

Impact of Air Quality on Internal Office Environment

As we all move towards returning to our offices in 2021, Quintessential Construction Managers & Consultants, LLC has been working with a partner that provides an air purifier featuring a Smart Sensor™ which automatically adjusts the fan speed according to the room air quality. The air purifier has a HEPA filter with an antimicrobial treatment that removes 99.97% of airborne particles, keeping the air clean and crisp for your breathing comfort even when it is allergy and cold/flu season.

It was thought that a building's HVAC ventilation system corrects indoor air quality problems. That thinking has recently changed, considering that indoor air is two to five times more polluted than outdoor air.

A study conducted in 2012 by the Department of Energy's Lawrence Berkeley National Laboratory assessed the effects of carbon dioxide (CO₂) in enclosed spaces, where concentrations of the gas may be higher because of recirculated air. The study was performed in a controlled setting meant to mimic an office environment, participants were subjected to increasing levels of CO₂, ultimately reaching amounts people would experience during a typical working day.

Benchmark, typical CO₂ levels in outdoor air are 400 parts per million (ppm). Building Facility Managers try to keep CO₂ levels indoors below 1,000 ppm, through ventilation and air circulation. Researchers have found that crowding in office spaces, conference rooms, classrooms and waiting rooms could bring CO₂ levels up to 2,500 ppm.

Studies have shown that in addition to productivity, concentration and recall for both adults and children was being greatly impacted by the indoor environment. Medical visits in the U.S. pose the threat of airborne germs and viruses in medical/healthcare facilities and waiting rooms.

We spend 90 percent of our time indoors and 90 percent of the cost of a building are the occupants, yet indoor environmental quality and its impact on health and productivity are often an afterthought.

Even the modest improvements to indoor environmental quality could have a profound impact on the decision-making performance and peace of mind of the occupants in our offices, conference rooms, classrooms, washrooms and waiting rooms.

Complementing hand sanitization, hand washing programs and daily surface cleaning with air cleaning to remove the harmful viruses and germs that can be inhaled can go a long way in creating a healthier, cleaner and more productive environment for the inhabitants of any facility.

If more information is desired on how we might be able to assist you in incorporating an air cleaning system into your facility, please contact us via our website at www.quintessentialllc.com.

About Quintessential LLC

Quintessential Construction Managers & Consultants, LLC is a multi-disciplined, innovative, solutions-driven consulting firm, dedicated to providing competitively priced services to its clients. Our diverse team of experts specializes in innovative solutions in direct response to our clients' needs. Established in 2006, the firm is currently positioned to provide its construction / project management knowledge and experience, which will sustain the firm's continued growth well into the future.