




HOW BUILDING OWNERS, TENANTS, AND DESIGNERS CAN WORK TOGETHER TO RETHINK THE OFFICE POST-COVID-19

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As businesses settle deeper into the work-from-home life, it becomes increasingly difficult to imagine what a return to the office will look like post-COVID. Normal day-to-day operations will be replaced by a demand to prioritize cleanliness and limit the spread of disease, but a clean building involves more than just a few conveniently-placed bottles of hand sanitizer; it demands a comprehensive understanding of how to use materials, technology, and design to safeguard high traffic spaces from becoming viral and bacterial hot spots.

In the return to work, businesses are tasked with transforming their spaces into cleaner environments that prioritize health. Though there are some steps building owners and tenants can take independently, collaboration between building owners, tenants, and designers will enable tenants and building owners to maximize the use of their existing spaces without compromising design, vision, and brand identity.



WHAT CAN BUILDING OWNERS DO?

Connect with architects and designers to make decisions that have long-lasting effects.



1. REEVALUATE YOUR AIR QUALITY

A recent [study](#) in the New England Journal of Medicine found that COVID-19 remained viable in aerosols for at least three hours, which means it can spread more easily with poor ventilation and air circulation. Considering most Americans spend up to 90% of their time indoors—and most of that time working in an office environment—investment in healthy air quality will go a long way to ensure a healthy environment.

Depending on pollution levels, increasing outdoor air ventilation is the first way to dilute contaminants in the building. Opening outdoor air dampers in

your HVAC system reduces the recirculation of air. In order to improve the overall air quality of a building, practice regular maintenance on the HVAC system by routinely changing filters, and consider [upgrading filters](#) to the highest quality compatible with the filter rack. If possible, keep systems running 24 hours a day to increase overall air circulation and maintain proper humidity levels to prevent the growth of contaminants. For high-traffic spaces in the building, consider portable room air cleaners with HEPA filters, or UVGI purification systems, particularly in high-risk spaces such as lobbies or waiting rooms.



2. INSTALL TOUCHLESS SOLUTIONS

The number of surfaces a person needs to touch to get from a building's door to their desk are important considerations in the wake of the coronavirus. Though most smaller commercial buildings cannot become contactless overnight, some immediate low-budget solutions include installing touch-free apparatuses in common areas, such as no-touch trash receptacles, reception check-in through personal smartphones, digital temporary badges, no-touch hand-sanitizer and soap dispensers, and hands-free foot pulls on restroom doors. The next level up would be integrating motion-and-voice activated technology, such as automatic doors and door openers, auto-flush toilets,

voice-activated elevators, no-touch filtered water dispensing, and occupancy sensors for light switches.

When considering more substantial retrofits, working together with your designer will enhance the preparedness of your building. Consider a doorless layout that minimizes barriers, such as those used in airports and other transportation hubs. A designer will help account for proper spacing in circulation spaces, particularly around high-traffic locations like security desks, to help move people through the space using floor, ceiling, or architectural details rather than physical barriers that require additional cleaning.



3. INTEGRATE HEALTHY MATERIALS

Though steel is common in commercial and industrial design for being sleek and easy to clean, studies have shown that COVID-19 and similar viruses live longer on [stainless steel and plastic](#) than other surfaces. Owners can invest in replacing door hardware with copper or brass alternatives, which have been proven to deactivate bacteria and viruses due to inherent antimicrobial properties. Choose materials that are easy to clean and can handle harsh chemicals, such as acidic cleaners or strong alkali cleaning agents. Limit the use of horizontal surfaces (where not needed),

and be wary of design elements like wall reveals and ledges in locations that are more at risk for trapping bacteria. Consider material transitions and avoiding exposed material edges that are susceptible.

Clean design should not mean sterile design. Consult with your architect or designer about options for antimicrobial paints and surface coatings that are appropriate for your space. Depending on the application, the use of faux-look materials can achieve a desired aesthetic without sacrificing cleanability.



