

Our Facilities Management team for The Auraria Higher Education Center (AHEC) facilities has adhered to the following CDC and ASHRAE recommendations for building air handling systems (AHUs).

- Set the amount of ventilation air in the building to at least the ASHRAE 62.1-2019 Standard, which advises to inspect the air handling systems to ensure that the ventilation exhaust, mixed air, and outside air dampers are operating to allow fresh ventilation air into the building.
 - Our Facilities Management team has also calculated current outside air % mixture and made the appropriate adjustments per the guidelines and recommendations from the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), the Environmental Protection Agency (EPA), and the Centers for Disease Control and Prevention (CDC).
 - Our Facilities team also performs routine preventive maintenance inspections and audits of building equipment to verify that AHU units and outside air control dampers are functioning and controlling correctly, per the appropriate specifications and guidelines.
- Increase the amount of ventilation air in the building to beyond the ASHRAE 62.1-2019 Standard, up to the maximum the HVAC system can handle.
 - Our Facilities Management team has opened all outside dampers to all AHU's in each building on campus to their max position that the HVAC system can handle.
 - Maintenance checks have been completed for AHEC owned facilities at regular intervals to verify that outside air control dampers are functioning and controlling correctly.
 - Our Facilities team also monitors the ventilation systems for our facilities through our Building Automation System (BAS) software, which allows us to monitor system function at the building level and at the room level in newer buildings. We continue to monitor and make adjustments when/where needed.
 - In the coming year are updating the BAS system software versions in 6 older buildings to allow more detailed reporting and monitoring.
 - All AHEC shared classroom buildings are designed to enable supply of 100% outside air when cooling below 70°F outside air temp.
- Keep the air handler cooling coils, condensate pans, and condensate traps clean and functional.
 - Our Facilities Management team performs regular preventive maintenance; changing filters and cleaning the coils and drains as needed.
- Upgrade of all standard air filters to at least a MERV-13 (or higher) rated filter:
 - Our Facilities Management team has also ensured that the AHUs in all AHEC facilities are in compliance with the code recommendation for MERV 13 filters within these air handling units where possible.
 - There are some buildings with residential air control systems such as the houses on 9th street Park and the Modular classrooms. These buildings have been modified with higher efficiency filters and many have operable windows. We encourage the use of these when occupied.
 - The Minimum Efficiency Reporting Value (MERV) filter is a highly efficient filter, and we are utilizing the maximum level of filter we can install on these units/equipment for our facilities.
 - A MERV 13 filter mitigates the transmission of infectious aerosol or airborne particulates.

- Due to their very high filtration efficiency, MERV filters have been shown in studies to be highly effective at removing particle sizes that may carry viruses.
 - Removal rates of these particles are in the 90th percentile and above upon first pass.
- Increase the relative humidity in the building to 40-60% RH. At this humidity range, 80% of the droplet nuclei viruses lose their infectivity within 15 minutes.
 - There is a Harvard University study which advises this specific range of relative humidity within a facility also serves to slow the spread of any potential aerosol or particulate.
 - Our Facilities Management team also maintains the relative humidity range within our facilities between 40% - 60% where the system is capable.
- Additional steps taken to mitigate risks:
 - Our Facilities Management team has validated all AHUs are performing in a mechanically sound manner for optimum performance.
 - Ventilation systems are monitored on an ongoing basis via our Building Automation System (BAS), which allow us to monitor proper system function, including with the help of automated BAS alarms.