## What products do we offer?

# **COVID-19 Solutions**

From the original 24Volt 1" Dynamic Air Cleaner to the state-of-the-art Dynamic V8, Dynamic has the right product to fit your application. Dynamic Air Cleaning Systems can be configured to provide the absolute best possible air cleaning solution for your application.

- Dynamic Germicidal UVC Systems can be easily retrofitted into existing systems. They can be used by themselves to irradiate an airstream in a space or combined with Dynamic Polarized Glass Media Panels to provide a catch/hold/kill solution to inactivate viruses and pathogens.
- 7 1" and 2" Panel Air Cleaners and V-Banks are used in return air grilles, unitary split systems and wall mount systems and can be run in series (tandem models) in light commercial packaged units.
- Dynamic V8 Air Cleaning Systems offer MERV 15+ performance and the ability to capture viral aerosols and odors. Its very low resistance to airflow and industry-leading dust-holding capacity allow it to be retrofitted into many systems that were designed for low-efficiency filtration. The Dynamic V8 can be installed in large central modular arrays in air handlers and fan-powered boxes or dispersed in individual modules to replace a section of duct or with smaller equipment.

Dynamic Air Quality Solutions has a range of products and over 30 years of experience designing systems that are optimized for the control of particle, biological, and gas phase contaminants, while providing significant energy and operational savings over traditional alternatives.

# Dynamic . Sterile Sweep® **UVC System UVC System** 1" & 2" Panel Air Cleaners Dynamic V8 Air Cleaning System

#### For further information, visit:

- (1) https://www.cdc.gov/coronavirus/2019-ncov/more/scientific-brief-sars-cov-2.html
- (2) https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html
- (3) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3831650/
- (4) https://www.ajicjournal.org/article/S0196-6553(20)30756-2/fulltext
- (5) https://www.ashrae.org/technical-resources/building-readiness#upgrading







www.DynamicAQS.com



## Protect the Air Space in your Building 24/7/365

According to ASHRAE: Transmission of SARS-CoV-2 through the air is sufficiently likely that airborne exposure to the virus should be controlled. Changes to building operations, including the operation of heating, ventilating, and air-conditioning systems, can reduce airborne exposures.

ASHRAE suggests several approaches to mitigate risks in existing buildings including upgrading filtration levels to MERV 13 or higher, UVC germicidal lamps to inactivate viruses, maximized ventilation rates, maintenance of moderate humidity levels and supplemental fan-powered air cleaning systems where upgrades to the central system would be difficult or insufficient. Dynamic has a range of products and solutions that allow for significant system upgrades and are designed with retrofitting into existing buildings in mind.

HVAC control measures are important tools to help reduce the risk of airborne transmission in buildings. However, they do not eliminate the possibility or the need for other control measures such as personal protective equipment, social distancing/decreased density, hand washing, and surface disinfection.





# **Remote Mount Germicidal UVC Systems:**

#### Proven to Inactivate Viruses and other Pathogens, including SARS-CoV-2 (COVID-19 virus)

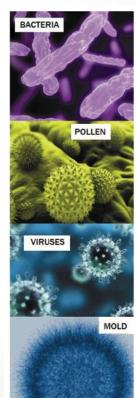
The CDC/EPA1 reports that viruses like Sars-CoV-2, the virus that causes COVID-19, are spread through large respiratory droplets that can land on surfaces and smaller aerosols that can stay suspended in the air from a few minutes to a few hours. The CDC encourages us to follow their guidelines<sup>2</sup> by social distancing, washing hands, and cleaning household surfaces to reduce the impact of these larger droplets. Epidemiologists, pulmonologists, and other medical experts also suggest that you be proactive in protecting the air space in your building from these smaller airborne viral aerosols.

The HVAC system recirculates all the air in your building 3-10times an hour, redistributing air that can carry these smaller respiratory aerosols. This makes ductwork the perfect location to install a Remote Mount Germicidal UVC System to disinfect your air space

24 hours a day; naturally and without adding any chemicals, sprays, ozone, ions, or gases to the air that you breathe.

Ultraviolet light with a wavelength of 245nm to 254nm (UVC) is what gives sunlight its germicidal properties. It has been harnessed in specialized lamps and used to disinfect air, water, surfaces, and food for decades. The Dynamic Remote Mount Germicidal UVC System uses the same high-output UVC energy that independent lab studies have shown will inactivate surface and airborne bacteria and viruses like MERS, SARS, influenza, tuberculosis, coronaviruses<sup>3</sup>, and now Sars-CoV-2<sup>4</sup>. The Dynamic Remote Mount Germicidal UVC System is 330% more powerful than standard UVC lights and will inactivate viruses and bacteria including the SARS-CoV-2 (COVID-19) virus and other harmful pathogens that move past it in the HVAC ductwork. According to the American Journal of Infection Control, it takes 1,048 microjoules to deactivate the Sars-CoV-2 virus. The Dynamic Remote Mount Germicidal UVC System produces 1,082 to 10,658 microjoules from 13 inches to 1 inch away from the lamp which gives it a large 26" complete inactivation zone around the lamp within the ductwork.

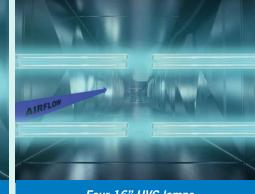
> Be proactive and protect the airspace in your building TODAY with a Dynamic Remote Mount Germicidal UVC System.



Remote Mount Germicidal UVC System

**Considerations:** Duct dimensions and air flow will determine the proper application of any germicidal UVC lamp system. The effectiveness of germicidal UVC depends on the length of time a microorganism is exposed to UVC, the intensity and wavelength of the UVC lamps, and their configuration within the HVAC duct system.





Four 16" UVC lamps Typical 20 ton air handler\* For more information, please visit www.DynamicAQS.com or call 1-(800)-578-7873

are 180 µW/cm2 @ 1 meter.

To efficiently heat and cool your building, proper

sizing of your HVAC and duct system, along with

best practice procedures for installation, must be followed. There are also calculations and installation procedures that need to be followed when determining the amount of UVC energy required to get the job done in an HVAC system. To obtain the desired kill/deactivation rates of microorganisms in a forced air system, proper design parameters are important. All design parameters are based off end-of-life output of 110 μW/cm2 @ 1 meter. Dynamic 16" UVC lamps

\*Application may vary depending on design parameter considerations.

