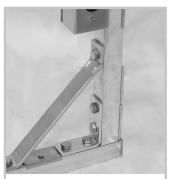
## **HEALTHCARE & COMMERCIAL HVAC**

## **EXPERT ENGINEERING - UNSURPASSED QUALITY**



Engineered Framing Systems are Factory built and Factory Tested. Shipment choice as 'readyto-install' or 'fast-assembly knock-down kit.'

Twist-lock electrical connections provide quick service disconnect and secure.



Access Door Safety Switch automatically

shuts the system down for service and maintenance.

- Every DisinfectAire system is engineered to meet or exceed 2008 ASHRAE guidelines as published in Chapter 16 of the HVAC Systems and Equipment Handbook.
- DisinfectAire furnishes complete systems, including all required safety switches, signage and viewports. Others ship only "light strips" that require field fabrication and engineering of safety features and components.
- DisinfectAire utilizes 360° distribution of UV Energy for disinfection of air moving at 500fpm, while simultaneously disinfecting surfaces in proximity to the lamp systems.
- DisinfectAire features highly-efficient, low mercury, non-proprietary Philips SteriLamps to help reduce replacement costs by as much as 75%
- DisinfectAire's engineering staff will determine the number and size
  of UV-C lamps, product specs and system placement required to
  disinfect your moving air. Call us for recommendations, specifications,
  and CAD drawings for any application.
- DisinfectAire builds every UV system to last the lifetime of your Air Handling Equipment.

#### Model EXTV

Economical, Complete UV-C Lamp Systems for large air handlers. Available in 1, 2, or 3 row systems engineered specifically for any size commercial system.

#### Model DRU

Track mounted systems simply slide out for ease of service. Engineered for air handlers less than  $50^{\circ}$  in interior height.

## HOW WILL UVC HELP MY BUILDING?

By controlling surface and airborne microorganisms, UVC can be beneficial for healthcare, hospitality, public spaces, patient rooms, administrative and support areas.

#### **Energy savings:**

Studies show that even a thin (0.024-inch/0.61-mm) layer of biofilm buildup on a coil increases energy consumption by at least 21.5 percent. By cleaning coils continuously, UVC eliminates biofilm much more effectively than conventional cleaning methods — saving energy by maintaining equipment at factory-designed efficiency.

#### Maintenance and operational savings:

Manual coil cleaning can be a major HVAC maintenance expense and may be very difficult to perform on small, tough-to-access packaged or unitary systems. UVC greatly reduces or eliminates the need for chemical cleaning or pressure washing of any size coil. It also eliminates the associated downtime, inconvenience and potential discomfort of patients and staff, as well as worker exposure to cleaning chemicals.

#### IAQ control:

UVC improves air quality by preventing the spread of infectious diseases, and also by reducing allergy and asthma symptoms commonly triggered by biofilm, a complex matrix of mold, bacteria, viruses and debris. Biofilm is a common source of odors, frequently contributing to complaints and HVAC operational issues. UVC creates a safer, more comfortable indoor environment and eliminates musty odors from the air conditioning system. Improved indoor air quality has also been documented to improve worker performance and decrease absenteeism.

### Equipment service life:

The surface cleaning effect of UVC helps restore older HVAC systems to efficient operation, prolonging the life of aging air handlers.

#### Water conservation:

Reclaiming UVC-cleaned condensate for cooling tower makeup, irrigation or gray water flushing can reduce water and waste-water costs.

#### LEED contribution:

Because of these varied benefits, UVC may contribute to earning LEED credits in one or more areas.

DisinfectAire.com





800-800-9729

# RESIDENTIAL/LIGHT COMMERCIAL HVAC

The forced air system in any home or office isn't just recirculating the air, its also recirculating airborne pathogens, mold, dust and a host of other harmful substances. DisinfectAire transforms your HVAC system into an efficient, facility-wide air disinfection system. Our IAQ-I,ADPL and PRU units, once installed into the forced air system of any home or small office building, remove bacteria, mold, chemical and smoke odors, viruses and other airborne contaminants from the air.

### **New or Existing HVAC Systems**

### Split-System HVAC Units up to 5 tons - ADPL-136

This unit is an ideal choice to destroy airborne virus and bacteria moving through the system, and spore growth (mold) growing on coils, drain pans and UV compatible filters. Optional PCO Grid removes volatile organic compounds, the cause of common household odors.

#### Split-System HVAC Units up to 10 tons - ADPL-260

In medium-sized commercial applications, the dual lamp ADPL can be installed directly over "A" style coils or in return air ducts to disinfect both air and surfaces.

#### Rooftop/Package HVAC Units up to 5 tons - PRU

The model PRU kit is installed within the air handler to provide continuous disinfection of air flow and improved energy efficiency.

#### Three-Stage Indoor Air Quality System - IAQ-I

DisinfectAire has created a simple and effective way to add an indoor air quality system to new HVAC installations. The IAQ-I can also be placed into the air return duct of an existing HVAC system. The three-stage IAQ-I combines three proven technologies in one compact, easy-to-install unit; pleated dust filters, UVGI lamps and PCO (photocatalytic oxidation) TiO, SAINT GOBAIN QUARTZEL® FELT.

#### DisinfectAire Recommends:

DisinfectAire's Model ADPL-136 is effective as a stand-alone unit, but we recommend that you install two lamps to achieve maximum disinfection within the HVAC system - one in the return air supply near a UV-compatible filter and a second near the AC coil.

