
The intent of these recommendations is to offer best practices to empower property managers and engineering and maintenance teams to make the best of the rare disruptions and occupancy changes caused by the Coronavirus Disease 2019 (COVID-19) pandemic. Advancing sustainability and wellness efforts in the face of this challenging crisis can show strength and leadership while reducing operating costs, increasing building resiliency, and improving indoor health.

A consortium of 25 commercial real estate organizations, representing hundreds of millions of square feet across the United States, collaborated to develop this guide. It was published in coordination with the Institute for Market Transformation. This resource is meant to provide a comprehensive guide for building engineering and/or property management teams to conduct internal audits and identify ways to make building(s) healthier and more efficient.

We hope that our collective ideas will help property teams optimize facilities during this difficult time. We face the COVID-19 crisis together as peers and are committed to finding solutions to continue sustainability efforts and emerge with strength.

Disclaimer
Guidelines from global, national, and local health and governmental bodies take precedence. Due to the dynamic nature of the COVID-19 pandemic, operational best practices may have changed since the release of this guide.
Energy Efficiency

Plug Load Considerations

Can the following items be turned off (and unplugged where applicable)?

- Tenant office equipment such as computers, monitors, printers, and other office appliances: □ Yes □ No □ N/A
- Space heaters: □ Yes □ No □ N/A
- Electronic fitness or other amenity equipment: □ Yes □ No □ N/A
- Kitchen appliances, equipment, hoods, and exhaust fans: □ Yes □ No □ N/A
- Ice makers and vending machines: □ Yes □ No □ N/A
- Water features and/or water fountains: □ Yes □ No □ N/A
- Is all equipment shutting off at night, as intended?: □ Yes □ No □ N/A
- Is any equipment drawing phantom loads?: □ Yes □ No □ N/A

Lighting Considerations

Can the following items be turned off and unplugged, where applicable?

- Task lighting: □ Yes □ No □ N/A
- All non-emergency lighting circuits in amenities, common spaces, and tenant spaces: □ Yes □ No □ N/A
- Can parking lot lighting hours or levels be reduced?: □ Yes □ No □ N/A
- Can "on" hours be scheduled for lighting systems?: □ Yes □ No □ N/A
- Are occupancy and/or vacancy sensors working properly?: □ Yes □ No □ N/A
- Is all lighting shutting off at night, as intended?: □ Yes □ No □ N/A

HVAC Considerations

- Are thermostats set to unoccupied set points or "holiday schedule"?: □ Yes □ No □ N/A
- Are there building areas or rooms that can be significantly reduced?: □ Yes □ No □ N/A
- Can HVAC use for tenants be "by request only" or set to weekend mode?: □ Yes □ No □ N/A
- Have central plant operations been reduced to account for lower occupancy?: □ Yes □ No □ N/A
- Is this an opportunity to check water temperature set points and scheduling?: □ Yes □ No □ N/A
- Does it make sense to shut blinds or window treatments?: □ Yes □ No □ N/A

Ventilation Considerations

- If a building is vacant, can ventilation be adjusted to reduce load from conditioning outdoor air?: □ Yes □ No □ N/A
- If a building is at least partially occupied, can outdoor air ventilation be increased to improve effective dilution ventilation per person, where outside air quality is not of concern?: □ Yes □ No □ N/A
- Have interior relative humidity and air quality levels been checked?: □ Yes □ No □ N/A
- Can portable room air cleaners with HEPA filters be purchased and placed on site?: □ Yes □ No □ N/A
- Can demand-controlled ventilation be disabled?: □ Yes □ No □ N/A
- During mild weather, can minimum outdoor air dampers be opened as high as 100%, to eliminate recirculation?: □ Yes □ No □ N/A
Can central air filtration be improved to the MERV-13 (or the highest compatible with the filter rack)? Can the edges of the filter be sealed to limit bypass air? □ Yes □ No □ N/A

Can systems run longer hours, if possible 24/7, to enhance air filtration by bringing in and filtering more outside air? Note that this action will significantly increase energy consumption and should only be implemented when and for as long as appropriate. □ Yes □ No □ N/A

Energy Procurement Considerations
Is now an opportunity to review energy procurement contracts to secure reduced pricing? □ Yes □ No □ N/A

Water Efficiency
Is this an opportunity to perform leak detection activities? □ Yes □ No □ N/A

Are efforts in place to prevent water stagnation? A summary of recommendations can be found here, while the full report can be found here. □ Yes □ No □ N/A

Waste Management
Should waste and recycling haulers be contacted to plan for reduced pick-ups? □ Yes □ No □ N/A

Can waste and recycling bins be removed from individual workstations? A behavior change that helps with waste diversion and reduction is to make people dispose of waste in a common area, such as a kitchen. Not only is this a waste management best practice, but it also minimizes the touchpoints of waste in the office, which could help reduce the spread of germs. Is this an opportunity to implement a policy change while tenants are not in the office? Would this be allowed under current tenant leases? A desk-side bin for paper only is also an acceptable practice. □ Yes □ No □ N/A

Audits, Upgrades, and Capital Improvements
Is now the time to perform a building or space audit to find energy efficiency opportunities while occupancy is lower than normal? □ Yes □ No □ N/A

Is now an opportunity to perform deferred preventative maintenance? □ Yes □ No □ N/A

Is this an opportunity to install smart power strips? □ Yes □ No □ N/A

Is it time to upgrade to LED lighting or lighting controls? □ Yes □ No □ N/A

To minimize disturbance during normal operations, would it make sense to identify and schedule projects that require building system shutdowns, such as planned equipment or fixture upgrades, for either energy or water systems? □ Yes □ No □ N/A

Tenant and Occupant Communication
If efforts were made to save energy and costs, would it make sense to communicate those efforts and savings to tenants? □ Yes □ No □ N/A

If building amenities are closed, are tenants aware of their closure? □ Yes □ No □ N/A

If access to tenant spaces is restricted by the landlord, should this list of recommendations and considerations be sent and suggested to the tenant so they can take action? □ Yes □ No □ N/A
HAVE YOU IMPLEMENTED ONE OF THESE STRATEGIES? WANT TO BE SPOTLIGHTED AND SHARE YOUR STORY?

If you are implementing any of these strategies to adjust, repair, or upgrade building systems during the COVID-19 pandemic, the Institute for Market Transformation is collecting stories of action. Please contact IMT at imtweb@imt.org.

Resources
ASHRAE COVID-19 Preparedness Resources / ASHRAE

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About IMT
The Institute for Market Transformation (IMT) is a national 501(c)(3) nonprofit organization that aims to decarbonize buildings by catalyzing widespread and sustained demand for high-performance buildings. Founded in 1996 and based in Washington, D.C., IMT leverages its expertise in the intersection of real estate and public policy to make buildings more productive, affordable, valuable, and resilient.

A trusted, non-partisan leader, IMT focuses on innovative and pragmatic solutions that fuel greater investment in high-performance buildings to meet local market priorities. Its efforts lead to important policy outcomes, widespread changes in real estate practices, and lasting market demand for energy efficiency—resulting in greater benefits for all people, the economy, and the environment.

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