



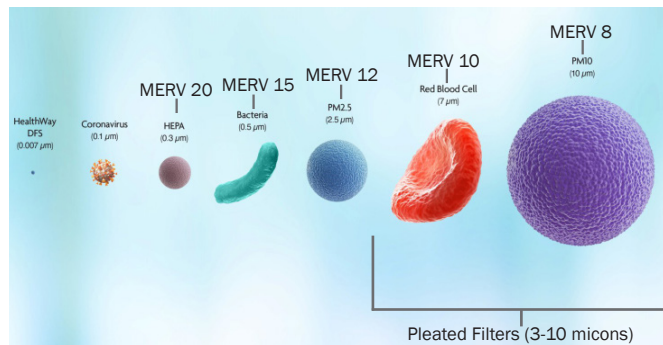
Proposal for HVAC Design Services

Williamsville Central School District

Mr. Maturski,

Thanks for having us out to discuss the ventilation situation in your buildings.

Having worked in all your buildings for the last 20 years, we are very familiar with the mechanical systems. All spaces in the building have the code mandated ventilation systems that provide fresh outdoor air to the spaces based on code allowable occupancy rates. They provide approximately 20 Cubic Feet per Minute (CFM) per person of fresh outside air while pushing stale air out of the space. For the most part, instructional spaces (classrooms) are furnished with a classroom unit ventilator. Some spaces have an air handling unit (AHU), but they act in a similar fashion. Classroom unit ventilators are typically located under a window and draw fresh air in from the outside. This air is filtered by the unit to remove dust, pollen and other allergens. The units are not intended to provide enhanced filtration, but as you can see from the graphic below, even HEPA filtration will not remove the coronavirus. Any attempt to install higher level filtration will only reduce air flow. This is precisely the exact opposite of what you want to do. All guidance from the WHO, CDC, and other agencies recommend increasing air flow to flush out the virus. You would not want to do anything to reduce airflow.



The good news is with a 50% occupancy in the classroom needed to achieve social distancing guidelines, you will have more than twice the code mandated ventilation rate, as the ventilation rate is based on a per occupant count and we are not reducing the ventilation, which is based on full occupancy. This will help flush out and dilute any virus. It is recommended these systems run for approximately 2-3 hours after classes end to continue to flush out the space, so it is ready for the next day.



We do recommend the district look to add DSF filter units to the nurse's area as this is the most likely area a sick or infected individual will end up and these spaces do not have as much airflow as a classroom. These portable filtration units are designed with an energized filter media that physically bonds the virus to a heap filter. WHO recommends treatment areas be provided with 340 CFM of fresh air per patient to flush out viral particles. These units provide more than twice that rate. They can also be used after hours in any other space to filter the air if it is suspected an infected person was in that space. They can become part of your active plan to clean and sanitize areas.

Please Note; We highly recommend against people adding any type of filter system to their workstation or classroom. These units do not meet guidelines from the State Education Department for use in schools and some may do more harm than good, by harboring viruses and even giving them a media to grow on, and they would not be part of sanitation and decontamination efforts.

Please advise if we can help in any way to help educate; faculty, staff, students, parents, and guardians on the risks and preventative measures you are taking.

John F. Daly, PE

Vice-President

Trautman Associates

37 Franklin Street #100

Buffalo, NY, 14202

716-883-4400