



Good for employees, good for the environment and good for business

The benefits of optimizing indoor air quality are truly far reaching. It is to everyone's advantage that the people working in or visiting a company's building are healthier, happier and more comfortable. The reduction of airborne allergens, bacteria, viruses and odors work to that end.

HVAC coils, are well known to get clogged with mold and harbor damaging microorganisms. They need periodic cleaning with environmentally harsh chemicals to restore their efficiency and remove build up that releases "building smells", allergens and pathogens into a building's air circulation.

Imagine consistently clean HVAC components that promote less energy consumption because they always work at peak energy efficiency... that instead of being a source of indoor air pollution, actually reduce it?

Imagine increased employee productivity as a result of fewer needed sick days and fewer distracting allergy symptoms... a significant, if indirect benefit of high quality indoor air.

Ultravation® products are designed to help companies achieve these IAQ benefits. Our designs take into consideration quality, trouble free performance, adaptability to any HVAC configuration, and low energy use. We stand behind our products with engineering and technical support prior to, during and after the installation.

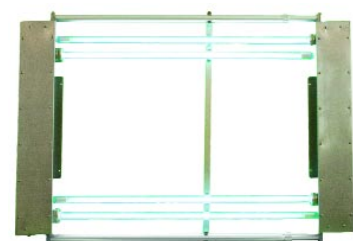
Our years of experience in OEM manufacturing make it easy for us to not only serve you with any service need, but also to advise and assist with maintaining the performance of any investment in IAQ products you may have already made.

We offer comprehensive IAQ solutions for our customers. We are dedicated to the success of the IAQ plan, and look forward to each and every installation.

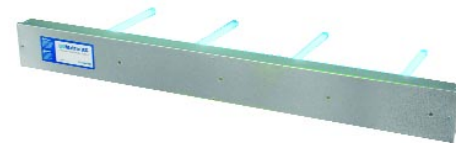
Scott Russell
President and Founding Partner



UVMatrix™ Commercial IAQ Solutions



Ultravation® UVMatrix™ SI-Series
Designed specifically to disinfect interior HVAC air handler surfaces, with universal adjustable fit for all cooling coils.



Ultravation® UVMatrix™ AS-Series
T3™ UV light array installs in ductwork or custom designed plenums for advanced airstream disinfection.



Ultravation® UVMatrix™ 4X-Series
For outdoor / rooftop HVAC applications with remote monitoring available.



Ultravation® UVMatrix™ FS-Series
Focused UVC Room Air Sanitizer for medical centers, public gathering areas. 100% silent disinfection through natural convection.



Ultravation® UVMatrix™ CW-Series
Ideal for classrooms, offices and meeting rooms. MERV 11 filtration with air stream disinfection and odor reduction.



Ultravation® UVMatrix™ SA-Series
Portable stand-alone air purification for classrooms, pet stores and other single room applications. HEPA filtration, germicidal UV and odor reduction.



Ultravation® UVMatrix™ EZ-Light
Design accommodates ice machines and PTAC systems to kill mold and prevent "dirty sock" odors from contaminated cooling coils. 24 VAC operation, available in 12, 22 and 33 inch T3™ high performance lamp lengths. Magnet-mount option, UV shield and easy mount electronic power supply.



EPA establishment number: 074725-VT-001



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Ultravation's T3™ system is protected by US patents 6,809,326B2 and 6,838,057B2
Ultravation's SI-Series™ system design is protected by US patents 7,419,642B2 and 6,828,052E2



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Increase Productivity
Reduce Health Issues
Lower HVAC Maintenance Costs
Improve Energy Efficiency
Create a Smaller Environmental Impact

UVMatrix™ Environmental Systems for HVAC





An HVAC system's impact far exceeds air temperature and humidity...

UVMatrix™ creates a new dimension in indoor climate control

Remove airborne allergens and pathogens, while cutting HVAC energy consumption and maintenance costs.

Stainless steel construction, ready for inhospitable HVAC environments.



The Ultravation UVMatrix™ SI-Series:

A microprocessor controlled system that automatically and consistently clears an HVAC coil of mold and all other bio-growth, eliminating a major source of airborne allergens, bacteria and viruses. It emits an industry leading lethal dose of intense UVC light. The coil simply sheds any bio-growth—existing or potential.

▲ High performance, patented T3™ UVC lamp system incorporating Philips precision UV lamps — a new level of germicidal intensity with no increased energy needs.

- Hospitals**
 - Colleges / Universities**
 - Court Houses**
 - Animal Clinics**
 - Museums**
 - Office Buildings**
- Day-care**
 - Elementary / High Schools**
 - Doctor's Offices**
 - Pet Centers**
 - Banks**
 - Theatres**
- Restaurants**
 - Health Clinics**
 - Prison Facilities**
 - Government Buildings**
 - Cruise Ships**

Ultravation® UVMatrix™ equipped HVAC systems create safer, more healthful, more productive, and “greener” indoor environments

Legionaire's Disease, Flu Viruses, Common Cold, SARS, Hospital Acquired Infections (HAIs), Chronic Allergies Due to Environmental Exposure to Mold — all can be promoted by HVAC contamination.

These and other microorganisms are affecting people in greater and greater numbers causing illness, increasing sick days, reducing productivity and otherwise negatively impacting peoples lives. The risks involved in owning a building and operating a business are intensified. Healthcare facilities of all kinds are taking action to minimize the spread of illness and infections from airborne pathogens.

