



How to Re-Open Buildings after Shutdown

Wednesday, July 15, 2020



REOPENING BUILDINGS: Determine Building Readiness

- ✓ **Confirm maintenance schedule**
- ✓ **Inspect building spaces**
- ✓ **Properly functioning HVAC equipment and control systems**
- ✓ **Eliminate health hazards**
- ✓ **Check air filters**
- ✓ **Secure supply chain inventory**

REOPENING BUILDINGS: Building Automation Systems

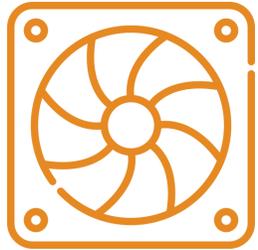
- ✓ Check for alarms, overridden points, or locked points
- ✓ Return the building to normal operating schedules
- ✓ Update automations/controls programming
- ✓ Manage air filter pressure sensors to accurately monitor filter loading and scheduling for filter change-outs

REOPENING BUILDINGS: Readiness for Occupancy

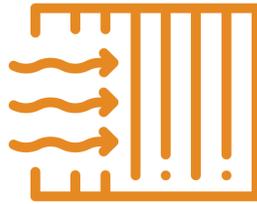
- ✓ Perform 100% outdoor air building flush for 4 hours
- ✓ Operate HVAC systems under normal schedule for a minimum of 1 week prior to students returning
- ✓ Monitor building conditions for space temperature and humidity levels
- ✓ Verify proper operation of all systems

HVAC System Recommendations

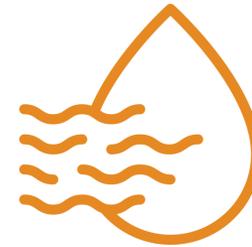
Operating Occupied Buildings During an Infectious Disease Crisis