# HEALTHCARE & COMMERCIAL HVAC

Large commercial air handlers and duct systems require the targeted application of UV energy to achieve air disinfection. UV energy also deep cleans the AC coils to reduce energy consumption and improve overall HVAC efficiency and performance. With our exclusive designs, DisinfectAire can engineer the exact UVGI delivery system for any need or application.

#### Model ADPL-60

In-duct fixtures can be quickly and easily installed at any convenient location in the duct system and require no expensive modification to the HVAC system. In-duct UV units are available in a variety of standard configurations to fit the specific dimensions of your ducts and airflow.

#### Model FCU

DisinfectAire's UVGI PTAC disinfectors provide an effective and easy way to disinfect the air in hotel rooms, classrooms, dormitories or any location where unit ventilators are installed for climate control. Several models are available to fit most PTAC units from major manufacturers.

#### Model BLUC

Model BLU uses reflectors to direct concentrated UV energy inside larger air handlers, providing air and surface disinfection.





The health aspects associated with the use of this product and its ability to aid in disinfection of environmental air have

Look for UL Classification Marking on Product.

The Classification Mark of Underwriters Laboratories Inc. is the only method provided by UL to identify products manufacture under its Classification and Follow-Up Service, Many, but all, of our products are Certified by UL., Flease contact us for increasing the Certified III Certified reporture.



800-800-9729

#### Greener Buildings:

"UVGI reduces microbial levels on HVAC surfaces ... can result in energy savings which can be significant, with payback of possibly less than 2 years. In addition, the associated improvements in air quality may reduce respiratory distress symptoms and thus improve attendance and work performance in occupied spaces." ASHRAE 2008 – HVAC Systems and Equipment Handbook, Chapter 16

Model ADPL-136 Model PRU



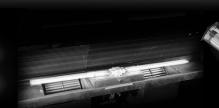




Model IAQ-I



Model ADPL-60



Model FCU



----

## **EMERGENCY MEDICAL SERVICES**

#### Permanent Installation - Model ADU

From ambulances to EMS helicopters, this device can be permanently installed into any vehicle. Stretchers, railings, medical equipment, control panels, flooring, walls and work surfaces are all likely to be directly contaminated during patient transport and can be difficult to clean. The Model ADU will disinfect any exposed surface while materials in glass or plastic containers are shielded from the germicidal effects.

#### Portable Use - Model EDU

This portable area disinfector is designed for use in small spaces, such as rest rooms, equipment rooms, and emergency vehicles where permanent installation is not practical. It can be used in ambulances, police cars, and correctional passenger vans and buses. The unit is equipped with a userspecified time delay and activation timer. Both the timer and the delay can be set in second, minute and hour increments.



Model EDU

# **UV-C MEASUREMENT**

The X-9 Handheld Radiometer measures irradiance and dose in the UV-C spectral range at 254nm. The radiometer is capable of accurate high level UV-C output readings at the lamp source, or very low UV-C levels required to verify safe human exposure. Despite its compact dimensions, the meter offers a large display and an RS 232 interface. Operation is simple for the benefit of non-technical personnel.

### ASHRAE Position Document on Airborne Infectious Diseases, 2009:

"...UVGI, when effectively applied, inactivates infectious agents locally and can be considered in public access and high-traffic areas such as cafeterias, waiting rooms, and other public spaces. In-room UVGI can be considered as a kind of disinfection between successive occupants of a room."

# **UPPER AIR - Ceiling Mount**

### Ceiling Mount with Ceilings 8 feet or higher

#### PM Model

This round pendant mount is for use in areas where ceiling mounting is preferred. The effective coverage area for the PM-418 unit is 440 square feet and the unit uses 4 Philips PL-L 18W UV Lamps.

Ceiling Mount with Ceilings 9 feet or higher

#### VM-818 Model

This square pendant mount is for use in large areas where ceiling mount is preferred. The effective coverage for the VM-818 unit is 720 square feet and the unit uses 8 Philips PL-L 18W UV Lamps.

#### SAM Model

Sanitizing Air Mixers are for use in areas where occupants may have direct line of sight into the fixture. UV lamps are not directly visible in a SAM unit, making this design safe to use in challenging areas. A fan draws contaminated air into the unit, disinfects it, and recirculates cleaner, healthier air. The effective coverage area is 440 sq ft. and each unit uses 2 Philips PL-L 18W UV Lamps.

Ceiling Mount with Ceilings 10 feet or higher

#### GC Model

This model is for use n large open spaces where ceiling mounting is preferred. The effective coverage area of the GC-136 is 240 sq. feet and the GC-236 is 480 sq. feet and the unit uses 1 or 2 Philips PL-L 36W UV Lamps.

### Air Mixing is the Key:



1997, CDC/NIOSH has determine the ability of Upper-room UVGI to kill or inactivate airborne mycobacteria. Completed research indicates that an appropriately designed system may kill or inactivate airborne bacteria and increase the protection afforded to healthcare workers.

Basic Upper-Room Ultraviolet Germicidal Irradiation Guidelines for Healthcare Settings, 2009 Department of Health and Human Services.

#### DisinfectAire.com



Model EDU

### Model ADU



Model X-9



Model PM





Model SAM



800-800-9729