

BETTER AIR | FOR OFFICES

The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) has formed the ASHRAE Epidemic Task Force to provide guidance for building operations in response to the COVID-19 pandemic. The primary document released by the task force, “ASHRAE Position Document on Infectious Diseases” provides a summary of the issues caused by infectious diseases transmitted through aerosols and the effect of HVAC systems on this transmission, through design and operation. This document has also been adapted by ASHRAE into a presentation, titled “Building Readiness.”

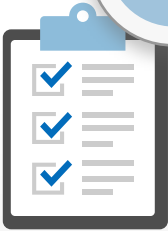
The HVAC recommendations from ASHRAE are listed on the following page. For convenience, we have categorized them by levels of increasing complexity and cost, Level 1 being the simplest and most inexpensive.

EP offers consultation and commissioning services to Landlords and Tenants looking to reopen their offices. We will audit your office space and provide a complete BETTER AIR feasibility analysis as well as perform commissioning on all of your mechanical systems.



LEVEL

1



Maintain

- Service**
Observe, service & clean all existing air conditioning systems, ERVs, outside air & exhaust air louvers, fans and dampers.
- Verify**
Check controls sequences & air side economizers are operating and that a relative humidity between 40-60% is maintained throughout the space.
- Filter**
Clean/replace all air filters and establish an aggressive schedule for replacement.
- Program**
Adjust HVAC programming to ventilate or “flush” spaces two hours before and after occupancy. This includes operating exhaust fans and opening outside air dampers to full-open position.

LEVEL

2



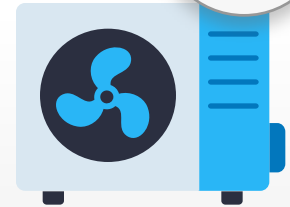
Improve & Enhance

- MERV 13 Filtration**
Replace all filters with minimum MERV 13. Review filter compatibility with application & equipment and rebalance associated systems.
- Retro-Commission**
Perform retro-commissioning on all mechanical equipment including full measurement and rebalancing of all air systems.
- Maximize Ventilation**
Analyze ability to increase outside air for existing systems beyond code minimums and perform adjustments.
- Disable DCV**
Demand Control Ventilation systems are good for saving energy but will limit the outside air introduced to a space.

These systems should be temporarily disabled for as long as indoor air quality is prioritized. Confirm local jurisdiction will allow for this since DCV is often installed based on a code requirement.

LEVEL

3



Add & Expand

- UV**
Install UVGI (Ultraviolet Germicidal Irradiation) for high-risk spaces in ductwork, equipment, or space.
- Air Scrubber**
Add portable air cleaners with HEPA or high-MERV filters.
- Increase Air**
If existing system cannot handle more outside air, add Dedicated Outdoor Air System (DOAS) for increased ventilation throughout space.
- Humidify**
Add humidification systems (duct mounted or in space) if relative humidity cannot be maintained between 40-60%.

Disclaimer: The COVID-19 pandemic is a situation that is evolving every day. The information here is based on the recommendations provided by the Centers for Disease Control and Prevention (CDC), Environmental Protection Agency (EPA), and American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE). Please refer to these agencies for the latest information.