



March 02, 2020

RE: Coronavirus: Fresh-Aire UV efficiency against viruses, bacteria & mold

*Fresh-Aire UV has been receiving inquiries regarding how effective UV disinfection systems are against Coronavirus. We believe the best approach is to be as transparent as possible and to explain the fundamentals and variables that play a factor in inactivating Coronavirus or any other pathogen with UVC germicidal technologies.*

Fresh-Aire UV systems are tested and validated against bacteria, viruses, mold & fungus. Fresh-Aire UV systems have been tested to achieve up to a 99.999996% reduction on microorganisms. There are a number of factors that need to be addressed in order to determine efficiency, these include but not limited to the application such as surface or air disinfection, air velocity & temperature, recirculation rates and dwell time as well as the specific biological target. Fresh-Aire UV systems are installed in the HVAC unit and/or ductwork and is designed to disinfect the air as it circulates through the ventilation system. UV dosage for log reduction are measured in several ways including microwatts per second/centimetres<sup>2</sup> ( $\mu\text{Ws}/\text{cm}^2$ ).

A very large percentage of microorganisms have an already defined microwatt dose for UVC inactivation including Coronavirus. UV disinfection has been employed for decades in water treatment; these microwatt values have been used for reference to gauge UVC efficiency against a large cross-section of microorganisms. It is impossible for any manufacturer to test systems against every biological target. Fresh-Aire UV systems have not been tested against Coronavirus. Fresh-Aire UV systems have been tested against biological targets that require greater dosage for inactivation.

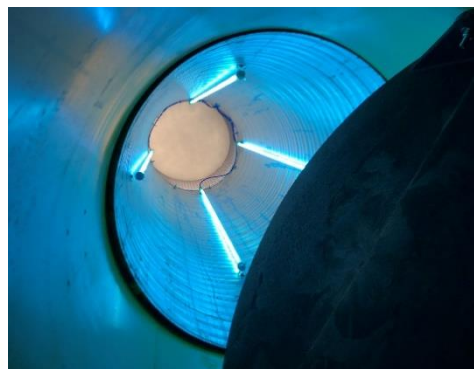
UV disinfection systems for HVAC are the ideal proactive measure to complement filtration, addressing microorganisms that are so small, that filters are mostly ineffective. The UV systems have also been shown to reduce problematic molds and pathogens that are found within the HVAC system and drain pan that would otherwise be introduced and distributed throughout the envelope of the building. *For more information on Fresh-Aire UV systems or to discuss your specific application, please contact 1-800-741-1195 or email [sales@FreshAirUV.com](mailto:sales@FreshAirUV.com).*



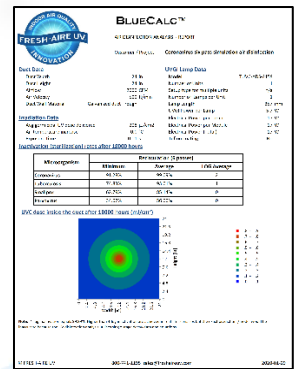
Air Handler Disinfection



Air Handler & Airstream Disinfection



Make-Up Air & Exhaust Disinfection



Blue-Calc Report / Analysis

*Fresh-Aire UV systems are installed within the HVAC system and are not intended to diagnose, treat, prevent or cure any disease. The systems have not been tested on Coronavirus and is not a medical device.*