HVAC's unintended role

The very system that provides comfort to a building's occupants can be a major contributor to poor or contaminated indoor air. The circulation of air through an HVAC system means that infectious airborne microorganisms and allergens from any area of the building will be drawn into the system and distributed throughout. Further, an HVAC coil, because it reduces

humidity by way of condensation, unintentionally creates an area the promotes the growth of bacteria, viruses and allergens—especially mold. The system, while distributing existing airborne microorganisms creates its own contribution of pathogens and allergens, compounding the problem.

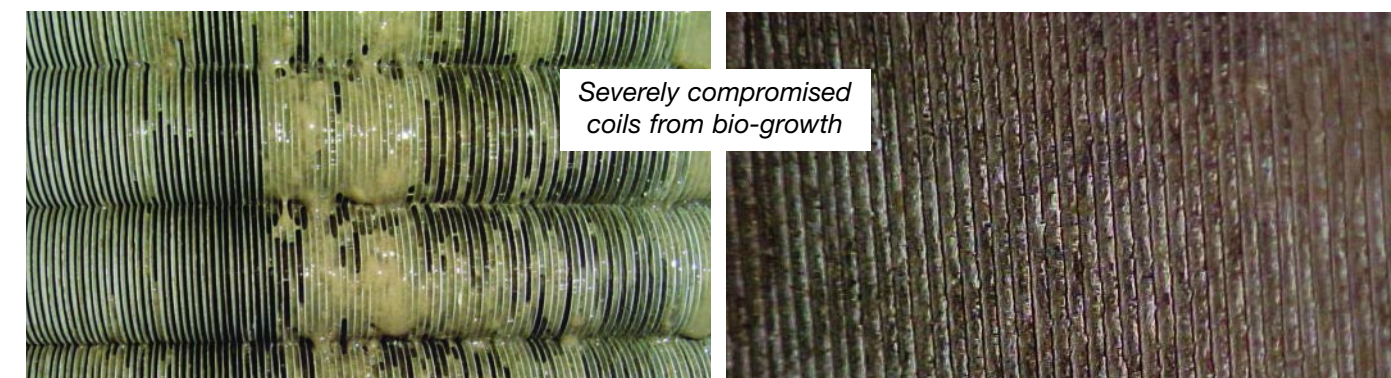
The effect of bio-growth accumulation on HVAC cooling fins

As airborne microorganisms pass through the cooling coil the condensate promotes the development of bio-growth. As it accumulates on the cooling fins a series of effects occur. The waste product, spores and offspring travel downstream, first accumulating on air duct surfaces and ultimately degrading the building's overall air supply.

HVAC operation is energy intensive. Clogged coils increase energy consumption, and cleaning them restores efficiency temporarily. But not without significant environmental and maintenance costs.

The condensate, bio-growth and debris that accumulates and coats the HVAC cooling fins effectively insulates the passing air from the cooling surfaces, preventing efficient thermal transfer. And as the growth builds up it inhibits air flow through the system. Both cause the system to use progressively more energy to operate.

The fact that HVAC coils become clogged with mold and other bio-growth in nothing new. Well maintained HVAC systems are periodically cleaned to restore system efficiency but the process begins again. The chemical cleaning agents are costly and have there own environmental impact. The cleanings themselves add to the overall cost of operation.



Severely compromised coils from bio-growth

UVMatrix™

Using the germicidal power of UVC light, bio-growth is stopped before it has a chance to begin...

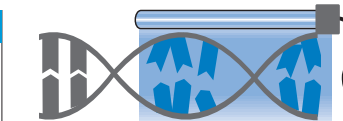
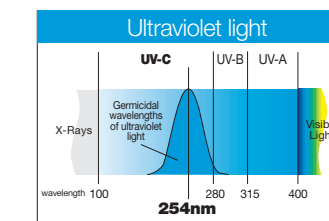
- ✓ **All types of microorganisms are destroyed before they colonize on HVAC components.**
- ✓ **Airborne microorganisms passing through the system are killed, greatly reducing their numbers throughout the building.**
- ✓ **Fewer allergy symptoms are experienced.**
- ✓ **Reduction of HAIs and other air communicable diseases are attained.**
- ✓ **Liability and risk factors relating to pandemic-type infections are diminished.**
- ✓ **Productivity is increased.**
- ✓ **Coils are clean 100% of the time providing peak efficiency 24/7 saving significant energy.**
- ✓ **Energy saved far exceeds energy consumed.**
- ✓ **Maintenance costs are lowered by reducing or eliminating chemical coil cleanings.**
- ✓ **The overall environmental footprint is improved through energy use reduction and elimination of chemicals.**



The Ultravation UVMatrix™ SI-Series utilizes our patented T3 UVC lamp system featuring Philips UV lamps—the lowest environmental impact UV lamps manufactured today. The T3™ system emits up to 40% more germicidal UV using low cost and low power-consuming standard configuration UV lamps. The SI-Series' patented flexible design was created to accommodate any HVAC configuration for new or retrofit installations.



How UV Disinfection Works



The disinfection process applies UVC light centered on 254nm to react with and destroy microorganism DNA.

Ultravation®
Professional Indoor Air Quality Products
Learn more at ultravation.com
866 468 8247