Ventilation



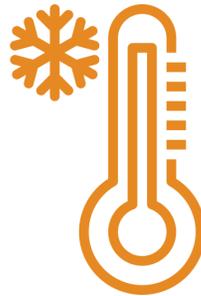
Filtration



Humidity



Controls

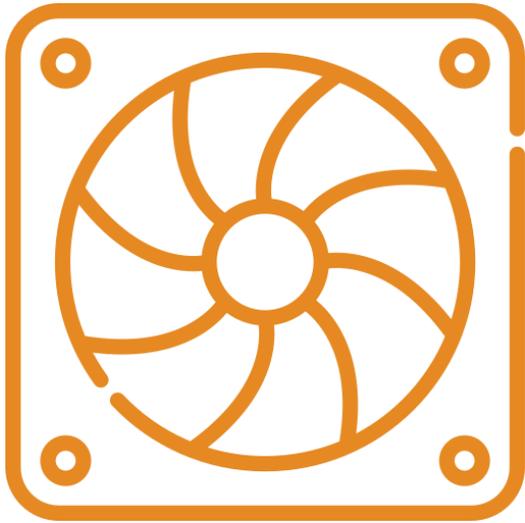


Temperature



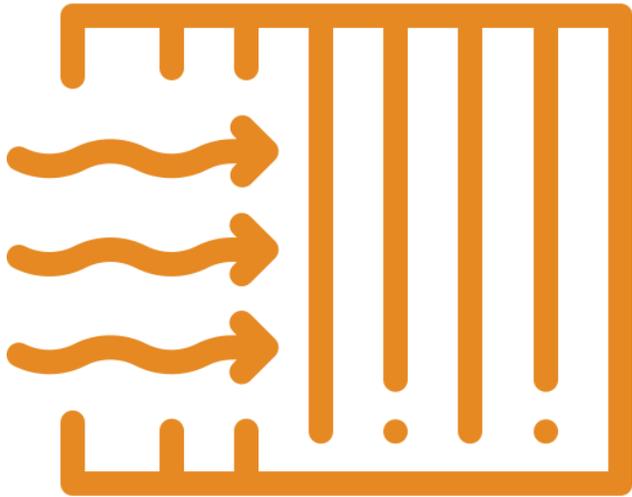
UVGI Statement

Ventilation



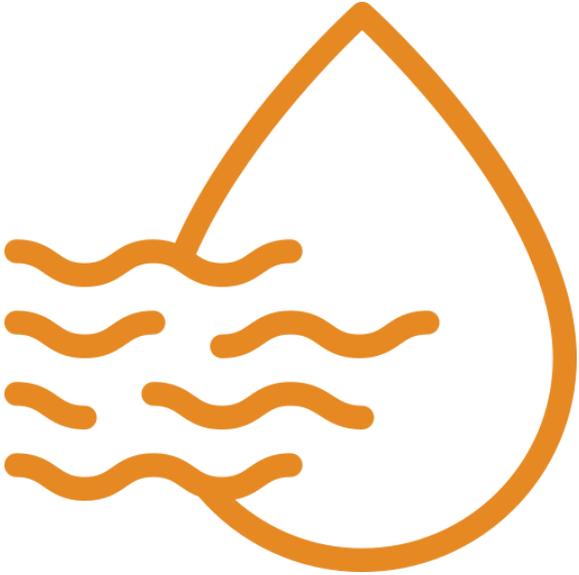
- Disable demand control ventilation
- Increase outdoor air ventilation rates to maximize dilution of the return air stream
- Install localized exhaust systems for source control in high risk areas (*ex: nurse's clinic or special needs classroom*)

Filtration



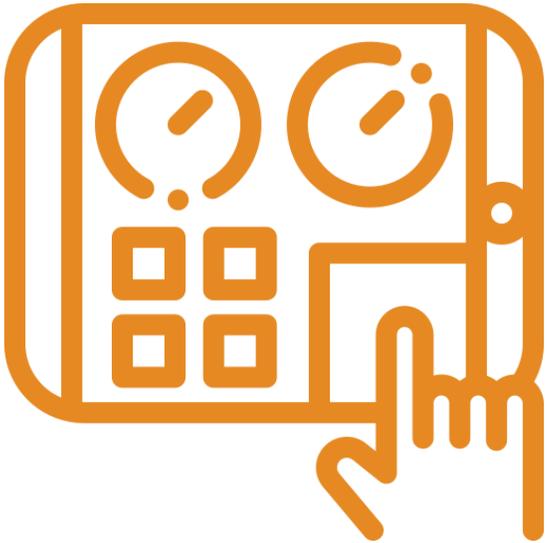
- Change filters and clean coils, drain pans, and the interior of air handling units
- Install filters with increased efficiencies and enhanced particle filtration capability
- Install portable room air cleaners in high-risk areas
- Seal edges of filter racks

Humidity



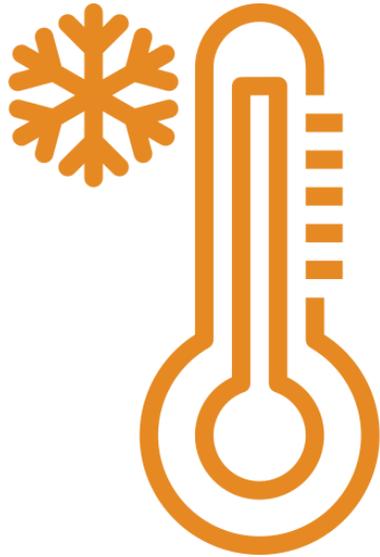
- Maintain space relative humidity (RH) between 40% to 60%

Controls



- Keep systems running longer hours to enhance the effects of increased ventilation and filtration

Temperature



- Maintain standard comfort conditions during occupied periods and standard setback/setup unoccupied space temperature

Temperature



- UV lighting systems have been installed in air handling units to improve air quality by reducing certain viruses and bacteria, and also reducing the amount of microbial growth (such as mold) on cooling coils and drain pans.*

*While UV light (specifically UV-C) has been well studied in infection reduction, no definitive science is available regarding its effect on COVID-19. Therefore, no COVID-19 recommendation can be made at this time

Confirm HVAC system and equipment are in good working order:

1 Building Automation System

2 Building Walk-thru

3 Audit Utility Bills

1

Building Automation System

- Check your building automation systems for alarms, overridden points, or locked points



2

Building Walk-thru

If building access **is permitted**, walk-thru each facility to check for:

- Systems that should not be in operation
- Units are set to appropriate setting
- Water leaks, dripping fixtures, or leaking flush valves



Audit Utility Bills

- Audit utility bills for signs of billing errors or indication of leaks or faulty meters if you experience unusual energy consumption.



Information and recommendations regarding COVID-19 are continually evolving, as are the science, technology, and procedures for combating the virus. Performance Services will take reasonable efforts to make recommendations consistent with accepted industry, scientific and/or governmental standards in place at the time of such recommendations. However, Performance Services disclaims any and all liability with respect to COVID-19, including, but not limited to, damages, costs and/or expenses related to any exposure to, contraction and/or spread of the virus.