

AntrumX: Re-Open Your School with Confidence



The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) published recommendations to address the challenges of the COVID-19 pandemic as it relates to the effects of heating, ventilation, and air-conditioning systems on disease transmission. AntrumX's centralized Indoor Air Quality (IAQ) sensing technology helps building managers adhere to ASHRAE's guidelines, minimizing the likelihood of spreading SARS-CoV-2 and other airborne diseases while optimizing maintenance and ventilation efficiency.

ASHRAE Guidance for Re-Opening Schools and Universities

Inspection and Maintenance

Consider assessing the condition of systems and making necessary repairs. All building owners and service professionals should follow ASHRAE Standard 180-2018 "Standard Practice for the Inspection and Maintenance of Commercial HVAC Systems."



Assessing the conditions of your HVAC systems is easier with AntrumX. Continuously monitoring your building's IAQ not only ensures that you are creating a safe space for your occupants, but highlights potential problem zones, helping you troubleshoot parts of your system that can fail during normal operation, such as a stuck damper contributing to a rise in CO2.

Ventilation

A good supply of outside air, in accordance with ASHRAE Standard 62.1-2019, to dilute indoor contaminants is a first line of defense against aerosol transmission of SARS-CoV-2. Pre- and post-occupancy purge cycles are recommended to flush the building with clean air.



AntrumX's centralized sensing technology produces more accurate IAQ data than space or duct-mounted sensors, allowing you to verify that your intended results are the ACTUAL results. There is no better way to ensure that your air is clean and safe for occupants than by optimizing your building management system to respond to real-time IAQ needs with centralized sensing.

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Filtration

Use of at least MERV-13 rated filters is recommended if it does not adversely impact system operation. If MERV-13 filters cannot be used, including when there is no mechanical ventilation of a space, portable HEPA air cleaners in occupied spaces may be considered.



MERV13 filters are designed to trap more than 75% of particles sized 0.3 – 1.0. The effectiveness of a MERV13 filter can be monitored using the PM2.5 measurement on the AntrumX platform. MERV13 filters are also designed to trap 90% or more of particles sized 3.0 – 10.0, and their effectiveness in this range can be verified using the PM10 metric on the AntrumX platform.

Air Cleaning

Air cleaners such as germicidal ultraviolet air disinfection devices may also be considered to supplement ventilation and filtration. Technologies and specific equipment should be evaluated to ensure they will effectively clean space air without generating additional contaminants or negatively impacting space air distribution.



AntrumX monitors PM2.5, PM10, and TVOCs, allowing building managers to ensure the technology they invested in is functioning as intended.

Energy Use Considerations

In selecting mitigation strategies, consideration should be given to energy use as there may be multiple ways to achieve performance goals that have greatly different energy use impact. Control changes and use of energy recovery to limit or offset the effect of changes in outdoor air ventilation rate and filter efficiency may reduce or offset energy and operating cost penalties.



AntrumX provides building management systems with room-level IAQ data on five different parameters, allowing building managers to optimize ventilation without having to choose between energy savings and a healthy building.

[Click here to read the full ASHRAE guidelines for re-opening schools and universities.](#)

