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**Managing Your Return
to The Office Following
COVID-19**



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Managing Your Return to The Office Following COVID-19

Occupancy and Social Distancing Solution



Occupancy Solution



The COVID-19 pandemic has forced millions of office workers to stay at home and work remotely. When restrictions begin to be lifted, it is going to be vital to manage the return to the office effectively.

Metrikus' occupancy solution allows you to understand how your space is being used, ensuring you are providing a safe and healthy environment in which to work.

01

Getting employees back to the office safely

Use real-time monitoring to ensure that social distances regulations are complied with

02

Maintaining a safe working environment

Leverage occupancy data to inform a use-based approach to cleaning

03

Understanding how much space is required

Make informed decisions about downsizing or reallocating space



01

Getting employees back to the office safely

A study by leading Harvard researchers suggests that 'prolonged or intermittent social distancing may be necessary into 2022' and that 'even in the event of apparent elimination, SARS-CoV-2 surveillance should be maintained since a resurgence in contagion could be possible as late as 2024.' As a result, the process of getting employees back into the office needs to be managed carefully.

By imposing limits on the total number of employees initially allowed into the office, employees can be protected from potential contagious interactions. Real-time occupancy monitoring can enable you to keep your headcount under a certain threshold, giving employees the ability to maintain social distancing.

Once more people return to the office, sensor technology can accurately track key factors including real-time people count, density in a given area, distance between occupants and movement between zones. Real-time alerts can then be used to manage the flow of staff, avoiding overcrowding and potential transmission.



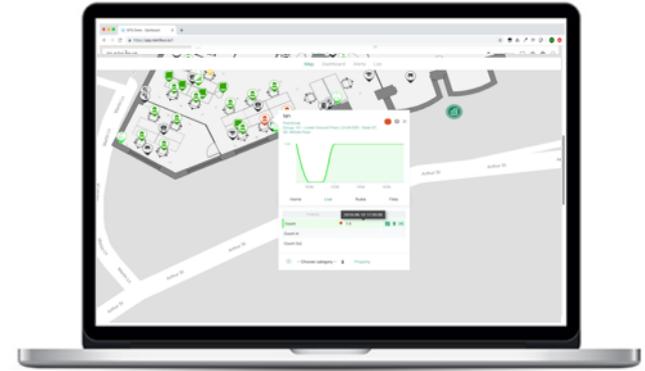
02

Maintaining a safe working environment

A study from The New England Journal of Medicine found that COVID-19 was still detectable on copper for up to 4 hours, on cardboard for up to 24 hours, and on plastic and steel for up to 72 hours. Keeping offices clean as employees return to work will be a key concern.

Occupancy monitoring can be used to inform cleaning regimes and schedules. Understanding the areas of the office that have been used the most, or perhaps not even used at all, can ensure that cleaning is more focused and effective.

Occupancy data can be particularly useful in places which can often become busy, such as lunch areas. It may become apparent that it is necessary to clean these areas several times throughout the day.



03

Understanding how much space is required

The COVID-19 pandemic has provided companies with a clear understanding of the extent to which flexible working can function for them. For many, it will have become apparent that a great deal of work can in fact be carried out remotely and businesses may feel as though some of their space is no longer necessary.

Installing sensors to monitor occupancy levels in offices can provide valuable data about how much space is really needed. Patterns that emerge over time show average utilisation levels and highlight specific areas that are underused.

This enables you to make informed decisions about either downsizing, or reallocating space to ensure it is being utilised effectively. This will be particularly important in the recession that will inevitably follow COVID-19.





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Managing Your Return to The Office Following COVID-19

Indoor Air Quality Solution



A Holistic Solution



The COVID-19 pandemic has forced millions of office workers to stay at home and work remotely. When restrictions begin to be lifted, it is going to be vital to manage the return to the office effectively and not compromise the health of employees.

Together, Metrikus and Aerum are offering a holistic solution to ensure your office is a safe and healthy environment in which to work.

01

Establish an air quality benchmark

Real time monitoring will uncover where changes need to be made for a healthier environment.

02

Undertake air cleaning and pathogen air sampling

Aerum's air purification technology can remove over 99.5% of harmful substances and pathogens.

03

Continuous real-time monitoring

Metrikus' IoT platform provides real-time environmental monitoring



01

Establish an air quality benchmark

Air pollution remains the single biggest killer on the planet over the last 60 years. Outdoor air quality has started to receive more attention.

Indoor air quality is several times worse than outdoor air quality.

Ventilation and air conditioning systems do not typically clean or purify air inside a building, leaving harmful substances and toxic pathogens potentially in the air.

Real-time monitoring is the only way to measure and improve the current air quality in your building.



02

Undertake air cleaning and pathogen air sampling

The risk of airborne COVID-19 has certainly bought air quality to the forefront. Recent research from MedRXiv indicates that circulating clean air reduces COVID-19 cell lifespan by up to twelve times. Recent academic and scientific studies confirm the [link between poor air quality, infection and survival rates from COVID-19.](#)

Guidance from WHO, CIBSE, BESA, ASHRAE and REHVA on COVID-19 has stated that changes to the HVAC system to include air purification reduces the risk of transmission through the air. They state that even the most robust HVAC system cannot completely prevent dissemination of COVID-19 transmission by droplets or aerosols, and therefore localised air purification is crucial to maintaining a healthy environment. COVID-19 can remain active for up to 28 days on inanimate objects, which is an additional risk to mitigate.

Aerum's molecular air purification hardware purifies air to a level above 99.5% for most harmful substances at a microgram, nanometer level (includes the safe removal of viruses down to 100 nanometers such as COVID-19). This hardware is unique in that it 'traps and eradicates' harmful substances and pathogens within the catalyst layers. The catalyst technology then converts pollutants into harmless substances and water with no risk of secondary release. Further assurances can be obtained by pathogen air sampling.



03

Continuous air quality monitoring

On-going air quality monitoring will then be provided using the Metrikus platform, proving that the measures taken have been effective.

As well as this, humidity and temperature can exacerbate the prevalence and spread of airborne and surface viruses (by up to 20x), and low humidity can also cause mucous membranes to dry out, which compromises our body's natural defence to viruses. Smart alerts will notify you when these wellness parameters deviate from their optimal zone, and action via your BMS can then be taken as appropriate.

The Wellness Board is based on Harvard-Syracuse and the WELL standard, allowing you to monitor real-time temperature, humidity, CO2, NO2, dust, noise, and light quality, as well as their optimal values and, crucially, their potential impact on employee well being and productivity.



Relevant Research

[Harvard '5 lines of defence' interview on CNN](#)

<https://www.sciencedirect.com/science/article/pii/S016041202031254X>

<https://www.thebesa.com/news/air-cleaning-should-become-standard-practice-after-pandemic/>

<https://blog.breezometer.com/air-pollution-impact-on-covid-19-mortality-shocks-scientists>

<https://www.scanvac.eu/scanvac-petition.html>

<https://www.sciencealert.com/two-new-studies-provides-evidence-that-air-pollution-is-increasing-risk-of-death-from-coronavirus>

<https://www.nature.com/articles/d41586-020-00974-w>

<https://www.hsph.harvard.edu/news/hsph-in-the-news/air-pollution-linked-with-higher-covid-19-death-rates/>

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