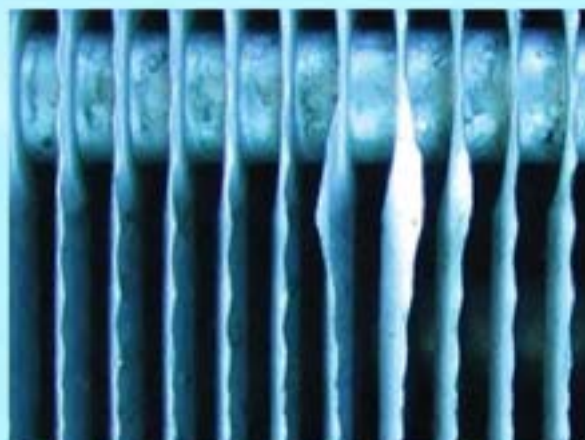
Germicidal UVC emitters degrade the organic build-up in the cooling coils, keeping the coils continuously clean. This lowers HVAC energy costs by improving heat transfer and increasing cooling capacity, also reducing the need for extensive cleaning and mould remediation

Air quality is dramatically improved. Providing a healthy environment for all building occupants

Typical AC system coil before cleaning



Typical AC system coil after Steril-Aire installation



Food Contamination

Solutions and Applications

- Steril-Aire in AHUs
- Steril-Aire in Storage Refrigeration
- Steril-Aire in Refrigeration Cabinet Displays
- Steril-Aire used prior to packaging to remove bacteria from food surfaces
- SterilWand used for decontamination of surfaces including food preparation, display shelves & restrooms



Mould inside refrigeration display



Meat surface decontamination with Steril-Aire

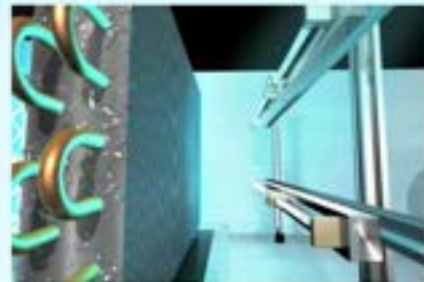
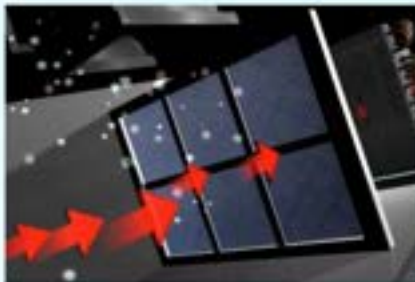
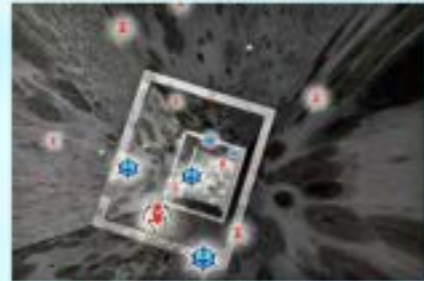
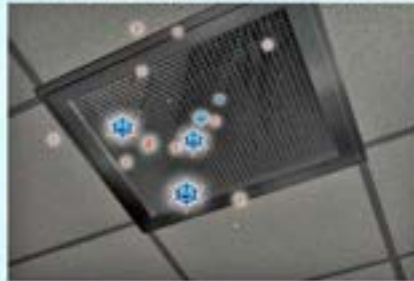


Coil Cleaned by Steril-Aire



IAQ and Hidden Problems

A sneeze releases viruses into the air that are sucked into the AC system and circulated throughout the building, making the inhabitants sick.



In air-conditioned buildings, sickness and related absenteeism are caused by two untreated sources of pollution, that easily pass through normal AC filters:

- 1: Bacteria and viruses that enter the building with the air and with people.
- 2: Mycotoxins and microorganisms that come from the mould/fungi growing on and in the AC coil and ducts.

By positioning the correct number of Steril-Aire UVC Emitters at the coil, these pollutants are destroyed. The air is left up to 99% free of pathogens.

Comercial Applications For Steril-Aire



HVAC systems

- AHUs
- Packaged Units
- Fan Coils
- Cooling Towers
- Refrigeration Storage



Locations

- Store
- Delicatessen
- Produce Area
- Pharmacy
- Food Preparation Areas
- Bakery
- Storage / Warehouse
- Walk-in Refrigeration
- Staff Rooms
- Cafeterias
- Ice Machines
- Administration Offices
- Restrooms
- Elevators
- Refrigerated Delivery Trucks



Portable Food Decontamination

- SterilWand:
For food preparation & display surfaces
Checkout Counter / conveyor belts.



Significant benefits for a wide array of industries.



Commercial & Industrial Buildings. Steril-Aire can support your financial goals by significantly reducing your HVAC operating costs, decreasing water use and improving indoor air quality. Owners can expect increased property values and reduced liability. Property managers will see higher occupant satisfaction and productivity as well as marketing differentiation.



Health Care. Steril-Aire's germicidal UVC can help protect your building, your patients, and staff while reducing energy consumption and maintenance costs. Our health care customers have realized reduced hospital acquired infections, cross-contamination, reduced hospital stays. Steril-Aire also takes cleanrooms to a whole new level of germicidal effectiveness.



Food & Food Processing. Steril-Aire UVC enhances food safety through mold bacteria and virus control, extending product shelf life and improving quality and production yields. Germicidal UVC helps to avoid recalls and mitigation, reducing sales loss, brand damage.



Schools & Institutions. With 14 million missed school days each year, a healthy school building is essential. Good indoor air quality means healthier students, teachers, professors and administrators. Steril-Aire's UVC for HVAC protects your building, your students and staff while reducing energy consumption and maintenance costs.