Safer, Smarter Educational Spaces

ASHRAE & CDC Reopening Guidelines

Current guidelines from the Centers for Disease Control (CDC) and The American Society of Heating, Refrigeration, and Air-conditioning Engineers (ASHRAE) recommend facility owners and managers reduce the transmission of diseases from airborne particles by improving the operations of the building ventilation systems by:

- Increasing the percentage of outdoor air inside their buildings as long as the temperature can be maintained in a comfortable range.
- Increasing total airflow supply to occupied spaces and disabling demand control ventilation.
- Flushing the air in a building for two full hours prior to first expected occupancy.
- Flushing the air in a building again for two full hours post-occupancy or after closing.
- Maintaining humidity between 40% -60% while being careful not to create condensation conditions that can lead to mold growth.

"If managed poorly, [buildings] can spread disease. But if we get it right, we can enlist our schools, offices, and homes in this fight."

- Joseph Allen, DSc, Director of the Healthy Buildings Program at Harvard's T.H. Chan School of Public Health

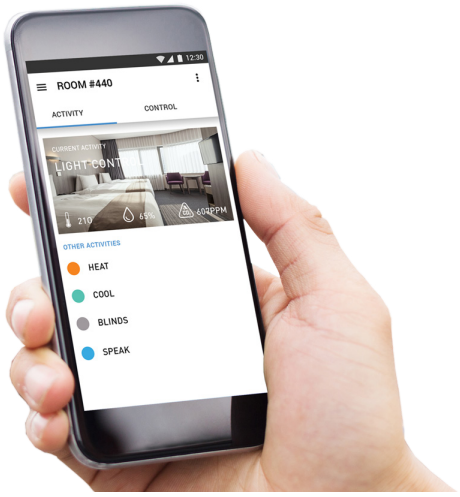
ATS can help implement and ensure you are following these guidelines while still maximizing energy efficiency by:

- Verifying your BAS sensors, equipment and control sequences are operating properly.
- Monitoring and reporting on temperature and humidity status in all spaces throughout the building.
- Programming your system (if possible) to use outside air to maximize airflow and free cooling.
- Ensuring your space temperatures stay above the recommended dewpoint temperature.
- Programming your system for pre and post occupancy building flushes or purges.

These measures can go a long way towards maximizing your energy efficiency while still providing a healthy and safe environment, as recommended by the CDC and ASHRAE. It is also interesting to note that an added benefit of improved IAQ is that it increases student learning outcomes and employee productivity.

Ways to Improve Occupant Confidence in Building Safety

- Use technology to provide TOUCHLESS control of space temperature, lighting, blinds, and A/V equipment.
- Use anonymous camera technology to determine if occupants are social distancing, large spaces have exceeded maximum occupancy, and if occupants are wearing masks.
- Monitor Indoor Air Quality for TVOCS, particles, and humidity — then provide an app for occupants to monitor their spaces remotely before entering the building. A recent Harvard study shows that "long-term average exposure to fine particulate matter (PM2.5) is associated with an increased risk of COVID-19 death in the United States."[3] ATS can provide and install sensors that continuously measure small particles, large particles, and TVOCs.
- Provide informational messaging through apps or local displays regarding the current indoor air quality status.



Mobile Apps

For more information, please contact your ATS Representative directly or contact us at our main number (425) 251-9680 or at www.atsinc.org/contact-us.

Information Dashboard

ATS is Your Solution for Safer, Smarter Spaces

References

1. ASHRAE. (2020, June 11). COVID-19 (Coronavirus) Preparedness Resources. Retrieved from ASHRAE: www.ashrae.org/covid-19

2. Centers for Disease Control and Prevention. (2020, June 11). Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19), May 2020. Retrieved from CDC: https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html

3. Harvard University. (2020, June 11). COVID-19 PM2.5 A national study on long-term exposure to air pollution and COVID-19 mortality in the United States. Retrieved from Harvard: https://projects.iq.harvard.edu/covid-pm

ATS
450 Shattuck Ave South
Renton, WA 98057
(p) 425.251.9680
www.atsinc.org

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