INDOOR AIR QUALITY SOLUTIONS YOU SHOULD BE CONSIDERING



Facility managers are now faced with an unprecedented challenge in the midst of the COVID-19 pandemic. While the health and safety of your building occupants has always been a priority, the risk of illness of an occupant has never been greater. And, in light of recent findings that COVID-19 could be airborne, safety is an even greater challenge.

There are several strategies that ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) recommends to control airborne infectious diseases, which include but are not limited to ventilation, temperature, humidity, exhaust, filtration, pressurization and technology strategies.

When evaluating your facility's indoor air quality, it's important to consider that many manufacturers make claims to improve indoor air quality, but do not necessarily have the ability to reduce virus pathogens within your space. There are many pollutants that affect the air quality in commercial facilities including molds, allergens, bacteria, pathogens, dust and other harmful particulates. While many technologies may actually reduce some of these pollutants, there are only a handful proven to reduce airborne virus pathogens.

In order to assess the technology that's best for your facility, it is highly recommended that you consult with a professional service provider such as TWC Services. A number of factors will determine your needs, including facility type, equipment sizing and existing policies. For informational purposes, we have outlined additional information regarding the various types of technologies that we offer to ensure your facility's indoor air quality meets health and safety standards.



AIR CLEANING SOLUTIONS



MERV-RATED FILTERS

THE BASICS: MERV is a term used by ASHRAE to classify the effectiveness levels of filters. Filters with a higher MERV value trap smaller airborne particles.

ADVANTAGES: MERV filters are commonly used and readily available. MERV filters rated 13 and above have been proven to trap bacteria and Nuceli from sneezes.

DISADVANTAGES: While higher rated MERV filters catch more particles, they are not guaranteed to remove viruses from the air. In addition, the higher resistance of the filters can cause pressure drops across the filter which can reduce the air flow and create a host of other problems.

CONSIDERATIONS: Please discuss applications with your TWC Services contact prior to making filter changes.



HVAC ULTRAVIOLET GERMICIDAL IRRADIATION

THE BASICS: Short-wave ultraviolet radiation is installed in HVAC equipment to destroy bacteria, mold, yeast and viruses. Typically, the light is installed on the discharge side of the cooling coil to expose the coil and the drain pan, thus inactivating and breaking down bio-aerosols and organisms.

ADVANTAGES: This is a scientifically proven technology recognized by ASHRAE and healthcare industries as effective on viruses and has been used for many years.

DISADVANTAGES: Must be used safely to avoid injury to humans. Installation and operational requirements can increase costs due to retrofit needs. With UV, only the air that is in direct sight of the light is impacted. Considered more effective at cleaning surfaces than air.

CONSIDERATIONS: There are a number of factors that should be considered when implementing a UV solution. TWC Services' engineering resources can help determine the best application to maximize impact on air quality and minimize retrofit costs.



REFLECTIVE ELECTRO MAGNETIC ENERGY TECHNOLOGY

THE BASICS: REME HALO® in-duct air purifier produces Hydro-Peroxide plasma that is distributed through the air handler, through the duct system and into the conditioned space. Unlike passive air technologies, which need pollutants to pass through the unit for purification or filtration, the REME HALO® in-duct air purifier sweeps through your building, actively purifying pollutants at the source. In addition, the charged plasma induces particles to coagulate or stick together making them bigger and easier for your filter to catch. Hydroperoxides occur naturally in the earth's atmosphere and are part of nature's process of cleaning the air.

ADVANTAGES: Dual ionizers reduce airborne particulates (dust, dander, pollen, mold spores), kill up to 99% of bacteria, mold and viruses, and reduce sneeze germs by 99% in the time a sneeze can reach three feet. Reflective Electro Magnetic Energy Technology has been shown to remove harmful contaminants to levels below the associated regulatory exposure limits for reducing health risks. It is approved by the US military for use in hospitals and by the USDA and FDA for use in food processing plants.

DISADVANTAGES: Requires cell replacement after 18,000-25,000 hours.

CONSIDERATIONS: The REME HALO® can be installed in a wide variety of applications. There are a number of factors that should be considered when implementing a Reflective Electro Magnetic Energy Technology. TWC Services' engineering resources can help determine the best application to maximize impact on air quality and minimize retrofit costs.

EMAIL US TODAY WITH QUESTIONS MYTWC24@TWCSERVICES.COM



HVAC SYSTEMS DURING COVID-19

Properly maintaining and operating your commercial HVAC system can increase your building's indoor air quality. Working with service experts like TWC Services, the following steps are recommendations for building owners, managers and staff to ensure your HVAC system is optimized to improve the health and safety of building occupants.

- Schedule and carryout HVAC planned maintenance as prescribed by the recognized standards and adhere to proper maintenance procedures. Consult with your service provider to determine what additional measures should be taken at this time.
- Make sure that your HVAC system is properly commissioned and operating correctly. Check the outside air flow rates and controls to confirm that the minimum outside air rates are achieved as a basic requirement and, if possible, increase the outside air rates.
- Maintain a range of 40-60% internal relative humidity.
- Consider a professional audit of your air conditioning system filtration and general cleanliness along with a review of the planned maintenance inspection records to confirm they meet standards for facility operation.
- Check the current air filtration type and condition and upgrade or replace the filter to F7-F9 grade (subject to fan capacity). This can reduce transmission of the virus through the system.
- If your system requires service, your contractor should change air filters, clean and sanitize all cooling and heating coil surfaces using approved methods and chemicals. Note: Fogging and fumigation are not recommended for normal facilities and HVAC systems not specifically designed for this treatment.

TWC Services screens all technicians prior to starting their day with a fit for duty questionnaire and exam.

Ensuring the health and safety of our employees and customers are our top priorities.

CLEAN AIR SERVICE CERTIFICATION

Maintaining and optimizing your HVAC system can be effective in reducing the spread of infection and should be considered part of your overall virus protection strategy.

Working together, we can provide a safe environment for your employees and customers.

When you hire our team for Clean Air Services, we will provide an official certificate for to you post and distribute.





CALL 855-698-9224 TO SCHEDULE YOUR CLEAN AIR SERVICE