

When COVID-19 first began its spread in early 2020, there was little attention paid to the cleanliness of indoor spaces.

It's not that they weren't being cleaned or properly ventilated, it's just that no one could prove to what extent a building was considered healthy. Then suddenly in spring of 2020, buildings across the United States were abandoned as the bulk of the workforce was told to stay home. Engineers and architects were asked to reconfigure hospitals to create negative pressure rooms or retrofit mechanical systems to accommodate UV lamps.

Commercial building owners who weren't actively involved in a new construction project were left wondering how to help their tenants and customers to feel safe returning to shared indoor spaces without investing in major HVAC overhauls or unproven technologies at a time when leases were at the risk of running scarce.

The silver lining here is that we've always needed healthier buildings and now we have a reason to work quickly and efficiently to get there. The timing isn't so bad either, because there is a lot of affordable, easy-to-deploy technology available for healthy buildings that simply wasn't around a few years ago.

Pandemic or not, it's a good time to start taking steps toward creating a healthy building.

Included here is one path to follow to create a healthy building for your tenants.

5 Steps to a Healthy Building building



5 Steps to a Healthy Building buildingsiot.com



Clean spaces and test surfaces for COVID-19

Cleaning and janitorial crews across all building types are taking on a lot of responsibility these days, and their check lists are a lot longer too.

The cleaning part is an obvious aspect to a healthy building, but what's new here is the ability to also test for the COVID-19 virus on your surfaces.

While it doesn't transmit easily from surfaces to humans, detecting COVID-19 on a countertop, for example, signals that the virus is circulating your space. This can help with early detection and keep your building from becoming the site of a widespread outbreak.



"COVID-19 has brought increased attention to the cleanliness of indoor spaces. Building owners, operators and occupants now expect more of the built environment. There are affordable ways to prove an indoor space is healthy, and it starts with proper cleaning."

- Brian Turner, CEO, Buildings IOT



Track equipment and spaces for cleaning and maintenance

We all agree that cleaning is the first step to a healthy building, but how can you know a space has been cleaned?

There's a QR code for that.

BuiltSpace charges a few cents per QR code as well as a small subscription fee. Stick the QR code to the surfaces you'd like to track for cleaning frequency and share the digital cleaning procedures with your staff. Duplicate the QR code for anyone you want to give direct access to the cleaning log – maybe parents of students who attend the school you manage, employees of your largest tenant or patients admitted to your hospital for overnight stays.



"The BuiltSpace lightweight asset management platform was easy to deploy. The solution is mobile-first, so our janitorial crews and maintenance teams were trained quickly. We started seeing useful data as soon as QR codes were adhered to surfaces and equipment."

- Jamie Uhlir, Director of Operators, WeWork Mid-Atlantic Region



Maximize outside air ventilation and install high efficiency filtration

Shortly after the pandemic shut down indoor operations across the U.S., the American Society of Heating and Refrigeration Engineers (ASHRAE) published a series of recommendations and resources for building operations. Across multiple reports and detailed options for stemming the spread of COVID-19 across indoor environments, the number one recommendation is to increase the amount of outdoor air you circulate through a space.

Yes, there are more complicated engineering suggestions and examinations of high-grade filters as well as explorations of newer technologies. But the most reliable way to keep your indoor air clean is to bring in more outside air.



"Usually, simple adjustments to your existing HVAC control system and some monitoring of the outcomes can drastically improve your indoor air quality."

- Jon Schoenfeld, Director of Energy and Analytics, Buildings IOT



Monitor indoor air quality

Once you're managing your air changes – in other words, ventilating spaces with outside air rather than recirculated, conditioned air – the next big step you can take to improve the health of your building is to install indoor air quality sensors (IAQ), sometimes also called indoor environment sensors (IEQ).

Think of it like the smoke and carbon monoxide detectors for your home, but commercial grade IAQ sensors measure for a variety of contaminants.

Although they can't yet specifically detect COVID-19, indoor air quality can affect building occupants negatively in lots of ways. Monitoring your IAQ can lead you to improvements that are deeply felt by those who enter your built spaces.



"You don't need multiple sensors to monitor for multiple environmental conditions. Look for sensors that cover the particulars and can also sense factors that impact comfort, like noise, light and humidity levels."

> - Brian Turner, CEO, Buildings IOT



Report on air quality

Similar to tracking your cleaning and equipment maintenance, it's possible to report on your indoor air quality. In most cases, these reports would go to your facility management team so they can address the issues that may be causing elevated levels of certain contaminants.

Air and environmental quality reports can also track the changes that were made to your HVAC system to enable increased ventilation with outside air and allow you to more easily monitor what's working.

It's likely too that when tenants begin returning to their offices, they'll be looking for ways to show their employees that the spaces are safe. Allowing access to air quality reports gives you one more way to help people feel safer coming back through your doors.



"Understanding environmental factors in a given space can go a long way in troubleshooting hot and cold calls. Consistent monitoring of these factors will eventually keep those calls from coming in at all, by enabling you to provide a healthier building"

- Jon Schoenfeld, Director of Energy and Analytics, Buildings IOT