4. INCORPORATE UV LIGHT

The use of [UVC lighting](#) has been proven effective as a means to inactivate a wide range of bacteria. Building owners can incorporate the use of UV light in a variety of ways, from installing UVGI (ultraviolet germicidal irradiation) lights into HVAC duct-work to periodically performing a UV “light wash” over office equipment when the office is not in use. Incorporating UV light should be considered strategically for areas such as hotel lobbies, elevator lobbies, waiting spaces, and

conference spaces, where specially-placed lights can disinfect a room in one hour. If permanent in-room solutions are not viable, owners can consider portable UV equipment units that move from room to room. As research is still being conducted regarding the safety of UV-C lighting on human skin, UV light washes should always be conducted after hours or when the office is not in use.



WHAT CAN TENANTS DO?

While maintaining a good working relationship with building management to ensure healthy indoor environmental systems, tenants can also set an example for a workplace that prioritizes health.



a. EXPAND YOUR CLEANING PROTOCOL

OSHA has issued new guidelines for [preparing workplaces for COVID-19](#), and it is clear that maintaining a clean working environment is key to fighting the spread of infection. In addition to routinely cleaning and disinfecting regular-use surfaces like desks, kitchen counters, and phones, tenants should expand their cleaning routines to include other regular-use surfaces that may get less attention, like refrigerator and drawer handles, dishwasher pulls, printer and copy machines, coffeemakers, elevator buttons. Keeping the supply closet fully stocked with EPA-approved cleansers, antibacterial wipes, tissues, hand soap and sanitizer, and kitchen sponges (the latter which should be replaced weekly) so that employees have cleaning supplies at their disposal. For smaller businesses with no cleaning service, develop a rotating cleaning schedule and hold employees accountable for their responsibilities.



b. | RETHINK THE OFFICE SPACE

Though open-plan offices have been thought to enhance collaboration and productivity, they also create the potential for shared germs. Consider installing glass dividers between workstations, which are easy to clean, while also allowing for light and visibility. If possible, arrange the office so that desks maintain the minimum six-feet of physical distancing. Spread out microwaves, refrigerators, and work surfaces in break rooms so that employees are discouraged from congregating their food prep in one corner. If possible, install a dishwasher (or second dishwasher) to eliminate communal sponges that collect bacteria.

Tenants can also talk to an architect or designer about transitioning from an open-plan office to modular workstations, integrating distancing without

sacrificing a company’s culture or aesthetic. A designer can suggest opportunities to rearrange the office, for example, to allow guests to walk through the office without crossing into employee work spaces, or allows employees to meet and collaborate with guests in specially designated zones.



C. MAKE WORKING REMOTELY AN OPTION-FOR GOOD

Now that many businesses have been forced to develop a work-from-home strategy in addition to more flexible sick leave policies recommended by the CDC, this option will be available to many more workers long term. According to Global Workplace Analytics, an estimated 25-30% of the workforce will be working at home on a multiple-days-a-week basis by the end of 2021.

Alternating remote work shifts among employees will dramatically decrease office density on a day-to-day basis, allowing employees to maintain physical distancing without dramatically shifting office design or demanding additional square footage. In the long term, splitting office and home shifts may even enable businesses to shrink their space requirements,

decreasing occupancy costs and reducing their carbon footprint. For every person working remotely half the time, a typical employer can save about \$11,000/year per employee, and employees can themselves save between \$2,500 and \$4,000 annually.

Prioritizing health and wellness in office design and culture will offer tenants other financial returns as well. The National Institute for Occupational Safety and Health (NIOSH) stated that in 2018, 17 million workdays were lost to the flu. That equates to approximately \$7 billion in sick pay and \$10.4 billion in direct costs for hospitalizations and outpatient doctor visits. Allowing—and encouraging—employees to work from home during their recovery time will boost productivity and prevent the spread of sickness.



MOVING FORWARD

It's important to remember that the return to office life will be a complex transition. It's essential that business and building owners think about how to retrofit current and future office spaces to better protect employees from harmful pathogens. Collaboration among building owners, tenants, and designers will allow for both a strategic immediate response and a long-term preventative approach, ensuring the ultimate safety and health of occupants for both existing commercial buildings and buildings still in design and construction. Together this strengthened trifecta will help businesses get back on their feet and prepare themselves for the unpredictable post-COVID landscape.