



**MATRIXHG**  
BUILDING SOLUTIONS<sup>SM</sup>

## WORKING TOGETHER TO **REVIVE & RESTORE** YOUR BUILDING

For years now, Matrix HG has been utilizing advanced technologies in the field as well as the office. During these difficult times of heightened awareness, our Task Force Team, is delivering UV-C options and preventative maintenance solutions for seamless efforts to help recover and re-open your building to normal business function post COVID-19.

### Proven & Proactive Measures for **Reducing the Chances** of Diseases Being Spread

New information continues to be discovered about the COVID-19 virus, and some building owners are considering options to modify their HVAC systems. Matrix HG supports all efforts for expediting the reinforcement of safe building operations and take actions that align with ASHRAE and WHO for the most current and professional HVAC procedures and protocol. For more information, please refer to:



<https://www.who.int/news-room/commentaries/detail/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations>

[https://www.ashrae.org/file%20library/technical%20resources/ashrae%20journal/2020journaldocuments/72-74\\_ieq\\_schoen.pdf](https://www.ashrae.org/file%20library/technical%20resources/ashrae%20journal/2020journaldocuments/72-74_ieq_schoen.pdf)

<https://www.ashrae.org/about/news/2020/ashrae-offers-covid-19-building-readiness-reopening-guidance>

# HVAC System Maintenance and Filter Replacement during the COVID-19 Pandemic

- Consider letting the filter load up further than usual to reduce frequency of filter changes.
- Don't let pressure drop increase enough to disrupt room pressure differentials.
- Confirm filters remain snug in their frames.
- When feasible, filters can be disinfected with a 10% bleach solution or another appropriate disinfectant, approved for use against SARS-CoV-2, before removal. Filters (disinfected or not) can be bagged and disposed of in regular trash.
- When maintenance tasks are completed, maintenance personnel should immediately wash their hands with soap and water or use an alcohol-based hand sanitizer.

## Ultraviolet Energy (UV-C) Ultraviolet Energy

Inactivates viral, bacterial and fungal organisms so they are unable to replicate and potentially cause disease.

- The entire UV spectrum is capable of inactivating microorganisms, but UV-C energy (wavelengths of 100 – 280 nm) provides the most germicidal effect with 265 nm being the optimum wavelength.
- The majority of modern UVGI lamps create UV-C energy with an electrical discharge through a low-pressure gas (including mercury vapor) enclosed in a quartz tube, similar to fluorescent lamps.
- Roughly 95% of the energy produced by these lamps is radiated at a near-optimal wavelength of 253.7 nm.
- UV-C light-emitting diodes (LEDs) are emerging for use.
- Types of disinfection systems using UV-C energy: In-duct air disinfection; Upper-air disinfection; In-duct surface disinfection; and Portable room decontamination.

